

# ANNUAL REPORT 2011

RENEWABLE ENERGY CORPORATION ASA







- $1. \ \mathsf{REC} \ \mathsf{Peak} \ \mathsf{Energy} \ \mathsf{solar} \ \mathsf{modules} \ \mathsf{installed} \ \mathsf{on} \ \mathsf{a} \ \mathsf{commercial} \ \mathsf{rooftop} \ \mathsf{in} \ \mathsf{Spain}.$
- 2. REC Silicon production facility in Moses Lake, WA, USA.
- 3. Employees at REC Silicon's production facility in Moses Lake, WA, USA.

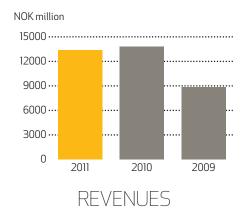
# **OVERVIEW**

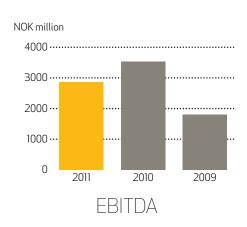
Page	
------	--

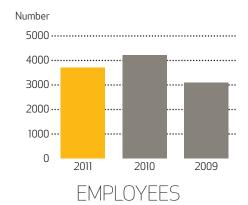
- Key Figures This is REC 4
- 6
- 8 Letter from the CEO
- 10 **REC** Board of Directors
- 11 Report from the Board of Directors
- 25 Statement of Compliance
- 26 The Board of Directors' report on Corporate Governance
- 32 Shareholder Matters
- 35 Sustainability
- Financial Statements REC Group 50
- 136 Financial Statements Renewable Energy Corporation ASA
- Auditor's Report 154
- 156 Addresses

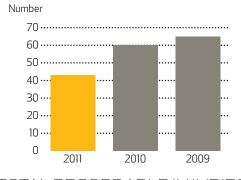
# 2011 KEY FIGURES

# **REC GROUP**









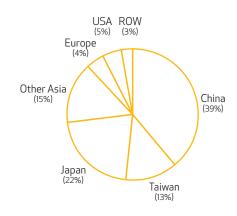
TOTAL RECORDABLE INJURIES

(NOK IN MILLION)	2011	2010	2009
Revenues	13 366	13 776	8 831
EBITDA	2 867	3 5 3 2	1803
EBITDA - margin	21%	26%	20%
EBIT	-9 508	1018	-829
EBIT - margin	-71%	7%	-9%
Net financial items	205	801	-472
Profit/loss before tax from continuing operations	-9 303	1818	-1301
Earnings per share from continuing operations		•	
-basic	-10.06	0.96	-1.63
-diluted	-10.06	0.51	-1.63
(NUMBER)			
Employees	3 587	4210	3 100
Total recordable injury frequency	5.7	8	13.2
Number of total recordable injuries	44	59	65
Lost-time injury frequency	1.4	3.9	6.5

# **REC SILICON**

(FINANCIAL FIGURES - NOK IN MILLION)	2011	2010	2009
Revenues	5 585	5 245	3 943
EBITDA	2 781	2735	1 920
EBITDA - margin	50%	52%	49%
Polysilicon sale in MT (Siemens and granular)	18 706	13 608	7 753
Silane gas sale in MT	1 651	1891	2 187
(NUMBER)			
Employees	882	850	750
Total recordable injury frequency	5.9	12.5	14.9
Number of total recordable injuries	11	22	24
Lost-time injury frequency	1.6	4.6	8.1

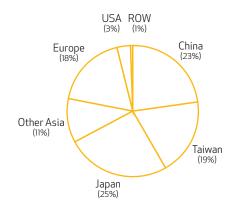
#### EXTERNAL REVENUE DISTRIBUTION REC SILICON 2011



### **REC WAFER**

(FINANCIAL FIGURES - NOK IN MILLION)	2011	2010	2009
Revenues	4 413	6 804	5 879
EBITDA	21	808	1 065
EBITDA - margin	0%	12%	18%
Multicrystalline wafer sale in MW	900	1 124	737
Monocrystalline wafer sale in MW	150	99	30
(NUMBER)			
(NOINDEN)			
Employees	718	1100	1100
	718 16	1 100 11.3	1 100 19.5
Employees			
Employees Total recordable injury frequency	16	11.3	19.5

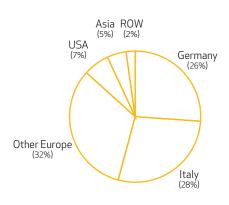
#### EXTERNAL REVENUE DISTRIBUTION REC WAFER 2011



## **REC SOLAR**

(FINANCIAL FIGURES - NOK IN MILLION)	2011	2010	2009
Revenues	5 856	5 624	1881
EBITDA	-30	228	-1074
EBITDA - margin	-1%	4%	-57%
Module sale in MW	594	425	110
(NUMBER)			
Feeders			
Employees	1 914	2 200	1 000
Employees  Total recordable injury frequency	1 914 1.7	2 200 3.9	1 000 5.4

#### EXTERNAL REVENUE DISTRIBUTION REC SOLAR 2011



REC is a leading vertically integrated solar energy company. REC produces polysilicon, wafers, cells and modules for the solar industry, and silicon materials for the electronics industry. REC also engages in project development in selected PV segments.



Moses Lake, WA, USA



Butte, MT, USA



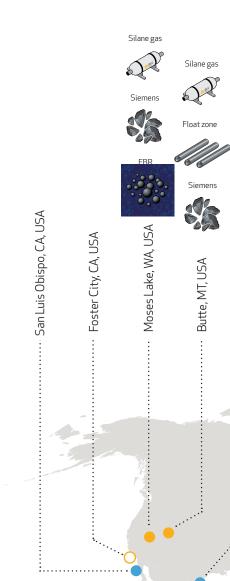
Singapore



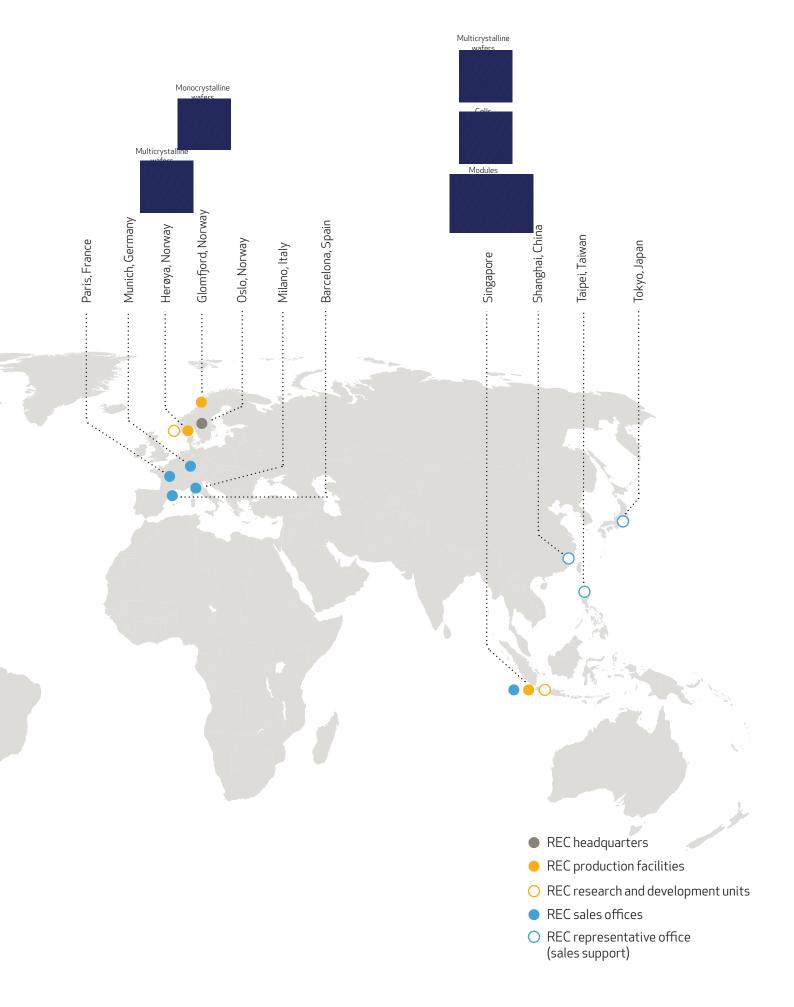
Herøya, Norway



Glomfjord, Norway



Houston, TX, USA





# LETTER FROM THE CEO

2011 has been a challenging year for REC, our shareholders, employees and customers. Overcapacity led to steep price declines and margin pressure across the value chain. However, the lower prices are improving the competitiveness of solar, and led to a strong market growth in the second half of 2011. Solar energy is now fast approaching a cost level in line with conventional sources of electricity in the sun rich regions of the world.

Our operating results in 2011, weakened compared to 2010. Sharp price declines for all products were partly offset by increased sales of polysilicon and modules and cost reductions across all business units. In addition, inventory write downs and costs related shutdowns of production capacity in Norway weakened our overall results.

The safety of our employees is a key priority, and we have worked systematically to improve our safety performance over the last few years. I am therefore very pleased to report that we have reached world class safety performance, with a lost time injury rate of 1.2 per million hours worked in 2011.

We have continued to improve the operational performance in REC Silicon, reaching an impressive cash cost for our Fluidized Bed Reactor (FBR) polysilicon of below 14 USD/kg. This industry leading cost position provides us with a solid platform for further growth. Further improved stability of the production processes in REC Silicon can still be achieved. The FBR process in particular is still relatively new, and through continued work with the REC Business System (RBS) we will realize the full potential of this technology. Our customers continue to give us positive feedback on the FBR material, as we are significantly increasing the external sales of polysilicon.

Operations in Singapore are also running very well and we reached the cost targets set out for year-end 2011 already in June. We have seen our cost position improve relative to our peers, and I am convinced that we will continue to improve at a high rate over the next few years. We are now working on a number of initiatives to improve cell efficiency and expand production capacity within the existing facility.

We have also had some great technology achievements during 2011, and the most recent developments, especially in 'Monocast' wafer process and improved solar cell design, give reason for being optimistic going forward. It is these technology advances and the improved product performance that will allow REC to differentiate from its competitors and make our products the preferred choice.

The REC solar module was announced the best performer in the independent Photon Field Performance Test. The test monitors the energy yield of solar modules from leading manufacturers over a 12 month period from January to December 2011. Additionally in September, our FBR technology was recognized when REC was awarded the 2011 Solar Industry Award for new innovative production of granular polysilicon.

REC's products are generating clean energy for the future. Sustainability is therefore an integrated part of our business model. Through a combination of our proprietary FBR technology and efficient use of clean energy in our production, REC has achieved an industry leading energy payback time of one year and a light carbon footprint for our solar modules. In the short term, we continue to improve the operational and environmental performance of our operations. In the longer term, investing in additional FBR production capacity will help the industry further lower its carbon footprint.

During 2011 we increased our solar module sales with 40 percent and further strengthened our relationships with existing and new partners in Europe, Asia and USA. Over the recent years we have worked hard to achieve world-class performance in our operations by implementing RBS. Inspired by the very good results in operations this approach has now been extended to sourcing, support functions and sales and marketing. By applying the RBS methodology, we seek to better understand the value our products and services create for our customers. Furthermore, we will continue to develop our selling processes to better match the buying processes of our customers. By this we seek to differentiate ourselves and create customer preference for REC. An important building block in these efforts is our partner program for our key solar module customers.

Despite progress in a number of areas, we unfortunately had to make the decisions to close down our cell plant in Narvik and half of our wafer capacity in Norway in 2011. In addition, on March 20, 2012, we decided to permanently close down the 300 MW monocrystalline wafer plant in Glomfjord. Our organization at these plants demonstrated operational improvements and cost reductions that were impressive, but this was unfortunately not sufficient in such a challenging market environment. My gratitude goes to all employees who had to leave their positions, and I would like to thank our employee representatives for an open and constructive dialogue during these difficult times.

I am convinced that continued cost reductions will lead to growth in demand for solar energy, and that over the next years, we will see restructuring and consolidation of a still immature and quite fragmented industry. REC is well positioned with strong support from all its stakeholders. With a clear focus on improving our operational performance and strengthening our market position, I believe REC will remain a leading player in the solar industry.

CEO & President REC

# REC BOARD OF DIRECTORS

# BJØRN M. WIGGEN (1959, MALE, NORWEGIAN)

Chairman of the Board of Directors of REC since March 2011. Currently President and CEO, Orkla ASA. Deputy Chairman of the Board of Tomra, member of the Board of Orkanger Ur og Optikk. Mr. Wiggen holds a degree from the Norwegian School of Economics and Business Administration (NHH)

#### SVEIN TORE HOLSETHER (1972, MALE, NORWEGIAN)

Member of the Board of Directors of REC since March 2011. Currently President and CEO at Sapa Group. Mr. Holsether holds a BSc degree in Finance & Management from the University of Utah.

# TORE SCHIØTZ\* (1957, MALE, NORWEGIAN)

Mr. Schiøtz has served as Chairman of the Board of REC between 2002 and 2007, deputy chairman from 2007 to 2009, and Chairman of the Board from March 2009 to June 2009. Currently Group Senior Vice President in Hafslund ASA and Managing Director Hafslund Venture. Chairman of the Board of Directors of Fesil AS. Member of the Board of Directors of Metallkraft and Hafslund Telekom AS. Mr. Schiøtz holds a Masters of Business Administration from the Norwegian School of Management (BI) and a CEFA Degree.

# ROLF B. NILSEN \* (1965, MALE, NORWEGIAN)

Member of the Board of Directors of REC since May 2007. Employee elected representative. Employed as operator in REC Wafer Norway AS since January 2001. Previously Member of the Board of Directors of REC ScanWafer. Local union leader for REC Wafer Norway AS in Glomfjord. Chairman of the Board of Stiftelsen ScanSatt.

# HILDE MYRBERG (1957, FEMALE, NORWEGIAN)

Member of the Board of Directors of REC since June 2009. Currently Senior Vice President Corporate Governance and Compliance in Orkla ASA. Deputy Chairman of the Board of Petoro AS. Member of the Corporate Assembly of Jotun AS. Ms. Myrberg has a law degree from the University of Oslo and holds a Masters of Business Administration degree from INSEAD, France.

# HELÉNE VIBBLEUS BERGQUIST\* (1958, FEMALE, SWEDISH)

Currently independent Management Consultant. Member of the Board of Trelleborg AB, TradeDoubler AB, Tyréns AB, Nordic Growth Market NGM AB and Swedish International Development Cooperation SIDA. Ms Vibbleus Bergquist holds a Bachelor of Science degree in Business Administration from the University of Linköping Sweden and is a former Authorized Public Accountant in Sweden.

# ODD CHRISTOPHER HANSEN\* (1953, MALE, NORWEGIAN)

Member of the Board of Directors of REC since June 2009. Currently self-employed and independent advisor. Member of the Board of Directors of Bertel O.Steen AS. Mr. Hansen is a senior advisor to EQT. Member of the Board of Directors of the University Hospital in Oslo and of The Norwegian Crown Prince and Crown Princess' Humanitarian Fund. Mr. Hansen holds a degree from the Norwegian School of Economics and Business Administration (NHH), and a Master of Science degree in International Management from Sloan School of Management at Massachusetts's Institute of Technology.

# SILJE JOHNSEN \* (1976, FEMALE, NORWEGIAN)

Member of the Board of Directors since May 2011. Employees elected representative. Currently Corporate Legal Counsel in REC ASA. Deputy board member in REC Wafer Norway AS and REC Solar AS. Ms. Johnsen has a law degree from the University of Oslo, Norway.

# MIMIK. BERDAL\* (1958, FEMALE, NORWEGIAN)

Member of the Board of Directors since May 2011. Currently independent legal and corporate counselling business. Prevailing directorships: Chairman of Infratek ASA and Rocksource ASA. Deputy Chairman of Itera ASA, member of the boards of Gjensidige Investeringsrådgivning ASA, Gjensidige Pensjon og Sparing Holding AS, Copeinca ASA, Gassco AS, Q-free ASA, Camposol PLC, Intex Resources ASA. Ms. Berdal holds a Cand.jur (law) degree from the University of Oslo.

# BERNT REITAN \* (1948, MALE, NORWEGIAN)

Member of the Board of Directors since May 2010. Mr Reitan was Executive VP and member of Alcoa's Executive Council until he retired in 2010. Board member of Yara International ASA and Royal Caribbean Cruise Lines. Co-Chair of Board of Trustees ASF (American Scandinavian Foundation) in New York. Mr. Reitan holds a Master of civil engineering, Norwegian University of Science and Technology, Trondheim, Norway.

# TOMMY KRISTENSEN\* (1967, MALE, NORWEGIAN)

Member of the Board of Directors of REC since June 2009. Employee elected representative. Mr Kristensen previously worked as an operator at REC ScanCell and is local union leader. Mr. Kristensen has a degree from Technical College and a certificate of completed and approved apprenticeship from REC ScanCell.

#### HANS ØDEGÅRD\* (1955, MALE, NORWEGIAN)

Member of the Board of Directors of REC since May 2011. Employee elected representative. Employed as operator in REC Wafer Norway AS since January 2009. Local union leader for REC Wafer Norway AS at Herøya.

# REPORT FROM THE BOARD OF DIRECTORS

#### 2011 HIGHLIGHTS

- Continued solar market growth, but overcapacity across the value chain led to steep price decline throughout the year
- Strong operational performance with cost reductions and improved market position
- 2011 EBITDA decreased to NOK 2,867 million sharp price decline for all products were partly offset by sales growth and cost reductions
- Net debt reduced by NOK 3.2 billion to NOK 4.7 billion through the year
- Due to the weak market conditions, cell production and half of the wafer production in Norway was permanently shut down in 2011
- Continued cost reductions enables growth in new markets and solar is fast becoming competitive with conventional sources of electricity

#### 2011 SUMMARY

Regulatory changes and macroeconomic uncertainty led to reduced global demand in the second and third quarter of 2011, and overcapacity in this period led to steep market price declines. In the fourth quarter demand improved, and according to solar industry analysts, overall demand for 2011 was in the range of 25 to 27 GW. This represented a growth of approximately 40 percent from 2010 to 2011.

REC has over the last few years been through a phase of construction and ramp up of significant new production capacity, mainly in the US and in Singapore. REC has in  $2011\,$  focused on cost reductions, further optimization of assets, and improved product quality across the value chain.

REC Silicon has in 2011 significantly increased production of granular solar grade polysilicon based on the low cost FBR process. Due to the challenging market conditions, REC Wafer has permanently closed about half of the production capacity in Norway, and currently operates about 50 percent of the remaining capacity. REC Wafer continues to reduce cost and improve product performance of the wafers produced at the most modern facilities in Norway. REC Solar has significantly improved cell efficiency and cost position in Singapore and built market presence in new markets. The REC module is recognized as a top performer in the field, and this is verified through independent tests.

Production of Siemens and granular polysilicon increased 39 percent in 2011 to about 19,000 MT. Wafer production in Norway decreased by 11 percent to about 1,100 MW as production was reduced in the second half year 2011. Module production increased 39 percent to about 700 MW in 2011, as the Singapore facility continued to increase throughput.

REC's average selling prices for modules declined 25 percent in 2011 compared to the average price in 2010, wafer selling prices declined 27 percent, and the polysilicon selling prices were down 12 percent. In the first half of 2011 REC Wafer continued to deliver wafers under long-term contracts, but most sales contracts were terminated against cash compensation in the second half of the year and in January 2012. REC Silicon significantly increased sales to third party customers through the year as wafer production capacity in Norway were shut down.

REC's revenues decreased three percent to NOK 13,366 million in 2011. The revenues were affected by reduced selling prices partly offset by increased sales volumes in REC Silicon and REC Solar.

 $2011\,EBITDA$  decreased to NOK 2,867 million from NOK 3,532 million in 2010. Sharp price declines for all products was partly offset by increased sales of polysilicon and modules and cost reductions across all business units. In addition, inventory write downs and cost related to temporary and permanent shutdown of production capacity in Norway weakened REC's results.

 $2011\, EBIT$  decreased to negative NOK 9,508 million from positive NOK 1,018 million in 2010. REC recognized NOK 10,097 million of impairment charges on property, plant, equipment and intangible assets in 2011, primarily in Norway and Singapore, compared to NOK 38 million in 2010. Depreciation and amortization decreased to NOK 2,278 million from 2,476 million in 2010.

Financial items decreased to NOK 205 million in 2011 from NOK 801 million in 2010. Interest expenses were significantly reduced and reduction of the fair value of the convertible bond contributed positively to the result, offset by reduced financial gains due to currency fluctuations.

REC has estimated an income tax expense of NOK 726 million for the year 2011. The tax expense was incurred despite a loss before taxes from continuing operations primarily due to impairment charges without tax effect and non-recognition of deferred tax assets.

REC reports a pre-tax loss from continuing and total operations of NOK 9,303 million and a loss after tax from continuing and total operations of NOK 10,030 million for 2011.

Capital expenditure amounted to NOK 0.7 billion in 2011. Net debt decreased from NOK 7.9 billion in 2010 to NOK 4.7 billion by the end of 2011. Equity decreased by NOK 10 billion to NOK 12.2 billion during the year, reflecting primarily the loss for the year.

#### **ACTIVITIES**

#### **Group Presentation**

REC was established in Norway on December 3, 1996, and has grown to become one of the world's leading suppliers of solar and electronic grade polysilicon, and a major supplier of wafers, cells and modules to the PV solar industry. The Group is also involved in developing PV systems. The Group headquarters are located in Sandvika, outside Oslo, Norway.

Report from the Board of Directors

RENEWABLE ENERGY CORPORATION ASA			
REC Silicon AS 100 percent	REC Wafer Norway AS 100 percent	REC Solar AS 100 percent	
REC Silicon Inc 100 percent	REC Wafer Pte. Ltd. 100 percent	REC ScanCell AS 100 percent	
REC Solar Grade Silicon LLC 100 percent		REC Cells Pte. Ltd. 100 percent	
REC Advanced Silicon Materials LLC 100 percent		REC Modules Pte. Ltd. 100 percent	

The chart shows the principal legal structure of Renewable Energy Corporation ASA per December 31, 2011 and is not a complete representation of all the companies and ownership and ownership and the companies are considered by the companies and the companies are considered by the companies and the companies are considered by the considered bstructures in the Group. REC Wafer Pte Ltd is managed together with the cell and module operations in Singapore and the financial results are reported as part of REC Solar.

REC's business structure comprises the three business segments REC Silicon, REC Wafer, and REC Solar. Production was in 2011 carried out in the following subsidiaries; REC Solar Grade Silicon LLC and REC Advanced Silicon Materials LLC in the US, REC Wafer Norway AS, REC ScanCell AS in Norway (closed down at the end of 2011) and REC Wafer Pte Ltd, REC Cells Pte Ltd, and REC Modules Pte Ltd in Singapore. REC's sales and marketing activities in modules, systems integration and project development are handled by local subsidiaries in Germany, Italy, France, Spain, the US and Singapore.

#### Mission and Vision - Smart Energy for a Cleaner Future

Global energy demand is expected to continue to increase over the coming years, and the climate change problems are still escalating. The world needs to promote sustainable alternatives to traditional energy sources, as the UN expects a quadrupling of annual carbon emissions in the 21st century unless active climate policies are quickly implemented. REC believes reduced cost, attractive carbon footprint and declining energy pay-back time will make solar energy an essential part of the future global electricity generation mix.

The company's mission statement "Smart Energy for a Cleaner Future" signals REC's commitment to play a leading role in the development of a sustainable energy market, and REC's vision is to become one of the world's leading providers of competitive solar energy solutions. To realize this vision, REC will seek to advance the competitiveness of solar energy and create value through innovation, operational excellence, and industry-wide expertise.

REC has over the last few years been through a phase of construction and ramp up of significant new production capacity, mainly in the US and in Singapore. In 2011, REC has focused on cost reductions, further optimization of our assets and improved product quality.

For 2012, REC has defined the following key priorities: The focus on cash flow and to maintain financial flexibility will continue. The restructuring of production capacity in Norway is expected to be completed. Investments are expected to be made in implementation of technology to improve product performance and reliability. Finally REC will seek to build brand identity and strengthen the market organization, both in Europe, Asia and the US.

#### Market position

REC increased production and sales volumes for polysilicon and solar modules in 2011, while wafer production and sales declined.

REC Silicon delivered silane gas and polysilicon to approximately 80 external customers in 2011. The top five external customers accounted for approximately 38 percent of REC Silicon's total sales revenue in 2011, compared to approximately 33 percent in 2010. Approximately 50 percent of the electronic and solar grade polysilicon sales volume in 2011 was sold to REC Wafer and REC Solar, compared with 72 percent in 2010. Geographically 88 percent of external sales revenues in REC Silicon came from Asia, five percent from USA while seven percent came from the rest of the world. REC Silicon received the 2011 Solar Industry Award for the Innovative REC proprietary Fluidized Bed Reactor (FBR) process, which significantly reduces the energy required to produce Solar Grade granular polysilicon marketed under the name NextSi™.

In 2011 REC Wafer delivered the majority of the wafer volume under contracts to 11 external customers however some wafer volume, off-spec material and certain by-products were sold to a number of other customers in the spot market. The top five external customers accounted for approximately 55 percent of the total sales revenue in 2011, compared to approximately 65 percent in 2010. Wafer sales to REC companies represented approximately 10 percent of the total sales revenues in 2011. Several of the long term contracts were terminated during 2011. Geographically 78 percent of external sales revenues in REC Wafer came from Asia, 18 percent from Europe while four percent came from the rest of the world.

REC Solar has in 2011 expanded deliveries to existing customers and developed new customer relationships in line with the module volume growth during the year. The customer base of REC Solar counted approximately 140 of the leading system integrators, installers and distributors in major markets such as Germany, Spain, Italy, France, and the US. The top five external customers accounted for approximately 27 percent of the sales revenue in 2011, compared to approximately 29 percent in 2010. Geographically 86 percent of external sales in REC Solar came from Europe, seven percent from the US while seven percent came from the rest of the world.

REC continued to build brand recognition in existing and new markets through a significant presence at a number of the largest solar conferences and international fairs, hosting partner visits to the Singapore facility, and a number of other regional market activities. REC modules ranked first in the 2011 Photon module field performance test, producing six percent more energy on average than competing modules. The one year long comparative study measures energy yield and is conducted by Photon Laboratory. REC's multicrystalline modules outperformed 45 different types of modules, including thin film and monocrystalline products.

The REC Partner Program, which was launched in 2010 to support and reward market channel relationships, has been well received and several new partners have joined in across the globe. The key benefits include a dedicated portal, where partners can track and trace orders and gain direct online access to commercial documents and product data, marketing resources, training material, technical support, displays and an online shop, all in local languages.

#### Cost reductions

REC has in 2011 continued to focus on cost reductions and quality improvements across all business units. REC set out cost targets for 2011 at a Capital Markets Day held in Singapore in November 2010. With the exception of REC Wafer, REC reached the cost targets set out for the fourth quarter 2011, already in the second quarter 2011.

Since the third guarter 2010, REC Silicon has reduced the cash production cost for FBR polysilicon by approximately 40 percent to below USD 14 per kg in the fourth quarter 2011. The cost reduction has mainly been achieved through improved process stability.

Significant improvements with respect to both cost and quality have been made at the plants both at Herøya and in Glomfjord in 2011.

The cost of producing modules in Singapore has been reduced by approximately 30 percent since third quarter 2010. In the fourth quarter 2011 the full module cost was 101 Eurocents/watt with a cash cost, including overhead, of 86 Eurocents/watt. The cost reduction has mainly been achieved through increased production volume, higher yield, and improved cell efficiency.

Beyond 2011, operational performance is expected to continue to improve at all facilities, and REC will continue to seek cost reductions and product value enhancement through development and rapid implementation of new technologies. Some of these new technologies will however require further investments to be realized. See specific 2012 cost targets in the section 'Outlook' on page 23.

#### Technology, research, and development

The strategic objective of profitable growth for REC is only attainable with cost efficiency and leading product performance. REC therefore deploys significant resources into developing and industrializing product and process innovations along the entire solar energy value chain.

REC has introduced a series of innovations to the solar industry, and the company continues to build on an IPR portfolio counting around 50 patents granted and approximately 240 patents pending. Key patents and patent applications cover REC's production technologies for silane gas, Siemens reactors, fluidized bed reactors and polysilicon deposition, ingot crystallization, wafer sawing, washing, singulation, and REC's future solar cell and module processes and designs.

REC Silicon's technology efforts in 2011 contributed to increased productivity of the silane process and of the fluidized bed reactor process. The program for the next generation FBR reactor (FBR-B) has demonstrated equal control and operability as the first generation fluidized bed reactors (FBR-A), and the continuing efforts are directed towards demonstrating electronic grade quality of silicon granulate produced with the FBR-B prototype reactor.

REC Wafer has development programs for 2000 kg crystallization furnaces (C2000) and for casting of partially monocrystalline ingots (Monocast). Tests within the C2000 program confirm that this technology has potential for a step change in both productivity and wafer quality going forward. Production scale tests in the Monocast program demonstrate that ingots and consequently wafers with distinctly better performance than obtained from the existing process with casting of multi-crystalline ingots can be achieved. REC has developed proprietary methods that increase the monocrystalline fraction of such ingots above what appears available in the market today.

REC Solar's in-house solar cell production achieved average cell efficiency above 16.8 percent for all production lines combined by the end of 2011, in line with the cell efficiency improvement roadmap. Full scale tests combining backside passivation technology and other key elements of REC Solar's 2012 18 percent cell efficiency program demonstrated their capability of contributing to increased cell efficiency. The improved wafer quality of Monocast wafers can also contribute towards reaching the 2012 cell efficiency targets. REC is currently in final stages of process development while preparing for investments in manufacturing roll-out, and evaluating how to prioritize these different technology upgrades in time.

REC Solar's photovoltaic modules were measured to deliver the best energy yield compared to all other tested modules in the independent 2011 Photon Magazine field test for the full year. The modules from REC produced six percent more electricity than the average module in the test during the course of the year. Manufactured in Singapore,

REC Peak Energy Series modules have been installed in various types of PV systems throughout Europe, the US and Asia.

Total research and development expenses increased to NOK 308 million in 2011, compared to NOK 290 million in 2010. The 2011 expenses include NOK 62 million of impairment related to a technology development agreement. Some of the development costs related to introduction of new technology into mass production were carried by the manufacturing plants and not reported as R&D.

#### THE FINANCIAL STATEMENTS

Pursuant to Section 3-3a of the Norwegian Accounting Act, the Board of Directors confirms that the financial statements have been prepared under the assumption that the enterprise is a going concern and that this assumption was realistic at the date of the accounts.

The REC Group reports its consolidated financial statements in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union and the Norwegian Accounting Act. The financial statements for the parent company, REC ASA, have been prepared in accordance with Norwegian Generally Accepted Accounting Principles (NGAAP).

For more information, please refer to the Financial Statements and note disclosures.

#### Selected key figures from the statement of income for the REC Group

(NOK IN MILLION)	2011	2010
Revenues	13 366	13776
EBITDA	2 867	3 532
EBITDA - margin	21%	26%
EBITDA excluding special items*	2 5 1 4	3 255
EBITDA - margin excluding special items	19%	24%
Depreciation and amortization	-2 278	-2 476
EBIT before impairment charges	590	1 056
Impairment charges	-10 097	-38
EBIT	-9 508	1018
EBIT - margin	-71%	7%
Net financial items	205	801
Profit/loss before tax from continuing operations	-9 303	1818
Earnings per share from continuing operations (in NOK)		
- basic	-10.06	0.96
- diluted	-10.06	0.51

#### \* Specification of special items

	2011	2010
Costs for junction box repair	0	38
Costs for restructuring	-220	-65
Onerous contracts due to capacity shut downs	-142	0
Write-down of inventories due to capacity shut downs	-245	0
Wafer contract cancellation fees	912	304
Sale of subsidiary REC Solar	47	0
Total	352	277

Parts of the special items presented are calculated and estimated and not found directly from the separate lines in the financial statements. This relates especially to the write-down of inventories due to capacity shut downs in 2011 and cost for junction box repair in 2010. It also does not include all items reported in the financial statements for onerous contracts, write-down of inventories and wafer contract cancellation fees.

#### Revenues and EBITDA

REC achieved revenues of NOK 13,366 million, a decrease of three percent from NOK 13,776 million in 2010. The revenues were affected by reduced selling prices partly offset by increased sales volumes of solar modules and polysilicon.

REC's average selling prices for modules declined 25 percent in 2011 compared to the average price of 2010, wafer average selling prices declined 27 percent, and the polysilicon average selling prices were down 12 percent.

EBITDA decreased 19 percent to NOK 2,867 million, and the EBITDA margin was 21 percent. Increased sales volumes of polysilicon and solar modules cost reductions across all business units and fees for termination of wafer sales contracts were offset by a sharp price decline for all products. In addition, inventory write downs and cost related to shutdown of production capacity in Norway weakened REC's results. EBITDA increased slightly in REC Silicon, but declined in REC Wafer and REC Solar. More details on the financial results and operational development per segment are provided below.

#### SEGMENT REVIEW

#### **REC Silicon**

REC Silicon produces polysilicon and silane gas for the solar industry and the electronics industry at plants in Moses Lake, Washington and in Butte, Montana. REC Silicon targets a polysilicon production of 20,500 MT in 2012 and employs approximately 880 people.

(FINANCIAL FIGURES - NOK IN MILLION)	2011	2010
Revenues	5 585	5 245
EBITDA	2 781	2735
EBITDA - margin	50%	52%
EBIT	1 801	1 853
EBIT - margin	32%	35%
Polysilicon production in MT (Siemens and granular)	19 050	13 673
- of which solar- and electronic grade in MT	16 672	11 459
Polysilicon sale in MT (Siemens and granular)	18 706	13 608
Silane gas sale in MT	1 651	1 891

REC Silicon reported revenues of NOK 5,585 million in 2011, an increase of six percent from 2010. The polysilicon sales volume grew significantly in 2011 but was partly offset by lower selling prices. Measured in USD, the increase in revenues was 15 percent.

Through further optimization of the FBR facility, total production of Siemens and granular polysilicon reached  $19,\!050\,\text{MT},$  an increase of  $40\,\text{percent}$  from 2010.

Sales volumes of solar grade polysilicon to third party customers increased in the second half of 2011, after REC Wafer reduced wafer production in Norway. About 50 percent of the electronic and solar grade polysilicon sales volume in 2011 was sold to REC Wafer and REC Solar, compared with 72 percent in 2010.

Average selling price in USD for Siemens and granular polysilicon declined, in particular in the second half of 2011. With a significant increase in polysilicon available for sale in the short term spot market, REC approached the market with aggressive pricing to secure volume off-take. The internal transfer price of polysilicon shipped to REC Wafer and REC Solar was adjusted down to the prevailing market price during the fourth quarter.

In 2011 the operational focus for REC Silicon has been to stabilize production and improve product quality from the new Silicon III and Silicon IV silane gas and FBR reactors.

Longer production runs, higher throughput and improved process control resulted in significantly improved product quality from the FBR reactors during the year. 84 percent of the granular polysilicon volume produced in the FBR reactors met the solar grade quality specifications in 2011 compared to 75 percent in 2010.

Furthermore, REC Silicon continues to receive positive customer response to the granular polysilicon material and the work to secure new contracts for the solar grade material continues. The granular form factor of the product is allowing for enhanced productivity and cost reductions in the customers ingot and wafer production process.

Silane gas sales amounted to 1,651 MT in 2011, down 13 percent from 2010. Silane gas sales were negatively affected by weakening market conditions during 2011. The softness in the silane gas market continues as the major end markets including displays, semiconductors and PV all experience significant weakness due to the macroeconomic environment.

REC Silicon's EBITDA amounted to NOK 2,781 million for the full year 2011, broadly in line with 2010. EBITDA margin thus ended at 50 percent down from 52 percent in 2010.

#### **REC Wafer**

REC Wafer produces mono- and multicrystalline wafers for the solar cells industry in Glomfjord and at Herøya in Norway. REC Wafer operates 950 MW of production capacity, and employs approximately 900 people. REC's wafer operation in Singapore is reported as part of REC Solar.

For 2011, revenues in REC Wafer amounted to NOK 4,413 million, a decrease of 35 percent from 2010. The decrease reflects lower sales volumes and significantly lower average selling prices.

(FINANCIAL FIGURES - NOK IN MILLION)	2011	2010
Revenues	4 413	6 804
EBITDA	21	808
EBITDA - margin	0%	12%
EBITDA excluding special items*	-396	505
EBITDA - margin excluding special items	-9%	7%
Depreciation and amortization	-417	-781
EBIT before impairment charges	-395	28
Impairment charges	-5 807	-11
EBIT	-6 203	16
EBIT - margin	-141%	0%
Multi wafer production in**	921	1 121
Mono wafer production in MW***	153	89
Total wafer production in MW	1 074	1 210
Multi wafer sale in MW**	900	1124
Mono wafer sale in MW***	150	99
Total wafer sale in MW	1 050	1 223

- Special items include costs for onerous contracts and write-down of inventories due to capacity shutdowns, restructuring costs and wafer contract cancellation fees
- Multi production and sale reported at 16.5 percent cell efficiency for 2011, and 15.5percent for 2010
- \*\*\*\* Mono production and sale reported at 20 percent cell efficiency for all periods.

Total wafer production amounted to 1,074 MW in 2011, a decrease of 11 percent from 2010. Approximately 85 percent of the production was multicrystalline wafers and the remaining mono wafers. Total sales volumes were broadly in line with production. Due to the weak market conditions the wafer capacity at the oldest plants at Herøya and at the multicrystalline wafer plant in Glomfjord was permanently shut down in 2011.

EBITDA amounted to NOK 21 million for the full year 2011, down from NOK 808 million in 2010. The EBITDA decline primarily reflects reduced sales volumes reduced selling prices, costs for temporary and permanent close down of production capacity and inventory write downs partly offset by reduced production costs and wafer sales contract termination fees.

Significant improvements with respect to both cost and quality have been made both at Herøya and in Glomfjord plants in 2011.

Despite these improvements, due to further weakening of the wafer market, on November 29, 2011 and on January 4, 2012, REC announced further reduction of capacity utilization at the remaining 650 MW multicrystalline wafer plant at Herøya and at the 300 MW monocrystalline wafer plant in Glomfjord.

With prospects of continued negative operating results, REC decided on March 20, 2012 to permanently close down the 300 MW monocrystalline wafer plant in Glomfjord. About 200 employees are affected.

#### **REC Solar**

REC Solar produces wafers, solar cells and modules, and engage in project development in selected segments of PV systems. REC Solar operates an integrated site for wafers, solar cells and modules production in Singapore. REC Solar targets to produce  $750\,\mathrm{MW}$  of modules in  $2012\,\mathrm{m}$  and employs approximately  $1,900\,\mathrm{people}$ .

(FINANCIAL FIGURES – NOK IN MILLION)	2011	2010
Revenues	5 856	5 624
EBITDA	-30	228
EBITDA - margin	-1%	4%
EBITDA excluding special items*	35	255
EBITDA - margin excluding special items	1%	5%
Depreciation and amortization	-874	-796
EBIT before impairment charges	-904	-568
Impairment charges	-4 206	-21
EBIT	-5 110	-589
EBIT - margin	-87%	-10%
Module production in MW	644	491
Contract manufacturing in MW	55	11
Module sale in MW**	594	425
Expansion costs	0	17

- Special items include junction box expenses, costs for onerous contracts and write-down of inventories due to capacity shutdowns, restructuring costs and gain on sale of subsidiary
- \*\* Module sale 2010 restated to include realized module sales through REC Systems

For the year 2011, REC Solar revenues amounted to NOK 5,856 million, up four percent from 2010. The increase reflects significantly increased production and sales volumes, which were partly offset by lower average selling prices.

Total module production amounted to  $699\,\mathrm{MW}$  in 2011, up from  $502\,\mathrm{MW}$  in 2011. The production growth comes from the continued optimization of the integrated wafer, cell and module plant in Singapore. Module sales amounted to  $594\,\mathrm{MW}$ .

Due to the weak market conditions the 180 MW solar cell production facility in Narvik, Norway was permanently shut down in 2011.

The Singapore plant has been performing well throughout the year with respect to production volume, yield, and cell efficiency. REC Solar has

significantly improved cost position in Singapore and built market presence in new markets.

EBITDA was negative NOK 30 million for the year 2011, compared to positive NOK 228 million in 2010. The EBITDA decline reflects significant price declines and inventory write downs, partly offset by increased sales volume and reduced unit production costs.

#### Eliminations - REC Group

(NOK IN MILLION)	2011	2010
Elimination revenues	-2 580	-3 995
Elimination EBITDA	234	-91

Elimination of internal profit depends on internal sales and intercompany inventory changes.

Elimination EBITDA is primarily unrealized internal silicon profit. The positive amount in 2011 was primarily due to reduced inventories in REC Wafer and reduced unrealized internal profits due to write-downs of inventories.

#### **FINANCIAL REVIEW**

See above for discussion of revenues, EBITDA and segment results

#### Depreciation, amortization and impairment

For the year 2011, depreciation, amortization and impairment amounted to NOK 12,375 million, compared to NOK 2,514 million for 2010. Impairment charges in 2011 were NOK 10,097 million.

#### Impairment reviews

Steep price declines in 2011 led market participants, analysts and REC to change their long term market views. Negative shift in estimated future sales prices was the main change in key assumptions that led to the significant impairments in 2011. The decisions to close down parts of the production capacity in Norway (REC ScanCell and parts of REC Wafer Multi Norway) and the uncertainties related to the continuing wafer operations in Norway also contributed to the impairments. If a decision is taken in a subsequent period to close down further production capacity, further losses on contractual commitments should be expected, and the value of working capital may also be negatively affected. On March 20, 2012, REC decided to permanently close down the 300 MW monocrystalline wafer plant in Glomfjord.

#### Specification of impairments for 2011

(NOK IN MILLION)	LAND AND BUILDINGS	MACHINERY AND EQUIPMENT	OTHER TANGIBLE FIXED ASSETS	ASSETS UNDER CONSTRUCTION	GOODWILL	OTHER INTANGIBLES	TOTAL	REMAINING PPE & INTANGIBLES DEC 31
REC Silicon	0	20	0	0	0	0	20	11 269
REC Wafer Multi Norway	1 962	2410	19	24	330	54	4 799	34
REC Wafer Mono	406	595	0	0	0	7	1 008	0
REC Singapore	2 2 1 1	1 544	63	1	0	44	3 863	4617
REC ScanCell	129	192	5	0	0	17	343	85
Other operations	-2	3	0	0	0	63	64	82
Total impairments	4 705	4 764	88	24	330	185	10 097	16 087

The estimated values in use of REC's operating assets are sensitive to changes in prices and other key assumptions. There is a risk that the price projections, cost targets etc. that were used in the impairment tests at year end 2011 cannot be achieved. This can result in further impairments.

See note 7 to the consolidated financial statements for further information.

#### Financial items

Net financial items amounted to NOK 205 million for 2011, compared to net financial items of NOK 801 million in 2010. Positive fair value adjustments of the convertible bond and gains on currency derivatives more than offset the financial expenses in both years.

#### Financial items - REC Group

(NOK IN MILLION)	2011	2010
Share of loss of associates	-97	1
Financial income	51	35
Financial expenses	-705	-1 381
Capitalized borrowing cost	12	247
Net financial expenses	-693	-1 134
Net currency gains/losses	-7	544
Net gains/losses embedded derivatives	92	-80
Net gains/losses other derivatives and fair value hedge	16	955
Net gains/losses derivatives	108	875
Impairment and loss on financial assets	1	-1
Fair value adjustment convertible bonds	841	481
Net financial items	205	801

Decreased interest bearing liabilities and borrowing costs and lower expensing of the remaining up-front fees and costs for the terminated and repaid bank facilities contributed to decreased financial expenses in 2011 compared to 2010. Currency affected net financial items through net currency gains/losses and net gains/losses on derivatives to a less extent in 2011 than in 2010. Changes in the estimated fair value of a EUR 320 million convertible bond is recognized to profit or loss and contributed to a gain both in 2011 and 2010.

See note  $25\,\mathrm{to}$  the consolidated financial statements for further discussion.

#### Profit/loss after tax from total operations

For 2011, loss after tax from total operations amounted to NOK 10,030 million compared to a profit of NOK 989 million for 2010. The profit from total operations for 2010 included net profit from discontinued operations related to the sale of Sovello AG.

Basic EPS from total operations was a negative NOK 10.06 for 2011. The corresponding amount was positive NOK 1.07 for 2010.

Diluted EPS from total operations was negative NOK 10.06 for 2011. The corresponding amount was positive NOK 0.61 for 2010.

#### Consolidated statement of comprehensive income

Comprehensive income was negative NOK 9,955 million for 2011, reflecting primarily the loss for the period. Comprehensive income for 2010 was NOK 1,307 million reflecting primarily profit and positive currency translation differences.

#### STATEMENT OF FINANCIAL POSITION AND CASH FLOW

The developments in the statement of financial position during 2011 primarily reflect the significant impairments of fixed assets and reduction of interest bearing debt.

#### Equity and debt

Equity amounted to NOK 12.2 billion (50 percent) at December 31, 2011, compared to 22.2 billion (60 percent) at year-end 2010.

Net debt was NOK 4.7 billion at December 31, 2011, a decrease of NOK 3.2 billion from the year-end 2010. Net debt include convertible bond at fair value and finance leases but exclude prepayments on which interest is calculated. Currency fluctuations also affected net debt development.

See note 17 to the consolidated financial statements for details of the REC Group's debt financing.

In March 2011 REC cancelled and repaid the NOK 1.3 billion loans from Eksportfinans and REC cancelled NOK 1.4 billion of the NOK 10 billion bank credit and guarantee facilities agreement. In April 2011, REC ASA issued new senior unsecured bonds in the Norwegian market; NOK 500 million and NOK 700 million with five and seven year tenors respectively. As part of the bond offering, REC bought back NOK 600 million of the existing NOK 1,250 million bond for a total of NOK 660 million. The primary purpose of the transactions was to extend the company's debt maturity profile.

Remaining undrawn amounts under the bank credit facility agreement were NOK 6.5 billion at December 31,2011.

Starting at the end of the first quarter 2012, the total amounts available in the revolving bank credit facilities will be reduced by NOK 350 million quarterly. The residual principal amount shall be repaid at the end of the second quarter 2013

See note 33 to the consolidated financial statements for amendments to the bank credit facility agreement after the reporting period.

#### Cash flow

Net cash flow from operating activities was NOK 3,098 million for 2011 compared to NOK 2,485 million for 2010.

Net cash flow from operating activities in 2011 was higher than EBITDA. Compared to EBITDA, net cash flow from operating activities was positively affected by REC Silicon being repaid more than NOK 300 million income taxes. Recognition of provisions for restructuring and onerous contracts did not have the corresponding cash outflow in the period. Net interest paid was partially offset by cash

#### Property, plant and equipment and intangible assets

(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OTHER	REC GROUP
Carrying value at January 1, 2011	11 852	6 006	9704	147	27 709
Translation differences	220	0	-86	1	135
Net additions*	176	252	216	10	655
Disposals	0	0	-47	-2	-49
Depreciation and amortization*	-961	-417	-863	-26	-2 266
Impairment	-20	-5 807	-4 206	-64	-10 097
Carrying value at December 31, 2011	11 269	34	4718	66	16 087
Of which	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
Property, plant and equipment	10701	34	4 641	49	15 425
Intangible assets	568	0	77	17	661
Payments of PP&E and intangibles, net of investment grants	211	121	337	9	678
*Amortization of prepaid lease in the statement of income not included in the table above:	-	-	-12	-	-12

The differences between additions and payments for property, plant and equipment and intangible assets primarily relate to government grants, changes in pre-payments, accruals and payables for capital expenditure and recognition of asset removal obligations.

inflows from derivatives. Change in other working capital and effects of prepayments from customers contributed in total somewhat negative.

Net cash flow from investing activities was NOK -609 million for the year 2011 compared to NOK -4,329 million in 2010. In 2011, REC has incurred limited payments for capex as the expansion programs to a large extent were finalized during 2010. Information per segment for additions and payments for property, plant and equipment, and intangible assets in the year 2011 is outlined in a separate table.

Net cash flow from financing activities was NOK -1,732 million for the year 2011 compared to NOK 1,018 million in 2010. For the year 2011, see above regarding repayment of loans from Eksportfinans and buy back and issue of NOK bonds. Proceeds from financing activities include prepayments, interest calculations received of approximately NOK 115 million in 2011.

#### **CONTRACTUAL COMMITMENTS**

Please see note 29 to the consolidated financial statements for 2011.

#### **REC ASA (NGAAP)**

#### Financial review

REC ASA prepares its financial statements according to NGAAP, and the amounts referred to below for REC ASA are NGAAP figures. REC ASA is a holding company comprising parts of Group Management and corporate functions, including REC's in-house bank and corporate research and development.

REC ASA reported revenue of NOK 86 million and a negative EBIT of NOK 238 million in 2011, compared to revenue of NOK 99 million and a negative EBIT of NOK 170 million in 2010.

Loss before  $\tan of NOK 13,498$  million compares to a profit before  $\tan of NOK 2,001$  million in 2010, and the net loss for the year of NOK 13,217 million compares to a net profit of NOK 1,576 million in 2010.

Due to significant losses and write-downs of assets in its subsidiaries, REC ASA had to contribute capital during 2011 to subsidiaries and recognized significant write-downs and losses on shares in, and loans to subsidiaries. This is the main reason for REC ASA's loss for 2011. Funding of the Group and bank derivative transactions for hedging purposes is conducted primarily through REC ASA, contributing to gains and losses, income and expenses as part of financial items. Due to the large amounts of loans to subsidiaries, interest income exceeded interest expenses for REC ASA for 2011 and 2010. For 2010, changes in foreign currency rates contributed to gains on currency and currency derivatives.

Total equity for the parent company REC ASA amounted to NOK 6,581 million at December 31, 2011, down from NOK 19,790 million in 2010. The decrease is due to the loss for the year.

Total assets decreased to NOK 14,620 million at December 31,2011 from NOK 29,594 million at December 31,2010. The decrease is primarily due to the losses and write-downs of loans to, and shares in subsidiaries.

#### Allocation of the net loss for the parent company (REC ASA)

The Board proposes that the net loss for the year of NOK 13,217 million is allocated as follows:

(NOK IN MILLION)	
Share premium reserve	-10 490
Contributed capital	-283
Other equity	-2 444

Following this, the parent company had no distributable equity at December 31, 2011. Consequently, the Board does not propose any dividends for the financial year 2011.

#### Organization

REC ASA had 56 employees as per year end 2011. The average number of full time equivalents (FTE) was 57.4. Sickness rate in 2011 was just below three percent. The work environment in  $2011\ \mbox{has}$  been influenced by the restructuring of the organization in Norway, which also affected the corporate centre. One injury with medical treatment was reported in 2011 where a temporary employee got a second degree burn on arm from hot water.

REC ASA is focusing on equal opportunities irrespective of gender. There should be no discrimination related to gender in cases such as compensation, promotion or recruitment. In REC ASA the female share is 38 percent and 31 percent of the managers are female. REC ASA continues to focus on having compensation and working conditions that do not discriminate neither gender nor nationality.

#### Change of control

The following information is relevant for REC ASA with reference to the Norwegian Securities Trading Act section 5-8a.

The credit facility agreement (credit facility) has a change of control provision applicable if a shareholder or a group of shareholders acting in concert gains control of more than 50 percent of the share capital. Such an event is a termination event under the agreement entitling the lenders to cancel the commitments and declare all outstanding amounts and accrued interest due and payable. The provision does not apply with respect to shareholders that were controlling at least 10 percent of the share capital at the time the agreement was entered into.

The bond agreements (ISINNO 001 53650.01, ISIN NO 001 060748.4 and ISIN NO 001 060747.6) and the subordinated convertible bond agreement (ISIN NO0010543457) have provisions similar to the change of control provision in the credit facility conferring a put option on the bondholders if a change of control event occurs. More detailed information can be obtained from the bond trustee, Norsk Tillitsmann ASA.

REC ASA is party to certain ISDA agreements with provisions to the effect that change of control under certain circumstances may entitle the counterparties to early termination of the agreements.

Change of control of REC ASA may also under certain circumstances affect certain agreements entered into by subsidiaries directly or indirectly controlled by REC ASA.

#### **RISK FACTORS**

REC is an industrial corporation exposed to various market and business risks. REC is exposed to variations in prices on the products REC sells, commodities and raw materials, currency exchange rates, interest rates and a number of other risks.

If any of the risks described in this section materialize, individually or together with other circumstances, they may substantially impair the business of REC and have material adverse effects on the company's business prospects, financial condition or results of operations. The  $\,$ order in which the individual risks are presented below is not intended to provide an indication of the likelihood of their occurrence nor of the severity or significance of individual risks. In addition to the following

risks, other risks of which the company is currently unaware, or which it does not currently consider to be material, may materialize and have adverse effects on the company's business, prospects, financial condition or results of operations.

#### Market and operational risk factors

The REC Group's activities expose it to a variety of market and operational risks factors.

REC evaluates that there are significant uncertainties related to the PV market development going forward. The uncertainty primarily relates to the effects of the changes in solar energy subsidy schemes in key solar markets, and to potential changes in the market supply and demand balance and prices going forward.

Germany and Italy represented 55 percent global solar module demand in 2011. Further reductions of the subsidy schemes in these and other markets are expected to continue to put pressure on PV systems- and module prices, and may also reduce overall demand. Demand growth may also be negatively affected by introduction of policies with a predefined maximum of annual installed capacity qualifying for subsidies and by complex permitting processes in emerging markets.

Reduced feed-in tariffs and continued oversupply may lead to further price pressure across the solar value chain. Oversupply may also lead to build-up of inventory through the value chain and reduced capacity utilization in the industry. Such adverse market developments could have significant negative impact on REC's financial results and financial position.

The share of sales of solar grade polysilicon to third party customers has increased after REC Wafer reduced wafer production in Norway. In light of the current market conditions this is increasing the exposure to short-term contracts and the spot market.

In 2011 and beginning of 2012 REC Wafer has negotiated contract terminations against cash compensation for most of the previous existing long term wafer sales contracts. Consequently, REC Wafer's exposure to the spot market has increased.

The solar industry has been and will continue to be subject to rapid technological change, frequent improvements, new products and services, and changing customer requirements. Competitors may launch new products and services earlier or at more competitive prices, implement and/or secure exclusive rights to new technologies.

With increased sales of solar modules, REC is more exposed to risks associated with the industry-standard of up to 25 year product warranty on modules. REC Solar has scaled up its efforts on product qualification and quality assurance considerably to reduce the risks of product claims.

In general, optimization of equipment to increase production volume and reduce costs is important for the future profitability of the company.

#### Financial risk factors

The goals for the REC Group finance policy and the treasury operations are mainly to minimize the risk for financial distress, secure long term

funding, reduce refinancing risk, hedge currency risk related to expected future net cash flows and manage interest rate risk. REC's finance policy sets the framework and limits for hedging activities in the REC Group. It defines risk management objectives, responsibilities and operational requirements. The REC Group finance policy was revised in December 2011 with limited changes from 2010.

All hedging transactions are undertaken in order to reduce negative impacts of changes in financial markets on net cash flow.

Please also refer to the consolidated financial statements for more information, particularly notes 3 and 30.

#### Currency risk

REC operates internationally and is exposed to currency risk. The Group is primarily exposed to fluctuations in US Dollar (USD), Euro (EUR), Singapore Dollar (SGD) and Norwegian Krone (NOK), arising from commercial transactions in currencies other than the entities' functional currencies, recognized assets and liabilities, and net investments in foreign operations.

REC's primary focus is currency hedging of the forecasted external net cash flow of the Group. NOK is the functional currency of the parent company REC ASA and the reporting currency for the REC Group. Net cash flow is defined as the consolidated cash flows from operations, finance costs and capital expenditure. The REC Group's policy is to hedge currency risk between 50 and 100 percent of the forecasted consolidated net cash flow on a 24 month rolling basis.

To manage currency risk arising from commercial transactions, REC entities use various forward contracts or options. In addition REC swap currency exposure of interest bearing debt from NOK to EUR and USD by using currency derivative contracts. REC ASA manages the currency risk on an overall REC Group level and establishes external foreign exchange rate contracts with banks. However, entering into currency derivative contracts increase currency risk on financial instruments related to the financial statement even if the purpose is to hedge the currency risk of estimated future cash flows in relation to NOK. By entering into currency derivative contracts REC establish financial instruments and consequently expose itself for changes in the fair value of currency derivatives in the financial statements. In addition, recognized financial assets and liabilities, especially internal receivables and payables and external interest bearing liabilities, in currencies other than the separate entities functional currencies are affected by changes in currency rates. In 2010 and 2011, REC has not used hedge accounting according to IAS 39 Financial Instruments: Recognition and Measurement for currency hedges.

#### Credit risk

REC has historically realized limited losses on trade receivables, but has in 2011 increased provisions for loss on trade receivables and realized these losses in 2011.

At year-end 2011 the REC Group, based on individual evaluation of the customers and the amounts receivables outstanding, has recognized limited provisions for losses on receivables. However, the REC Group has experienced that an increasing part of the customers are overdue in settling the amounts owed. Many companies in the solar industry are struggling with their liquidity due to the difficult market conditions.

The management evaluates that the credit risk is increased at December 31, 2011 compared to December 31, 2010.

Policies are in place to ensure that sales of products are made to customers with an acceptable credit history, and the company also applies requirements for various payment guarantees or prepayments, and to some extent credit insurance. The difficult market conditions in 2011 have increased credit risks related to counterparties. REC has experienced some disputes when it has been necessary to call on bank guarantees from customers. Credit risk may also increase by abrupt changes in market conditions by changes in government incentives. Due to close down of parts of REC Wafer's production capacity, and termination of-long-term wafer sales contracts, REC Silicon and REC Wafer are more exposed to spot sales. This may increase the credit risk.

Generally a more challenging and competitive market environment may increase credit risk through sales to financially weaker customers, extended payment terms and sales into new and immature markets.

REC Silicon and REC Solar have during 2011 increased the number of customers, and thereby reduced somewhat the risk related to concentration of a limited number of customers. However, the customers are to a large extent exposed to the same industry. In 2011, no single customer exceeded ten percent of revenues or trade receivables but some of the customers are relatively large. At year-end 2011, the seven largest trade receivables constituted 44 percent of total trade receivables.

#### Interest rate risk

Changes in market interest rates affect the fair value of assets and liabilities or the variability in cash payments. The REC Group is exposed to interest rate risk through funding and cash management activities, primarily in REC ASA. Approximately 61 percent of REC's debt (excluding the finance leases) has variable interest rates (interest periods shorter than 12 months) while 39 percent has fixed interest rates (longer than 12 months).

Interest hedging instruments may be used to control and minimize the company's interest cost and risk related to fluctuations in interest rates within the framework defined in the finance policy. The risk towards fluctuations in interest rates is measured by modified duration, see note 3 for further description. The modified duration at year end 2011 was 1.6 years (excluding finance lease debt).

#### Financing and liquidity risk

REC shall strive to maintain access to various sources of funding. Due to the dynamic nature of the underlying businesses, REC aims to maintain a high degree of financial flexibility by keeping sufficient cash and cash equivalents or committed credit facilities available.

REC shall at all times strive to have sufficient equity capital to implement the business strategies and have financial flexibility in relation to possible new investments. Taking into account the market volatility and the risk related to future cash flow from the REC's production facilities, REC shall aim to maintain a long term capital structure corresponding to an "Investment Grade" rating. Short term deviations from this long term ambition may occur.

The liquidity risk has increased in the second half of 2011, due to the difficult financial market and the future market uncertainty and risk related to REC's products.

REC has significant debt maturities in 2013 and 2014. REC will work on reducing these maturity risks, primarily through refinancing of debt.

According to REC's finance policy, REC shall at all times maintain financial ratios within the limits defined in the loan agreements of REC ASA and subsidiaries, and take the necessary measures that are available to avoid financial distress. Neither the senior NOK bonds nor the convertible EUR bond contain financial covenants. There is cross default between all the loan agreements above certain threshold amounts. At December 31, 2011, REC complied with all financial covenants in the loan agreements. Please refer to note 3 and note 17 for further information on the loan agreements and covenants.

The solar market is expected to remain challenging in 2012 and REC's margins and cash flow are hence expected to be lower than in 2011. REC currently has adequate liquidity and ample headroom in its banking facilities, within its agreed financial covenant levels. However, the Company has for some time had discussions with its bank group to improve its flexibility in the loan agreement going forward allowing the company to focus on further cost improvement initiatives. The amendments discussed, among other things, address the extension of the final maturity date, covenant levels and definitions allowing for shut down of assets in Norway (costs related to shut downs) and capital expenditures in relation to further cost improvements of the operations.

See note 33 to the consolidated financial statements for amendments to the bank credit facility agreement after the reporting period.

#### **ORGANIZATION AND SUSTAINABILITY**

REC's mission statement is "Smart Energy for a Cleaner future", which signals REC's commitment to making safe and sustainable solar energy affordable and accessible globally. This means continuous focus on reducing the cost and enhancing the value of solar products, while keeping safety at the forefront and always striving for a high environmental and governance standard.

REC acknowledges its responsibilities as a company to be held accountable to shareholders, investors, employees, and society. Everywhere REC operates it will continuously seek to limit any negative effects caused by its activities. Sustainability is integral to the way that REC does business.

#### Sustainability reporting

REC's sustainability reporting addresses the issues that are material for the company and our stakeholders. REC is continuously working to improve its reporting, and from 2011 REC will use the Global Reporting Initiative (GRI) framework to measure and report on sustainability performance. The GRI is internationally recognized, and its framework establishes a transparent means through which to report on the following six indicator areas: economics, environment, labor, human rights, society, and product responsibility.

#### Governing sustainability

The Group Policies on Sustainability define the REC way of working with sustainability both internally and in the various markets REC operates. The Group Policies consist of Business Conduct Policy, Safety and Health Policy, Environment and Climate Policy as well as Quality and Improvement Policy. The policies are governing documents for all REC activities and are

normative for all underlying governing documents within sustainability. They are reviewed annually by the Board of Directors.

To support the implementation of the Group Policies, an HSE management system was developed and adopted by the Group Management in January 2011. This consists of 14 HSE principles and an assessment tool where all internal HSE processes are covered. Expectations and practical implementation methods are explained in order to secure and improve HSE standards and share best practices across the Group, using the REC Business System rules & principles.

All manufacturing plants performed a self-assessment according to the REC HSE principles both in 2010 and in 2011 and the results are used for prioritizing improvement actions and programs. In 2012 the ambition is to further roll-out the HSE principles to other parts of the organization where applicable, as well as establish cross-assessments between the units.

To ensure compliance with the Group Policies, the performance management of sustainability has been strengthened through 2011 with annual objectives, specific KPI's and quarterly reports to the Board of Directors, focusing on KPI scorecard and risks. It is a Board responsibility to secure acceptable performance, also within the sustainability area.

To ensure quality in all parts of the production, REC is using the ISO 9001 certification as a basis framework. Five of eight REC manufacturing units now have ISO 9001 certification. To improve the environmental aspects of the production process, REC has been focusing on implementation of the ISO 14001 standard and all business units in Singapore have achieved this certification. In addition they implemented the occupational and health safety management standard of OHSAS 18001 during 2011, and achieved the certification at the end of the year. REC Silicon in Butte is actively pursuing the US OSHA equivalent to OHSAS 18001, called the Voluntary Protection Program (VPP). They submitted their application in December 2011 and will be audited in 2012.

#### **Business Conduct & Compliance**

REC sets high standards of integrity, which are expected of every employee and in every country where we do business. The REC Code of Conduct is the integrity framework that describes the behavior expected of employees and stakeholders. It was revised and approved by the Group Management in February 2012. A training program will be rolled out in 2012.

A Whistleblower hotline and procedure was launched in 2011, and is available to all employees, contractors, vendors and other stakeholders of the Group to report their concerns or complaints related to the REC Group's business conduct. REC investigates all potential integrity concerns and cooperates fully with law enforcement agencies. The Audit Committee will be informed of all complaints related to accounting and auditing matters. The Board will be informed of specific complaints as required and will also be provided regularly with general updates of complaints received. No adverse action will be taken against an employee due to complaints submitted in good faith. Complaints can be made anonymously.

In 2011, REC was subject to one case of alleged corruption, however after thorough investigation there was nothing found. REC will take every accusation of corruption seriously, do a thorough investigation and report to the Board of Directors.

In 2011, REC Silicon paid two fines related to 1) an authority inspection of process safety management and 2) not meeting emission limits. Both cases occurred in 2010.

#### People and organization

The number of permanent employees decreased by 15 percent to 3,587 at the end of 2011. The decrease is mainly driven by the permanent shut down of some of the manufacturing sites in Norway.

Of the total number of employees at the end of 2011, 28 percent were female, which is similar to 2010, but slightly up from 23 percent in 2009. Out of the total of seven executives in the Group Management team at the end of the year, one was female. In the company's Board of Directors, one of four employee-elected Directors was female, while three of the eight shareholders elected Directors were female.

Average absenteeism rate due to sickness is just above 1.5 percent, which is lower than four percent reported both in 2010 and 2009.

REC and its subsidiaries are committed to equal opportunity employment and practices. All employees and applicants shall be treated without regard to age, gender, sexual orientation, nationality, race, religion, disability, marital situation or any other protected status. REC has succeeded in recruiting individuals and teams globally with the necessary competence, potential and cultural fit needed.

REC has made changes to REC Group management in 2011 and 2012. Erik Sauar resigned as SVP & CTO and member of Group Management at the end of the third quarter 2011. In the first quarter 2012, Alessandro Perrotta was employed as Executive Vice President Wafers, Cells & Modules and a member of Group Management, with a base in Singapore. John Andersen, Jr. continues as EVP & Group COO, and member of REC Group Management. Florian Krumbacher was appointed SVP & Chief Legal Officer and member of Group Management, after Kristine Ryssdal, decided to leave REC.

#### Health and Safety

Health and Safety has the highest priority in REC and the target is zero harm. In 2011, a key focus area for all REC manufacturing units has been to risk assess work activities to eliminate inherent risks or apply control measures, with the significant involvement of employees. Another key area for continuous improvement is incident management. All employees are encouraged to register hazards and incidents in order to identify and implement preventive measures that can eliminate recurrences and reduce the total level of risk. More than 20,000 hazards and incidents were registered in 2011, equating to approximately five per full time employee.

All employees at REC manufacturing sites are represented in formal joint management-worker health and safety committees, where they monitor and advice on occupational health and safety programs.

REC ended 2011 with no work-related fatalities in more than 7.5 million worked hours across the workforce. The number of Lost Time Injuries (LTI) was 11, down from 29 in 2010. The LTI-rate (number of LTI per million worked hours) was 1.4 in 2011 compared with 3.9 in 2010. The

number of Total Recordable Injuries (TRI) was 44, down from 59 in 2010. The TRI-rate (number of TRI per million worked hours) decreased from 8.0 in 2010 to 5.7. Even if the results represent an improvement, REC is continuously working to reduce the TRI rate.

#### **Environment and Climate**

REC's environmental performance is best measured by two important factors: energy efficiency and carbon footprint.

The energy efficiency of PV can be measured as total generation of energy through the lifetime of a PV-system, as energy generation per m<sup>2</sup> or as energy payback time. The total generation of energy provided by a PV module over the lifetime is an important indicator for customers investing in a PV system.

A Life Cycle Assessment (LCA) study was undertaken in 2011 based on production data from the first quarter of the year. The LCA, conducted independently by the Energy Research Centre of the Netherlands (ECN), calculated the carbon footprint and the energy payback time. For polysilicon produced in the US, and for wafers, cells and modules produced in Singapore, a carbon footprint of 21 g CO<sub>2</sub>-eq/kWh with a corresponding energy payback time of 1.2 years was achieved. For modules with wafers and cells produced in Norway, the corresponding values were  $18 \,\mathrm{g}\,\mathrm{CO}_2$ -eq/kWh and an energy payback time of  $1.1 \,\mathrm{years}$ . Modules containing 100 percent silicon produced using the proprietary Fluidized Bed Reactor (FBR) process in the USA, wafers and cells produced in Norway and modules assembled in Singapore have an energy payback time of 1.0 years. The energy source used for the calculation was hydropower for the polysilicon process in Moses Lake, hydropower for the Norwegian processes and natural gas power for the operations in Singapore.

In 2011, for the first time, REC provides environmental performance data within the annual report, reflecting information collected for selected GRI indicators. REC will continue to develop its reporting and disclosure, which will be used as a basis against which to measure and drive continual improvements in environmental performance. In 2012, REC plans to report carbon emissions in accordance with the requirements of the GHG Protocol and to expand its reporting to include additional indirect emission sources such as transportation.

REC has a range of HSE-related permits for operations at its sites, and maintains a record of any non-compliance as part of regulatory HSE requirements. Non-compliances constitute breach of permit, citations or violations identified by regulatory audits. In 2010, a total of 34 noncompliances were recorded, of which seven were open at year end. In 2011, a total of 31 new non-compliances were recorded, and at yearend, three were still open. Of the total 31 non-compliances, 15 were violations from regulatory audits and 16 were permit breaches. Of the 16 permit breaches, 13 were short term excursions of emission limits, and three were specific breaches of permit conditions. No breaches resulted in significant long-term environmental impacts.

#### Sustainability in the supply chain

REC seeks to contract services and to purchase, hire, or lease equipment and materials in a manner that ensures that REC's own sustainability policies are met. This process includes audits and contractual obligations.

In 2011, REC has focused on implementing a standardized sourcing process for the significant direct material suppliers of REC Solar's wafer, cell and module production and to parts of REC Wafer. Suppliers in these areas typically represent more than 80 percent of the annual expenditure of REC Solar. Sustainability has formed a key part of supplier prequalification reviews, supplier audits, supplier performance management and supplier development. The sustainability issues cover human rights, freedom of association, child and forced labor, corruption as well as occupational health and safety.

In 2011, all significant direct material suppliers for REC Solar have undergone audits on sustainability. For REC Wafer in Norway, sustainability is also included in audits conducted on approximately half of the significant direct material suppliers and key business partners. No suppliers were identified as having significant risk regarding sustainability issues.

Audits for REC Silicon suppliers were not conducted in 2011. In 2012, REC will seek to further harmonize on the supplier quality process including sustainability across all business segments.

#### Stakeholder relations

In REC, stakeholder engagement takes many forms; e.g. through partner programs with customers, close dialogue with investors, local community engagement and through membership in associations which influence our frame conditions. The most important subject in 2011 regarding employees has been the organization restructuring and shutdown of capacity in Norway. In this context the unions have been involved in the whole process. A close dialogue was also kept with representatives for the regional and local governments and other affected stakeholders

REC works to maintain customer relations by various means. REC Solar conducts annual customer satisfaction surveys, which is distributed to business partners involved in the solar module markets. Customers can also provide feedback directly online, related to their own products. REC Wafer and REC Silicon engage with customers more in relation to specific technical issues, and so meet with customers face-to-face or via formal technical exchange events.

REC recognizes that it is a key player in the communities in which it operates. REC Silicon has established a community affairs strategy and seeks to reinforce relationships with local authorities, industrial and community neighbors through participation in community affiliations and employee volunteer programs. REC Wafer supports local community activities for children and youth, while there is no tradition in Singapore for social donations.

REC participates in the industry-wide PV CYCLE program in Europe, which works to establish operational collection and recycling solutions for end-of-life PV modules. REC is also active in the European Photovoltaic Industry Association (EPIA), which contributes to the European development of predictable, sustainable and just frame conditions for solar energy. REC is also supporting Bellona (NGO), in their work to strive for increased use of solar energy, through influence on political energy and climate processes.

#### Product responsibility

REC has adopted the principle of product stewardship promoting the development of reduced health and environmental impacts from our products. Product stewardship is to be ensured in the whole lifecycle from R&D, design, sourcing, manufacturing, distribution, installation, operation, maintenance, decommissioning through disposal as well as recycling. All products are in compliance with relevant prevailing legislative regulations. REC modules are designed to meet the highest quality standards and provide stable output over the lifetime of the product. Our most recent solar module, the REC Peak Energy Series, is certified according to CE, UL1703, IEC 61215 and IEC61730.

Our internal qualification requirements exceed the requirements in the referenced standards.

REC wafers and modules are also certified to benefit from the ten percent premium available as part of an Italian photovoltaic incentive scheme for solar systems containing European components.

#### Corporate governance

Good corporate governance is essential to ensure that our business is run in a way that protects the long-term interests of all stakeholders. The Board of Directors has approved and implemented corporate governance principles endorsing and complying with the Norwegian Accounting Act and the Norwegian Code of Practice for Corporate Governance (Code of Practice) issued by the Norwegian Corporate Governance Board, most recently revised on October 20, 2011. REC's compliance with the Code of Practice is detailed in the report on Corporate Governance for 2011 which is included in this Annual Report on page 26.

#### **OUTLOOK**

#### Market

The steep price decline on PV modules and other components has led to favorable end-user returns on investments in PV systems in a number of markets.

The 2011 price decline continued to improve the competitiveness of solar energy versus conventional sources of energy, and the levelized cost of electricity from PV is now below the retail electricity price in certain regions around the world. The cost of stimulating the use of PV for electricity generation is reduced significantly, and increased interest for PV as a clean source of energy from policymakers can be observed. Going forward it is expected that a number of markets, in particular in Asia and the US, will continue to grow and hence demand will diversify away from the key markets in Europe.

Overall demand outlook for 2012 is highly uncertain, but industry analysts are forecasting a global solar market in the range of 26 to 32 GW.

Analysts are still forecasting industry wide production capacity above estimated global demand in 2012. The current market price level is putting pressure on high cost capacity and there are signs of capacity reductions across the solar value chain, including polysilicon. Despite these adjustments, through the first quarter 2012, the prices have continued to decline across the value chain, and this may continue throughout 2012.

The development in the selling prices for REC's solar grade polysilicon, wafers and modules are generally expected to follow the market price fluctuations.

#### REC's 2012 priorities

For 2012, REC has defined the following key priorities: The focus on cash flow and to maintain financial flexibility will continue. The restructuring of production capacity in Norway will be completed. Investments will be made in implementation of technology to improve product performance and reliability. Finally REC will build brand identity and strengthen the market organization, both in Europe, Asia and the US.

#### **Production targets**

The full year 2012 production targets as well as the actual 2011 production figures are summarized in a separate table.

SEGMENT	PRODUCT	2011 ACTUAL	2012 TARGET
REC Silicon	Polysilicon	19 050 MT	~ 20 500 MT
REC Wafer	Wafers	1 074 MW	NA
REC Solar	Modules	699 MW	~ 750 MW

 $2012\,\text{polysilicon}$  production is expected to increase through continued optimization of the production facilities.

The softness in the silane gas market continues as the major end markets including displays, semiconductors and PV all experience weakness due to

the macroeconomic environment. REC will be aggressive and targets to increase market share in the silane gas market in 2012.

No production guidance is provided for REC Wafer due to significant uncertainty related to future operations.

All production targets are subject to changes in the market conditions and operations.

#### Cost targets

REC Silicon targets to reduce FBR cash production cost by another ten percent in 2012, with expected cash cost below USD 13 per kg in the fourth quarter 2012. Cost reductions is expected to be achieved through more stable operations, increased production volume, reduced cost of raw materials as well as reduced overhead costs. In 2012 REC expects about two thirds of its total polysilicon production to be based on the FBR process.

REC Solar targets to reduce the production cost by another 30 percent in 2012 to 70 Eurocents per watt in the fourth quarter 2012. The cost reductions are expected to be achieved through implementation of new technologies to increase average cell efficiency to 18 percent, strategic sourcing with reduced cost and consumption of polysilicon, other materials and consumables, improved operational performance, debottlenecking and higher equipment availability as well as reduced fixed costs and economies of scale in support functions.

Sandvika, March 20, 2012

Bjørn M. Wiggen Chairman of the Board

Hilde Myrberg Member of the Board

Heléne Villoles Degguist Heléne Vibbleus Bergquist Member of the Board

> Hans Ødegård Member of the Board

Tore Schiøte

Mimi K. Berdal Member of the Board

Odd Christopher Hansen Member of the Board

Rolf B. Nilsen

Member of the Board

Svein Tore Holsether Member of the Board

Bernt Reitan Member of the Board

Tommy Kristensen Member of the Board

Silje Johnsen Member of the Board

Ole Enger
President and CEO

# STATEMENT OF COMPLIANCE

The Board of Directors and the Chief Executive Officer (CEO) have today considered and approved the report from the Board of Directors, the financial statements for the REC Group and for the parent company REC ASA for the year ending December 31, 2011.

The consolidated financial statements of REC have been prepared in accordance with International Financial Reporting Standards as adopted by the EU and additional disclosure requirements as stated in the Norwegian Accounting Act that are applicable per December 31, 2011. The financial statements for the parent company REC ASA have been prepared in accordance with the Norwegian Accounting Act and Generally Accepted Accounting Principles in Norway that are applicable per December 31, 2011. The report from the Board of Directors for the REC Group and REC ASA has been prepared in accordance with the Norwegian Accounting Act and the Norwegian Accounting Standard no. 16 applicable per December 31, 2011.

We confirm that, to the best of our knowledge:

- the financial statements for the REC Group and REC ASA for the year ending December 31, 2011 have been prepared in accordance with applicable accounting standards, and
- the information in the financial statements gives a true and fair view of the REC Group's and REC ASA's assets, liabilities, financial position and results of operations for the year ending December 31, 2011, and
- the report from the Board of Directors report for the year ending December 31, 2011 includes a fair review of:
  - the development, results of operations and position for the REC Group and REC ASA, and
  - the principal risks and uncertainties for the REC Group and REC ASA.

Sandvika, March 20, 2012

Bjørn M. Wiggen Chairman of the Board

Hilde Myrberg Member of the Board

Heléne Vilbleus Bergquist Member of the Board

> Wars (Alegard Hans Ødegård Member of the Board

Tore Schiøtz Member of the Board

Huu li Berdel Mimi K. Berdal Member of the Board

Odd Christopher Hansen Member of the Board

Member of the Board

Svein Tore Holsether Member of the Board

Member of the Board

Tommy Kristensen Member of the Board

Silje Johnsen Member of the Board

President and CEO

# THE BOARD OF DIRECTOR'S REPORT ON CORPORATE GOVERNANCE

Renewable Energy Corporation ASA ("REC" or the "Company", including its subsidiaries worldwide, sometimes also referred to as "REC Group") endorses the Norwegian Code of Practice for Corporate Governance (Code of Practice) issued by the Norwegian Corporate Governance Board, most recently revised on 20, October 2011. The latest amendments to the Code of Practice are also incorporated into the reporting requirements of the Accounting Act. The Code of Practice and the Accounting Act are available at www.nues.no and at www.lovdata.no respectively. The Board has adopted the following report that explains how REC meets the requirements of the Code of Practice and the Accounting Act and explains possible deviations for 2011:

#### 1.IMPLEMENTATION AND REPORTING ON CORPORATE GOVERNANCE

REC's objective is long-term value creation for its shareholders.

REC believes sound business must be based on value-based management and clear guidelines on ethics and sustainability. REC's mission is Smart Energy for a Cleaner Future.

To enable us to carry out the mission, the Board has adopted a common set of core values:

RESPONSIBILITY

**ENTHUSIASM** 

COMMITMENT

INNOVATION

DRIVE

The core values are part of the Company's Corporate Governance Principles and have been introduced to all employees, and the Company has implemented various programs in order to maintain focus on and live these values.

The Company's ethical values and corporate social responsibility are also described in the Code of Conduct and certain other group policies on sustainability. The Code of Conduct includes requirements for compliance with laws, ethical behavior and professional integrity for all employees and board members of the Company and its subsidiaries. In addition, REC has adopted the following group policies:

- Business Conduct Policy
- Safety and Health Policy
- Quality and Improvement Policy
- · Environment and Climate Policy

The Corporate Governance Principles, the Code of Conduct and the Group Policies have been adopted by the Board and will be reviewed on an annual basis. All documents are available to the public on the Company's website.

#### 2. BUSINESS

The purpose of the Company is described in the Articles of Association § 3:

"The Company's purpose is development and sale of products and services related to renewable energy sources, and to perform other financial operations related to such. The Company may, through subscription of shares or in any other ways, including granting of loans, acquire interests in other companies with identical or similar purposes".

REC believes the solar industry plays a key role as a long-term supplier of sustainable energy and its business is focused on developing competitive solar energy solutions. REC's strategic ambition is built on an integrated value chain, reaching from silane and polysilicon production through wafer, module and systems delivery. To make solar energy fully competitive with traditional energy sources, REC focuses on cost reduction and improvement of products. This should be achieved through introduction of new process and product technologies as well as continuous productivity improvement and technology development. REC's strategies and goals are presented in the annual and quarterly reports, at the Capital Market Days and at various investor meetings.

#### 3. EQUITY AND DIVIDENDS

The REC Group's consolidated equity was NOK 12,192 million on December 31,2011, which was equivalent to approximately 50 percent of total assets.

The Board considers that the equity capital is appropriate for the Company's objectives, strategy and risk profile. Reference is also made to note 3.3 to the consolidated financial statements regarding capital structure and financing and to the report of the Board of Directors.

The REC Group's ambition is to give its shareholders a high and stable return on their investment and to be competitive compared with alternative investment opportunities with comparable risk. This should be achieved, first and foremost, through strong and profitable growth.

To support committed investments and productivity improvements, the Board's view so far has been that retained earnings should be put to profitable use within the Company. Accordingly there has been no distribution of dividends to the shareholders since the Company was publicly listed in 2006.

The REC Group and REC ASA reported large losses in 2011 and REC ASA had no distributable equity at December 31, 2011. Consequently, the Board of Directors does not propose any dividend payments for the financial year 2011.

Reference is made to note 3.3 to the consolidated financial statements. The Board will continue to make a yearly assessment based on the goals and strategies and the financial situation of the Company.

At the Annual General Meeting (AGM) on May 25, 2011, the Board was granted the following authorities:

- Authority to issue convertible bond (s) with warrants (up to ten percent of the existing share capital).
- Authority to acquire shares in the Company (up to a maximum of ten percent of the nominal value)
- Authority to increase the share capital (up to ten percent of the existing share capital).

Reference is made to note 15 of the annual financial statements for a more detailed description of the mandates including defined purposes and time limits for utilization. Separate voting for each purpose was implemented on the AGM.

#### 4. EQUAL TREATMENT OF SHAREHOLDERS AND TRANSACTIONS WITH RELATED PARTIES

REC has one class of shares and each share confers one voting right at the General Meetings. The Articles of Association contain no restrictions on voting rights.

REC seeks to conform to the principles for equal treatment of shareholders and is generally cautious as regards transactions with shareholders, members of the Board of Directors, Group Management or parties related to these.

REC did not acquire own shares in 2011. Shares acquired in previous years in relation to employee share programs have been acquired through the stock exchange.

There were no agreements in 2011 between REC or a REC Group company and shareholders, directors, Group Management or a party related to such individuals that could be described as a material transaction. Reference is also made to note  $10\ \text{to}$  the consolidated financial statements regarding related party transactions.

The Board has adopted guidelines to ensure that the Board will be informed of any possible interests of a Board member or a member of the Group Management or parties related to these in any transaction or matter dealt with by the Board, as well as guidelines for the handling of such a situation.

#### **5. FREELY NEGOTIABLE SHARES**

REC is listed on the Oslo Stock Exchange. All shares are without any restrictions and are freely negotiable.

#### **6. GENERAL MEETINGS**

According to the Articles of Association, the AGM is to be held by the end of June every year.

The notice of a General Meeting and the proposed resolutions are sent to the shareholders and made available at the Company's website no later than three weeks prior to the date of the General Meeting.

The supporting documentation, including the recommendations of the nomination committee, is available on the Company's website no later than three weeks prior to the General Meeting and is not distributed to the shareholders according to the Articles of Association unless specifically requested.

Efforts are being made to ensure that the proposed resolutions and supporting information are sufficiently detailed and comprehensive to allow the shareholders to form a view on all matters to be considered at the meeting. The invitation includes information about shareholders' rights at the meeting.

The Company regularly states in the notice of the meeting that shareholders wishing to participate at the General Meeting shall notify the Company within a specific time limit. The time limit cannot expire earlier than five days prior to the General Meeting. So far, the time-limit has always been set at two working days prior to the meeting. Shareholders who have not given notice within the time limit may be denied participation at the meeting. Registration of attendance may be done by mail, telefax or electronically via the Company's website. Separate voting on each candidate for election to the Board and nomination committee is offered at the General Meeting.

The Chairman of the Board, the Board members and the members of the Nomination Committee are normally present at the General Meeting. The auditor is also present. All Board members are encouraged to participate at the meeting.

Shareholders that cannot attend the meeting may vote by proxy. The shareholders may elect a proxy of their choice, and the Company also nominates a person that the shareholders may elect to vote on their behalf. Information about the procedures the shareholders must observe in order to participate and vote is given together with the notice of the meeting. The shareholders also receive a form for appointment of a proxy. The proxy form is prepared in a way that allows separate voting instructions to be given for each matter to be considered. It is however not possible to vote separately on each candidate nominated to the Board by way of instructing the proxy prior to the General Meeting. This is due to the fact that the composition of the Board must be in accordance with applicable legislation regarding gender representation and qualifications for the audit committee. The nomination committee's proposal is given with due respect to such legislation. Should a situation arise where the composition of the Board may be in conflict with applicable legislation, the situation and consequences of electing a board contrary to applicable legislation should be discussed at the General Meeting and the shareholders should base their voting on the views discussed at the meeting.

The Articles of Association allow the Board to accept written advance votes subject to the existence of a satisfactory method for verifying the identity of the shareholder. The Articles of Association also allow the Board to accept that votes may be cast through electronic communication. So far, no satisfactory solutions for written advance votes and electronic voting have been established, but the Board will continue to evaluate the situation based on the solutions available at any time.

The General Meeting is opened by the Chairman of the Board who proposes an independent chairman to be elected to chair the meeting.

The protocols of the General Meetings are available on the Company's website.

#### 7. NOMINATION COMMITTEE

The Articles of Association provide for a Nomination Committee consisting of three members. The members are elected by the AGM for a term of two years and the AGM appoints the chairman of the Committee. The remuneration of the Nomination Committee is decided by the AGM. The Nomination Committee makes proposals to the AGM for members to be elected to the Nomination Committee. The composition of the current Committee is in accordance with the requirement of independence in the Code of Practice. Rules of procedure for the Nomination Committee have been adopted by the General Meeting and are available on the Company's website.

The Nomination Committee presents recommendations to the AGM regarding the election of the shareholder-elected members of the Board and the remuneration for members of the Board. The Committee's recommendations provide relevant information of the candidates.

The Nomination Committee examines the annual report by the Board of Directors on the valuation of its own work and takes its contents into consideration when making its recommendations on board composition. The Committee also consults with the CEO, the Chairman of the Board, the shareholder-elected Board members and the largest shareholders of the Company before submitting its proposals.

Information on the members of the Nomination Committee and deadlines for submitting proposals to the Committee are included on the Company's website. The Nomination Committee presents and provides the basis for the proposals by the Committee at the AGM and also reports on how the Committee has carried out its work during the past year. The rules of procedure do not establish rules for rotation of the members of the Nomination Committee.

# 8. CORPORATE ASSEMBLY AND BOARD OF DIRECTORS: COMPOSITION AND INDEPENDENCE.

REC has agreed with its employees not to have a corporate assembly in the parent company or its subsidiaries. As there is no corporate assembly, the employees have extended representation in the Board.

The Board consists of between seven and twelve directors (currently twelve). Up to eight are elected by the shareholders and four are elected by the employees of the REC Group companies in Norway. The shareholder- elected members are elected for a term of one year . The employee-elected members are elected for a term of two years.

The directors are presented in the Annual Report with information about education and experience. Currently three of the eight shareholder-elected members and one of the employee-elected members are women.

All the shareholder-elected members of the Board are independent of the Company's Group Management. A majority of the Board members are independent of material business contacts.

The following five Board members are independent of the Company's main shareholders:

- Odd Christopher Hansen
- Helène Vibbleus Bergquist
- Bernt Reitan
- Mimi Berdal
- Tore Schiøtz

The Board elects its own Chairman according to the Articles of Association and the Public Limited Liability Companies Act  $\S$  6-1 (2).

According to its rules of procedure, the Nomination Committee must ensure that the composition of the Board is in accordance with applicable legislation and regulations of the Oslo Stock Exchange at all times

The Nomination Committee bases its recommendations on the candidates' experience, qualifications and their capacity to serve as directors of the Company in a satisfactory manner.

The recommendation from the Nomination Committee with information about the proposed candidates is available on the Company's website at least  $21\,\mathrm{days}$  before the AGM.

Board members have not been specifically encouraged to acquire shares but Board members may acquire shares with due consideration to the requirements of the Securities Trading Act and the Company's procedure for primary insiders. The Company assists the Board members to comply with mandatory disclosure obligations. It is also stated in the Company's procedure for primary insiders that primary insiders should abstain from short-term transactions in REC related financial instruments, and that they should apply due care and diligence with regard to ownership periods.

#### 9. THE WORK OF THE BOARD OF DIRECTORS

The Board has the ultimate responsibility for the management of the Company and the Group and for supervising its day-to-day management.

The Board has adopted an annual plan for its work with respect to fixed items. Other items are added as required. The Board held 16 board meetings in 2011 which were well attended by all Board members with limited absences.

The Board regularly adopts and reviews the Company's strategy.

The Board has adopted "Rules of procedures for the Board of Directors" for the work of the Board. The rules describe the Board's responsibilities, duties and administrative procedures as well as the tasks and duties of the Chief Executive Officer. The Board has also adopted a Chart of

Authority regulating in detail all matters that are to be decided by the Board and the matters that may be decided by the administration with a description of the appropriate level of decision-maker. The Chart of Authority distinguishes between investment decisions, customer contracts, procurement contracts, compensation and finance and is reviewed on an annual basis and adapted if necessary. The Board holds at least one meeting per year with the auditor and without any members of the Group Management and the administration present.

The Board has currently established two committees - the Audit Committee and the Compensation Committee. Information about the members of these committees is included in the Annual Report.

The Board reviews its own performance, including the work of the Board committees, annually.

#### The Audit Committee

The Audit Committee consists of three members of the Board. Two members are independent of the Company's Group Management and material business contacts. The third member is one of the employees' representatives at the Board of Directors. Two members are independent of the Company's main shareholders, including the employees' representative. The Committee has collectively the competence required in the Public Limited Liability Companies Act § 6-42. Two members are independent according to § 6-42 Public Limited Liability Companies Act and have the required qualifications within accounting and auditing.

The Committee supports the Board with respect to the assessment and control of financial risk, financial reporting, auditing and control and prepares discussions and resolutions for the Board's plenary meetings. It has no decision-making authority. In addition, under the newly adopted whistleblower procedure, complaints from employees and other concerned parties are received and followed up by the Committee. The Chief Financial Officer participates in the meetings of the Audit Committee. The Committee should hold at least one meeting per year with the auditor and without the Chief Financial Officer or any other members of the Group Management and the administration present.

The Audit Committee held eight meetings in 2011 and has been in regular contact with the Company's auditor regarding auditing of the statutory accounts and is also assessing and monitoring the auditor's independence, including monitoring non-audit services provided by the auditor to the Company.

The Committee makes recommendations to the Board with respect to the appointment, retention and termination of the Company's auditor as well as the auditor's fees. The Committee reviews complaints regarding accounting, internal controls and auditing matters.

The tasks and rules of procedure of the Audit Committee are further regulated in the Audit Committee Charter.

#### The Compensation Committee

The Compensation Committee consists of three members of the Board all of which are independent of the Group Management. The Committee supports the Board by preparing resolutions with respect to the terms

and conditions of employment for the Chief Executive Officer and with respect to general principles and strategies for the compensation of the REC Group Management, including bonus and option programs as well as other material personnel related matters. It also makes recommendations to the Board with respect to Employee Share Purchase Programs.

The tasks and procedures of the Compensations Committee are further regulated in the Compensation Committee Charter.

The Compensation Committee held four meetings in 2011.

#### Corporate Governance Committee

The Board decided not to form a Corporate Governance Committee in  $2011\,\mbox{as}$  the reporting on corporate governance as described in the Accounting Act and the NUES principles should be prepared as part of the Audit Committee's tasks.

#### 10. RISK MANAGEMENT AND INTERNAL CONTROL

REC has a risk management system to ensure that all business segments within the REC Group have a systematic and uniform approach to risk management. Within the system, the roles, responsibilities, processes and procedures, standards, tools, facilities and documentation to be produced are defined. Group Management sets the context in which risks are managed, i.e. how risks are to be identified, analyzed, controlled, monitored and reviewed. It also supervises the risk management process, however the business segments are the "riskowners" and responsible for ensuring that risk management is a systematic, integrated part of their day-to-day operations. Each business segment defines and analyzes risks in order to establish or update its risks picture through a bottom-up process. In addition, each segment must carry out a top-down analysis.

Each segment reports a risk picture (top ten per segment area) every year as an integrated part of the planning process as well as an update in connection with the quarterly reporting. REC Group Management performs a separate and additional risk evaluation based on a top-down approach. The quarterly risk assessment is presented to the Board of Directors.

In addition, REC Group Management generates monthly reports that are sent to the Board of Directors including operational reviews, HSE (Health, Safety and Environment), financial highlights and key performance indicators. REC Group Management also submits quarterly sustainability reports to the Board of Directors.

In 2011 REC has further improved the existing risk assessment and monitoring process related to financial reporting. The risk assessment has been headed by Group Finance and has a Group perspective (topdown approach). The risk assessment consists of scoping of the relevant risks that could have a significant effect on the consolidated financial statements, as well as evaluating the mitigating controls which are in place for these risks. Some key risk areas have been indentified and reviews have been performed on site for all major reporting units. The risk assessments, findings and mitigating actions have been presented to the Audit Committee and Board of Directors. The process will be further developed in 2012.

To ensure a consistent financial reporting throughout the Group, the financial information is reported through the Group's common web based reporting system, Hyperion Financial Management (HFM). Every month, except for January and July, each reporting unit reports figures in HFM based on output from its own ERP system. HFM has a chart of accounts and forms designed for group reporting to meet the requirements in IFRS that are used by all entities. HFM has built-in controls in the forms and reports designed to check that the reported information is consistent. The quarterly and year end reporting processes are expanded to meet various supplementary information requirements. The consolidation process primarily takes place on Group level but also on segment level where consolidated financial information is required. The reporting in HFM is the basis for the management review on segment and Group level. The review is performed each reporting month

Group Finance monitors changes in accounting/reporting requirements for the Group, implements relevant changes in HFM and provides the reporting units with adequate information and guidelines. Group Finance provides relevant training in HFM when required. Prior to the year end reporting Group Finance conducts meetings with the reporting units where reporting requirements and accounting issues (if applicable) are discussed.

Prior to each quarterly reporting Group Finance conducts preparation meetings with the segments and selected entities to discuss issues and ensure a timely and accurate reporting based on a fixed agenda.

In connection with the quarterly reporting each segment issues a representation letter to the Group CFO, confirming among others the completeness, accuracy and validity of the reporting.

Based on the assessment, evaluation and testing of risk management and internal control over financial reporting performed in 2011, the Board of Directors did not find any circumstances indicating that it has not met its obligation to ensure that REC's accounts and asset management are subject to adequate control.

The REC Group's financial risk management is described in note 3 to the consolidated financial statements. Reference is also made to the Board of Directors' report which includes an analysis of the financial statements and the key risk factors.

In addition to the risk and financial assessment and reporting described above, the Company has a set of corporate policies on general business conduct (in particular the Code of Conduct) which applies to all employees, officers and directors. These policies are implemented inter alia by setting relevant objectives in employees' annual goal agreements, by regularly monitoring performance on an individual and Company level and reporting of results.

In addition, the Company has recently adopted a Whistleblower Procedure encouraging all employees, contractors, vendors and other stakeholders of the Group to report their concerns or complaints related to the REC Group's business conduct including its accounting, internal controls and auditing matters. The Audit Committee will be informed of all complaints related to accounting and auditing matters. The Board will

be informed of specific complaints as required and will also be provided regularly with general updates of complaints received. It is stated in the Code of Conduct that no adverse action may be taken against an employee due to complaints submitted in good faith. Complaints can be made anonymously.

#### 11. REMUNERATION OF THE BOARD OF DIRECTORS

The members of the Board receive remuneration in accordance with their individual roles. Board members who participate in the Audit Committee and Compensation Committee receive additional compensation, see note 16 to the consolidated financial statements. All compensation is disclosed.

The remuneration is not linked to the Company's performance and the members are not granted share options. None of the shareholderelected members of the Board has taken on specific assignments for the Company in addition to their appointment as members of the Board.

#### 12. REMUNERATION OF THE GROUP MANAGEMENT

The Board determines all aspects of the remuneration of the Chief Executive Officer.

REC's remuneration policy for the Group Management has been established according to guidelines from the Board. The Board presented its policy on the remuneration of the Management at the AGM in May 2011 and the AGM endorsed this policy.

The remuneration of the Group Management consists of the following main elements:

- Basic salary
- Variable pay based on an annual performance-related compensation system
- Share options
- Certain compensation in kind, e.g. company car and telephone allowances
- Pension and insurance schemes

The variable pay and the value of the share options are linked to the Company's financial performance over time and include incentives related to performance that the employees can influence.

There are absolute limits for performance-related remuneration.

The remuneration of the Chief Executive Officer and the other members of the Group Management are disclosed in note 16 to the consolidated financial statements.

#### 13. INFORMATION AND COMMUNICATIONS

REC treats its investors equally. Timely information is given and published simultaneously to all investors in accordance with applicable legislation and regulations in order to provide the best possible basis for the valuation of the Company.

Presentations that are open to the public are conducted in connection with every quarterly report and are also made available through a webcast. Analyst Q&A conference calls are usually held in the afternoon on the same day as the quarterly report is released. The quarterly presentations are normally given by the CEO and CFO. The Investor Relations Officer participates at the quarterly presentations and from time to time members of the Group Management in addition to the CEO and CFO. Furthermore, the Company keeps an ongoing dialogue with its investors and makes presentations to analysts and investors through various conferences and investor events.

The Investor Relations (IR) function is in charge of coordinating the Company's communications to the market and to existing and potential investors of the Company. The Investor Relations Officer reports to the CFO.

The annual report is sent to the shareholders on request. The annual and quarterly reports, all announcements to the Stock Exchange, the latest presentations and the financial calendar are published in the Investor section on the Company's website.

The Board has adopted an IR policy specifying i.a. who is entitled to speak on behalf of the Company on various subjects and with guidelines for the Company's contact with shareholders other than through General Meetings.

#### 14. TAKE-OVERS

The Company has no defense mechanism that can prevent take-over bids. The Board is open to initiatives that are commercially and financially attractive for the shareholders of the Company. The Board will assess a potential offer for the Company's shares in accordance with applicable legislation and adequate requirements in the Code of Conduct in due course. No other guidelines have been established by the Board of Directors in the event of a take-over bid.

Any transaction that effectively will constitute a disposal of a majority of the Company's activities will be decided by the General Meeting.

#### 15. AUDITOR

The Company's external auditor is independent from the Company and is elected by the AGM.

The auditor participates at the Board meetings where the Board deals with the annual accounts and provides comments related to the accounting principles and the Financial Statements. At the meeting the auditor comments on any material changes in the Company's accounting principles, comments on material estimated accounting figures and reports if there are disagreement between the auditor and the Group Management of the Company.

The auditor annually presents a review to the Board of the most significant identified weaknesses and proposals for improvements of the internal control procedures. The auditor provides the Board with an annual confirmation that the auditor satisfies the requirements for independence together with a summary of all services in addition to audit work that have been undertaken for the company.

The auditor meets with the Audit Committee and the Board once a year without the Chief Executive or any other member of the Group Management present.

The auditor also participates in the meetings of the Audit Committee and submits the main features of the audit plan for the REC Group to the Audit Committee.

The remuneration of the auditor is approved by the AGM. The auditor provides a break-down between audit and non-audit services, and the AGM is given information about non-audit services provided by the auditor.

The auditor participates at the AGM and presents the independent auditor's report.

The Board has issued guidelines regarding Group Management use of the auditor for services other than audit.

The report is also available on www.recgroup.com.

# SHAREHOLDER MATTERS

The REC share is listed on the Oslo Stock Exchange under the ticker code REC.

The company has held more than 200 investor meetings and a large number of presentations during 2011 in Norway as well as internationally.

At year-end, REC's total market capitalization was NOK 3,311 million. Around 25 analysts are regularly publishing research on the company.

#### Key data per share

	2011	2010
Market capitalization at year-end (NOK million)	3 311	17739
Number of shares traded (million)	3 877	3 755
Number of shares at year-end (million)	997.2	997.2
Market price at year-end (NOK)	3.32	17.79
Highest market price during the year (NOK)	22.05	37.27
Lowest market price during the year (NOK)	3.00	14.64

#### SHAREHOLDER/IR POLICY

REC has implemented a corporate governance and shareholder policy approved by REC's Board of Directors to ensure the provision of accurate, relevant and timely information to the capital market.

Investors and capital market participants shall be provided consistent, timely and precise information simultaneously. As REC is an international enterprise, with investors across the globe, all news and press releases are and will be published in English only.

REC shall make quarterly earnings presentations available as webcasts in real time.

#### **SHARE DATA**

#### Share price development in 2011



The share price decreased throughout 2011, bringing the total market capitalization from NOK 17,739 million at the beginning of the year, to NOK 3,311 million at the end of the year.

The share price development during 2011 can be seen below as well as the performance of the Oslo Stock Exchange (OBX) and the NEX renewable index.

#### **SHAREHOLDERS**

As per December 31, 2011, the REC Group had about 29,000 shareholders, and the total number of outstanding shares at the end of the year was approximately 997 million, each with a nominal value of NOK 1.

Share distribution and main shareholders are described in separate tables.

Identification of shareholders registered on nominee accounts is carried through every quarter, the latest as per December 21, 2011. The latest analysis shows that Blackrock, Peoples Bank of China, Nordea Asset Management and Storebrand Investments would also be represented on the list of top 20 shareholders.

#### **GEOGRAPHICAL DISTRIBUTION**

Nearly 40 percent of the outstanding shares in REC are held by Orkla ASA and the remaining shares are held by shareholders all across the world. The geographical split below is based on the identification of shareholders registered on nominee accounts as per December 21, 2011.

	COUNTRY	SHARES	% TOTAL SHARES
1	Norway	826 467 841	82.88%
2	United Kingdom	49 857 494	5.00%
3	Sweden	36 404 671	3.65%
4	United States	23 316 041	2.34%
5	Denmark	16 568 378	1.66%
••••	Total 5 largest	952 614 425	95.53%
	Other markets	44 537 693	4.47%
	Total number of shares	997 152 118	100.00%

#### **SHARE LIQUIDITY**

High turnover in the REC share is important for REC's investors as this will reduce the cost of capital, and further attract investors.

In 2011, nearly 1.2 million trades were executed and the total trading value was NOK 47.1 billion. About 3.9 million shares were traded in the year, this represents a turnover velocity of 389 percent, calculated as the total number of shares traded in the period as a percentage of the average total registered number of shares.

During 2011 REC was the tenth most traded share on the Oslo Stock Exchange, measured in turnover by value. Measured by numbers of transactions, REC was the sixth most traded company on the Oslo Stock Exchange in 2011.

#### Shareholders spread as per December 31, 2011

NUMBER OF SHARES FROM	NUMBER OF SHARES TO	NO. OF SHAREHOLDERS	NO. OF SHARES	%
1	100	3 3 3 4	204 505	0.02%
101	1 000	12084	5 656 664	0.57%
1001	10 000	10 357	36 865 279	3.70%
10 001	100 000	2 932	91 748 483	9.20%
100 001	1 000 000	466	136 095 247	13.65%
1 000 001	-	78	726 581 940	72.87%
		29 251	997 152 118	100.00%

#### 20 largest shareholders, December 31, 2011

	SHAREHOLDER	%	31.12.2011	TYPE	NAT
1	ORKLA ASA	39.74%	396 236 635		NOR
2	FOLKETRYGDFONDET	2.83%	28 175 871		NOR
3	UMOE AS	2.16%	21 532 090		NOR
4	VERDIPAPIRFONDET DNB NORDIC	1.73%	17 230 104		NOR
5	BANK OF NEW YORK MELLON SA/NV	1.72%	17 117 998	NOM	BEL
6	SKANDINAVISKE ENSKILDA BANKEN	1.46%	14 567 211	NOM	SWE
7	HOLBERG NORGE	1.37%	13 689 086		GBR
8	SKANDINAVISKA ENSKILDA BANKEN	1.33%	13 290 406	NOM	SWE
9	CLEARSTREAM BANKING S.A.	0.99%	9 837 212	NOM	LUX
10	HOLBERG NORDEN	0.98%	9 747 095		NOR
11	VERDIPAPIRFONDET DNB NORGE (IV)	0.85%	8 483 367		NOR
12	DNB NOR MARKETS, AKSJEH/ ANALYSE	0.72%	7 136 507	NOM	NOR
13	VITAL FORSIKRING ASA	0.69%	6 911 674		NOR
14	KLP AKSJE NORGE VPF	0.66%	6 621 542		NOR
15	FONDSFINANS SPAR	0.52%	5 200 000		NOR
16	WESTCAP A/S	0.50%	5 000 000		NOR
17	CREDIT SUISSE SECURITIES	0.49%	4851602	NOM	GBR
18	VERDIPAPIRFONDET DNB NORGE	0.47%	4 689 859		NED
19	NORDNET BANK AB	0.44%	4 393 361	NOM	SWE
20	DNB NOR SMB	0.43%	4 250 000		NOR
	Total 20 largest	60.07%	598 961 620		
	Other	39.93%	398 190 498		
	Total number of shares	100.00%	997 152 118		

#### **INVESTOR RELATIONS ACTIVITIES**

REC puts emphasis on transparency and equal treatment of shareholders, and on informing all investors and analysts at the same time.

The Investor Relations section of REC's website is an important tool, and this section contains up-to-date information on the company's financial performance and share price information. In addition, users can find an updated financial calendar, company presentations and reports, and other important data for the financial markets.

In conjunction with the release of its interim financial results, REC gives a public presentation to investors, analyst and press. The presentation is web-casted and it is also possible to participate by telephone.

During the year, REC has participated in various renewable energy- and PV conferences as well as holding more than 200 meetings with Norwegian and international investors. The cities covered by REC during road shows in 2011 include: Oslo, London, New York, Frankfurt, Zurich, Copenhagen and Stockholm.

At the end of the year, the number of sell-side analysts that regularly follow REC was around 25, of which ten are based in Norway. An updated list of analysts following the company can be found under investor relations at www.recgroup.com

#### **FINANCIAL CALENDAR 2012**

EVENT	DATE
Fourth quarter 2011	February 8, 2012
First quarter 2012	April 25, 2012
Annual General Meeting	May 22, 2012
Second quarter 2012	July 19, 2012
Third quarter 2012	October 24, 2012
Fourth quarter 2012	February, 2013

#### **REGISTRAR**

If you have any questions regarding your holding of REC shares, please contact our registrar in Norway:

#### DnB NOR VPS Service

Registrars Department Stranden 21 0021 Oslo Norway

Tel.: +47 22 48 35 90 Fax: +47 22 48 11 71

#### **CONTACT**

#### Mikkel Tørud

VP & Investor Relation Officer
Tel.: +47 97 69 91 44
Tel.: +47 67 57 44 50
Email: ir@recgroup.com

#### Mail address

PO Box 594 1302 Sandvika Norway

#### Office address

Kjørbovn. 29, Sandvika

# SUSTAINABILITY

#### INTRODUCTION

REC's mission statement is Smart Energy for a Cleaner future, which signals REC's commitment to making safe and sustainable solar energy affordable and accessible globally. This means continuous focus on reducing the cost and enhancing the value of solar products, while keeping safety at the forefront and always striving for a high environmental and governance standard.

REC acknowledges its responsibilities as a company to be held accountable to shareholders, investors, employees, and society. Everywhere REC operates it will continuously seek to limit any negative effects caused by its activities. Wherever possible sustainability is integral to the way that REC does business.

#### SUSTAINABILITY REPORTING

REC's sustainability reporting addresses the issues that are material for the company and our stakeholders. REC is continuously working to improve its reporting, and from 2011 REC will use the Global Reporting Initiative (GRI) framework to measure and report on sustainability performance. The GRI is internationally recognized, and its framework establishes a transparent means through which to report on the following six indicator areas: economics, environment, labor, human rights, society, and product responsibility.

In 2011 REC has reported according to a C level as defined by the GRI G3.1 guidelines, including as many indicators as the current data situation allows. REC will in 2012 continue to develop its reporting according to the GRI, by including other relevant performance indicators with the ambition to reach a B level. A table of all GRI indicators covered within this report is included on page 43. This report covers the following topics:

- Governing Sustainability
- Economic Sustainability
- People and Organization
- Health and Safety
- Environment and Climate
- · Sustainability in the Supply Chain
- Stakeholder Relations
- Product Responsibility

The economic and labor data are complete for REC as a whole. The environmental data presented in this report covers the manufacturing sites operating in Norway, Singapore and the United States, inclusive of plants that have been shut down during the year. This accounts for the key areas of environmental impact. Data on health and safety represents likewise the manufacturing sites and headquarters, but only partly on REC sales offices and supporting locations due to the lack of data. REC will develop its sustainability reporting in future years to reflect the activities throughout the wider organization.

#### **GOVERNING SUSTAINABILITY**

#### **Policies**

The Group Policies on Sustainability define the REC way of working with Sustainability both internally and in the various markets REC operates. They were adopted by the Group Management in 2010 and meet the NUES standards regarding their content. The policies are communicated internally and on the website. The Group Policies consist of Business Conduct Policy, Safety and Health Policy, Environment and Climate Policy as well as Quality and Improvement Policy. The policies are governing documents for all REC activities and are normative for all underlying governing documents within sustainability. They are reviewed annually by the Board of Directors.

- The Business Conduct Policy is designed to promote transparency and accountability with the highest level of business ethics in all REC's activities, as well as continuously improve business conduct together with REC's stakeholders. The Business Conduct Policy supports sustainability, human rights, labor practices, business ethics, transparency and avoidance of corruption.
- The Safety and Health Policy targets zero harm to employees, contractors, partners, customers and members of the public.
- The Environment and Climate Policy shall maximize the positive contribution from renewable and climate-friendly solar energy at affordable prices.
- The Quality and Improvement Policy provides a continuous focus on quality and improvements in running operations.

#### **Principles**

To support the implementation of the Group Policies, an HSE management system was developed and adopted by the Group Management in January 2011. This consists of 14 HSE principles and an assessment tool where all internal HSE processes are covered. Expectations and practical implementation methods are explained in order to secure and improve HSE standards and share best practices across the Group. The assessment tool rates the implementation methods on a scale of Low – Average – Good – Best Practice – World Class, according to the use of the REC Business System rules & principles.

All manufacturing plants performed a self-assessment according to the REC HSE principles both in 2010 and in 2011, and the results are used for prioritizing improvement actions and programs. In 2012 the ambition is to further roll-out the HSE principles to other parts of the organization where applicable, as well as establish cross-assessments between the units.

#### Performance management

To ensure compliance with the Group Policies, REC sets annual objectives; monitors performance through specific KPIs, reports results monthly and quarterly and executes audits on all levels in the organization, in line with the REC Business System. This process has been strengthened in  $2011\,$  across the whole organization.

The Board of Directors gets quarterly sustainability reports focusing on KPI scorecard and risks. It is a Board responsibility to secure acceptable performance, also within the sustainability area.

#### Certifications

To ensure quality in all parts of the production, REC is using the ISO 9001 certification as a basis framework. Five of eight REC manufacturing units now have ISO 9001 certification.

To further improve the environmental aspects of the production process, REC has been focusing on implementation of the ISO 14001 standard. The ISO 14001 is a framework to assist organizations in developing their own environmental management system. All business units in Singapore have achieved the ISO 14001 certification and are undergoing annual audits by third party.

OHSAS 18001 is an international occupational health and safety management system standard. It is intended to help organizations control occupational health and safety risks. All business units in Singapore implemented the OHSAS 18001 during 2011, and achieved the certification at the end of the year.

Similarly, the polysilicon facility in Butte is actively pursuing the US OSHA equivalent to OHSAS 18001, called the Voluntary Protection Program (VPP). The VPP recognizes companies who have implemented effective safety and health management systems where management, labor, and OSHA work cooperatively and proactively to prevent fatalities, injuries, and illnesses through a system focused on: hazard prevention and control; worksite analysis; training; and management commitment and worker involvement. VPP participants are exempted from OSHA programmed inspections while they maintain their VPP status. The facility in Butte submitted their application in December 2011 and will be audited in 2012.

#### **Business Conduct**

REC sets high standards of integrity, which are expected of every employee and in every country where we do business. The REC Code of Conduct is the integrity framework that describes the behavior expected of employees and stakeholders, based on the REC Group policy of Business Conduct and the REC core values; Responsibility, Enthusiasm, Commitment, Innovation and Drive. It contains practical instructions to help employees in their day-to-day work and is underpinned by standards and policies covering issues such as corruption and illegal payments.

The Code of Conduct is available in English and Norwegian and was revised and approved by the Group Management in February 2012. A training program will be rolled out in 2012 for targeted employees, and it is integrated into induction training of all new employees. Every employee has to sign the Code of Conduct to acknowledge their commitment of adherence.

A whistleblower hotline and procedure was launched in 2011, encouraging all employees, contractors, vendors and other stakeholders of the Group to report their concerns or complaints related to the REC Group's Business Conduct. REC investigates all potential integrity concerns and cooperates fully with law enforcement agencies. The Audit Committee will be informed of all complaints related to accounting and auditing matters. The

Board will be informed of specific complaints as required and will also be provided regularly with general updates of complaints received. No adverse action will be taken against an employee due to complaints submitted in good faith. Complaints can be made anonymously.

In 2011, REC was subject to one case of alleged corruption, however after thorough investigation there was nothing found. REC will take every accusation of corruption seriously, do a thorough investigation, report to the Board of Directors and take the necessary actions.

#### Compliance

REC in Moses Lake paid a fine of USD 50,219 to the Department of Labor & Industries in 2011. This was a result of negotiated settlement related to 14 violations of the process safety management regulations following a week long inspection in March 2010. The underlying matters associated with the violations have been ameliorated.

Regarding environmental non-compliances, in  $2011\,\text{REC}$  in Moses Lake was fined USD  $10,000\,\text{for}$  not meeting emission limits set by the Washington Department of Ecology's air quality permit. This was related to emission tests conducted in June 2010.

In 2011, REC was subject to no legal actions for anti-competitive behavior, anti-trust or monopoly practices, and received no monetary or non-monetary fines for non-compliance in this area.

In 2011, REC was subject to no legal cases regarding corrupt practices or discrimination. In 2011, REC was neither a subject to monetary or non-monetary fines for non-compliance with laws and regulations concerning the provision and use of any products and services.

#### **ECONOMIC SUSTAINABILITY**

The table on the next page summarizes the direct economic value generated and distributed by REC in 2011.

#### PEOPLE AND ORGANIZATION

The total number of permanent employees decreased by 15 percent during the year to 3,587 at the end of 2011. The decrease is mainly driven by the permanent shut down of production capacity in Norway. For REC Wafer this was a reduction in number of permanent employees of 33 percent, giving a total of 718 at the end of 2011. For REC Solar, the reduction was 13 percent, bringing the total down to 1,914 permanent employees. The reduction of capacity in Norway was the major driver in the reduction, but Singapore also reduced the number of employees by 14 percent, down to 1,316. For the European offices involved in module sales, systems integration and project development the number of employees increased by 26 percent up to 78. Reorganization of the corporate functions gave a reduction of 16 percent during 2011. REC Silicon has maintained number of employees during 2011 and have 882 employees at year end.

As some staff are still in notice period in Norway it is expected that the number of permanent employees will be approximately 1,700 in REC Solar and 600 in REC Wafer at the end of the first quarter 2012. In REC Wafer about 190 of these employees are temporarily laid-off.

The number of contracted employees, apprentices and trainees were 204 at the end of the year, a reduction of 51 percent during 2011.

#### Direct economic value generated and distributed

(NOK IN MILLION)		2011	2010	2009
Direct economic value generated		14 390	14 115	8 9 2 6
Revenues		13 366	13 776	8 831
	Other income	992	304	0
	Interest income & other financial income	32	35	95
Direct economic value distributed		-11 693	-11 539	-8 245
Operating Costs	Cost of material and changes in inventories and write-downs	-5 750	-4 980	-3 000
Operating Costs	Other operating expenses	-3 740	-3 357	-2 379
Employee compensation		-2 001	-2 211	-1 649
Payments to capital providers	Interest expenses and fees	-504	-1 138	-833
Income tax paid (-) / received (+)		302	147	-384
Economic value retained		2 697	2 576	681

#### Total workforce by December 31, 2011

(NUMBER AND PERCENTAGE)	REC SILICON	REC WAFER	REC SOLAR	REC ASA	TOTAL
Total number of employees	882	718	1914	56	3 587*
Number of full time employees	882	712	1912	52	3 575
Number of part time employees	0	6	2	4	12
Number of apprentices/trainees/interns	0	22	47	0	69
Percentage contracted/ temporary man-year	11%	1%	2%	4%	4%
Percentage female employees	18%	18%	37%	38%	28%

<sup>\*</sup> Total number includes 17 employees at Technology Inc in US

## Turnover by December 31, 2011

(NUMBER AND PERCENTAGE)	REC SILICON	REC WAFER	REC SOLAR	REC ASA	TOTAL
Total number of resignations	52	190	384	21	647
Resignations – of which women	21%	20%	47%	38%	37%
Resignations – of which age group under 30 yrs	21%	19%	45%	10%	35%
Resignations – of which age group 30-50 yrs	50%	76%	52%	91%	60%
Resignations – of which age group over 50 yrs	29%	6%	2%	0%	6%
Resignations – of which voluntary	64%	96%	83%	100%	86%

Average sickness rate in 2011	REC SILICON	REC WAFER	REC SOLAR	REC ASA	TOTAL
Percentage absence due to sickness	0.8%	7%	3%	3%	1.6%

Of the total 3,587 employees at the end of 2011, 28 percent were female, which is similar to 2010, but slightly up from 2009 (23 percent). Out of the total of seven executives in the Group Management team at the end of the year, one was female. In the company's Board of Directors, one of four employee-elected Directors was female, while three of the eight shareholders elected Directors were female.

The total turn-over rate for 2011 was 18 percent. In Singapore the rate was 24 percent, in the US it was six percent, while Norway had 19 percent. Many resignations in Norway were a direct result of the ongoing organizational restructuring, which led to employees searching for and finding opportunities externally. The number of in-voluntary resignations will increase in the first quarter 2012, as those leaving as a result of the organization changes/shut-downs have completed their resignation period.

Approximately 75 percent of all employees in Norway are unionized. The cooperation between management and the unions is functioning well through established representation and fora. The union representatives contribute constructively in the handling of the company's challenges and opportunities. Election of new employee-elected representatives to the Board was carried out in 2011. There are currently no unions represented in REC companies outside Norway. REC allows for freedom of association in line with international conventions, and works to ensure that employees are treated in a fair manner. Where employees are unionized and national regulations allows for collective bargaining agreements, REC will facilitate these discussions. It is thus estimated that approximately 21 percent of total workforce is covered by collective bargaining agreements.

The sickness rate is calculated based on days of absence as percentage of number of actual workdays per year per full time employee. This means that vacation and regular holidays have been excluded.

REC and its subsidiaries are committed to equal opportunity employment and practices. All employees and applicants shall be treated without regard to age, gender, sexual orientation, nationality, race, religion, disability, marital situation or any other protected status. REC has succeeded in recruiting individuals and teams globally with the necessary competence, potential and cultural fit needed.

REC also encourages that all employees have annual performance reviews with their manager, covering both specified tasks for the period and development activities. In 2011 approximately 65 percent of the employees received these reviews.

#### **HEALTH AND SAFETY**

#### Health and safety work

Health and Safety has the highest priority in REC and the target is zero harm. To achieve a world class safety culture, it is vital to involve all employees in continuous improvement in the daily way of working. The REC Business System has proved to be a key factor for improving the safety culture. This includes that all work activities need to be risk assessed to eliminate inherent risks or apply control measures. In 2011, this has been a key focus area for all REC manufacturing units, with the significant involvement of employees.

For example in REC Solar, extensive work has been undertaken in standardizing all work instructions and risk assessments as part of the OHSAS 18001 certification process. In REC Wafer and REC Silicon, emphasis has been put on training employees and management in the Safe Job Analysis method, which has been applied to high risk and nonstandard work activities.

Another key area for continuous improvement is incident management. All employees are encouraged to register hazards and incidents in order to identify and implement preventive measures that can eliminate recurrences and reduce the total level of risk. In 2011, more than 20,000 hazards and incidents were managed in this way, equating to approximately five per full time employee.

All employees at REC manufacturing sites are represented in formal joint management-worker health and safety committees, where they monitor and advice on occupational health and safety programs. The form of the local committees varies according to local requirements. In Norway, every site with more than 50 employees has a central work environment committee. In addition safety representatives are elected among the employees in every department/shift, to be active advisors in their department's health and safety work. Likewise, in the US sites, formal safety committees are established with members representing all areas. They actively review weekly and monthly the progress in health and safety programs and follow up on outstanding issues. In Singapore, there are formal health and safety committees within each business unit,

(INDICATOR)	2011	2010	2009
Lost Time Injuries (LTI), number			
REC Silicon	3	8	13
REC Wafer	6	17	16
REC Solar	2	4	3
REC Group	11	29	32
Lost Time Injury (LTI), rate			
REC Silicon	1.6	4.6	8.1
REC Wafer	3.8	8.3	9.5
REC Solar	0.5	1.1	2.0
REC Group	1.4	3.9	6.5
Total Recordable Injuries (TRI), number			
REC Silicon	11	22	24
REC Wafer	25	23	33
REC Solar	7	14	8
REC Group	44 *	59	65
Total Recordable Injury (TRI), rate			
REC Silicon	5.9	12.5	14.9
REC Wafer	15.9	11.3	19.5
REC Solar	1.7	3.9	5.4
REC Group	5.7	8.0	13.2

The total REC Group figure also includes 1 TRI in REC ASA at the headquarters in Norway

with both management and employee representatives that meet monthly to discuss and resolve issues to protect the work environment.

#### Safety performance

A summary of REC's safety performance is provided below. REC ended 2011 with no work-related fatalities in more than 7.5 million worked hours across the workforce.

The total number of Lost Time Injuries (LTI) was 11, down from 29 in 2010. The LTI- rate (number of LTI per million worked hours) was 1.4 in 2011 compared with 3.9 in 2010. This represents real world class performance, since REC's LTI-rate is the best rate achieved benchmarked to average energy, semiconductor and process industry results. The number of Total Recordable Injuries (TRI) was 44, down from 59 in 2010. The TRI-rate (number of TRI per million worked hours) decreased from 8.0 in 2010 to 5.7. Even if the result represents an improvement, REC is continuously working to reduce the TRI-rate.

The strong downward trend REC has recorded from 2009 to the present is a result of increased focus on systematic safety leadership and standardization throughout the organization. This includes setting clear performance and improvement targets for all units, weekly and monthly HSE job observations performed by management as well as extensive management and team involvement in each incident investigation. HSE performance and systems are developed, monitored, audited, and reviewed to identify trends, measure progress, assess compliance, drive continuous improvement, manage risks and provide assurance that governing processes are working effectively.

#### **ENVIRONMENT AND CLIMATE**

#### **Environmental performance**

Sustainability is an integral part of the strategy of REC. This includes maximizing the energy efficiency of its products, minimizing negative environmental impacts, and preventing pollution from all business activities and products. Both REC and the solar industry in general depend on the safety and sustainability of PV products.

(INDICATOR)	REC SILICON	REC WAFER	REC SOLAR	2011 TOTAL
Energy and emissions				
Electricity (GWh)	1 544	273	290	2 107
Direct energy consumption (GWh)	1 034	0	0.22	1 034
Direct emissions (MT CO <sub>2</sub> -eq)	211 203	0	46	211 249
Indirect emissions from electricity (MT CO <sub>2</sub> -eq)	312536	3 826	122 050	438 412
$NO_x$ emissions (MT)	58	0	0	58
Water				
Municipal water consumption (million m3/yr)	1.0	7.5	3.1	11.6
Surface water consumption (million m3/yr)	3.5	6.9	0	10.4
Waste water discharge (million m3/yr)*	1.6	9.6	2.7	13.9
Waste				
Non-hazardous waste recycled (MT)	355	4 680	1016	6 015
Non-hazardous waste to energy recovery (MT)	0	639	107	745
Non-hazardous waste to landfill (MT)	11 421	9913	3 9 5 4	25 288
Hazardous waste treatment (MT)	354	182	10 365	10 901
Raw material use**				
Metal Grade Silicon (MT)	28 445	0	0	28 445
Polysilicon (MT)	0	3116	3 680	6 846
Process pastes (MT)	0	0	47 460	47 460
Glass (MT)	0	0	1 368	1 368
Ethylene vinyl acetate (MT)	0	0	3791	3 791
Polyester backsheet (MT)	0	0	4 4 4 4 5	4 445
Aluminium (MT)	0	0	7 206	7 206
Other figures				
Ozone-depleting substances (MT CFC-11eq)	0	0	0	0
Number of permit breaches ****	8	8	0	16

Value includes total waste water discharges, sanitary discharge, non-contact water

discharge to land or site pond, and discharges managed by waste contractor.

\*\*\* Data includes main raw materials consumed in production process and going into the final module product. Additional process aids are also consumed but this data is not currently provided.

<sup>\*\*\*</sup> Data includes incidents where emission limits were exceeded.

In 2011, for the first time, REC provides environmental performance data within the annual report. This reflects information collected for selected GRI indicators. REC will continue to develop its reporting and disclosure, which will be used as a basis against which to measure and drive continual improvements in environmental performance. A summary of REC's environmental performance is provided below.

#### **Energy and emissions**

To ensure REC has a minimal impact on the environment, efforts are continually made to reduce energy use and carbon emissions. Wherever possible, REC uses low-carbon energy sources such as hydroelectric power in Norway, natural gas power in Singapore and natural gas and hydroelectricity in the United States.

In 2011, the total amount of electricity used at REC manufacturing sites was 2,107 GWh. Emissions of CO<sub>2</sub>-equivalents due to the generation of electricity have been calculated on the basis of:

- Carbon free hydroelectric power for Moses Lake
- NorthWest electric grid mix for Butte
- Natural gas power for Singapore
- Norwegian grid mix for the Norwegian plants

This resulted in the indirect emissions of 438,412 tonnes CO<sub>2</sub>-equivalents. In addition natural gas and diesel consumption of  $1,034\,\text{GWh}$  results in the direct emissions of 211,249 tonnes  $CO_2$ -equivalents.

In 2012, REC plans to report carbon emissions in accordance with the requirements of the GHG Protocol and to expand its reporting to include additional indirect emission sources such as transportation.

In Singapore, there is a strong commitment to save energy with a site goal to reduce consumption by seven percent from 2010 to 2012. More than 20 initiatives are identified to achieve this goal, including minor adjustments and larger operational changes. In 2011, the installation of ultra-low NO<sub>x</sub> burners at Butte and Moses Lake resulted in significant reductions in NO<sub>x</sub> emissions and CO<sub>2</sub> savings through enhanced efficiency.

## Carbon footprint and energy efficiency

The carbon footprint of a product is increasingly a measure of performance and quality, reflecting both the energy efficiency and the energy source in the manufacturing chain of the PV module as well as the energy efficiency of the PV module itself.

A Life Cycle Assessment (LCA) study was undertaken in 2011 based on production data from the first quarter of the year. The LCA, conducted independently by the Energy Research Centre of the Netherlands (ECN), calculated the carbon footprint and the energy payback time.

For polysilicon produced in the US, and for wafers, cells and modules produced in Singapore, a carbon footprint of 21 g CO<sub>2</sub>-eq/kWh with a corresponding energy payback time of 1.2 years was achieved. For modules with wafers and cells produced in Norway, the corresponding values were

 $18 \,\mathrm{g}\,\mathrm{CO}_2$ -eq/kWh and an energy payback time of  $1.1 \,\mathrm{years}$ . Modules containing 100 percent silicon produced using the proprietary Fluidized Bed Reactor (FBR) process in the USA, wafers and cells produced in Norway and modules assembled in Singapore have an energy payback time of 1.0 years.

#### Waste management

An important aspect of REC's environmental policy is material and waste management. REC continually investigates opportunities to enhance level of material reuse and recycling with its design and production processes, in order to minimize resource consumption. Throughout the product design process, REC works to reduce material and packaging, without compromising on quality.

In general all the waste from the manufacturing processes is sorted and recycled to a high degree with third party waste management facilities. In 2011, REC sent over 6,000 tonnes of material for recycling.

Any hazardous waste is properly collected and treated. In the polysilicon production, REC operates with a closed loop cycle process, and the small waste volumes are handled according to regulatory requirements. All polysilicon waste is recycled within the manufacturing process and other inputs recovered and reused. For instance, REC does not dispose of silicon tetrachloride as a waste, as it is consumed within the closed silane manufacturing process.

In REC Solar, waste is one of the significant environmental aspects identified through their ISO 14001 management. Waste reduction programs have been established to reduce the general waste with five percent through a two year period 2011-2012, as well as to reduce specific hazardous waste fractions. The aim is to reduce sludge containing hydrogen fluoride with 20 percent and waste water containing hydrogen fluoride with 35 percent in the period 2011-2012.

REC Wafer achieves a high degree of recycling of silicon carbide (SiC) and polyethylene glycol (PEG) on site as an integrated part of the wafer process.

#### Environmental compliance

REC has a range of HSE-related permits for operations at its sites, and maintains a record of any non-compliance as part of regulatory HSE requirements. Non-compliances constitute breach of permit, citations or violations identified by regulatory audits. In 2010, a total of 34 noncompliances were recorded, of which seven were open at year end. In 2011, a total of 31 new non-compliances were recorded, and at year end three were still open.

Of the total 31 non-compliances, 15 were violations from regulatory audits and 16 were permit breaches. Of the 16 permit breaches, 13 were short term excursions of emission limits, and three were specific breaches of permit conditions. None of the breaches are regarded as significant spills as there were no long-term environmental impacts.

In all permit breach cases, the local environmental authorities were notified and corrective and preventive measures taken to improve operational routines and design weaknesses. The number of new and  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ open non-compliances represents an important KPI for sustainability, and is reported weekly, monthly and quarterly to ensure special focus from site management.

#### SUSTAINABILITY IN THE SUPPLY CHAIN

REC strives for sustainability and the highest level of business ethics in all its activities, and promotes transparency and accountability to continuously improve business conduct together with the stakeholders. This includes setting requirements to suppliers, contractors and business partners. To be able to achieve the ambitious targets, REC seeks to contract services as well as the purchase, hire, or lease of equipment and materials in a manner to ensure that REC's own sustainability policies are met, including audits and contractual obligations.

In 2011, the focus has been on implementing a standardized sourcing process for significant direct material suppliers to REC Solar's wafer, cell and module production and to parts of REC Wafer. Suppliers in these areas typically represent more than 80 percent of the annual expenditure of REC Solar. Sustainability has formed a key part of supplier pre-qualification reviews, supplier audits, supplier performance management and supplier development. The sustainability issues cover human rights, freedom of association, child and forced labor, corruption as well as occupational health and safety.

In 2011, all significant direct material suppliers for REC Solar have undergone audits on sustainability. For REC Wafer in Norway, sustainability is also included in audits conducted on approximately half of the significant direct material suppliers and key business partners. No suppliers were identified as having significant risk regarding the sustainability issues.

Audits for REC Silicon suppliers were not conducted in 2011. In 2012, REC will seek to further harmonize on the supplier quality process including sustainability across all business segments.

#### STAKEHOLDER RELATIONS

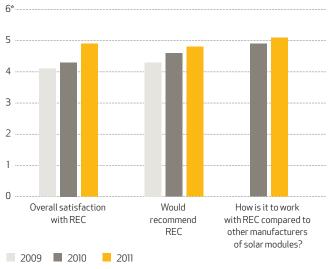
Stakeholder engagement in REC takes on many forms, depending on type of stakeholder group. Stakeholder identification with whom to engage is based on whom REC is directly responsible for as well as those that are directly affected by our activities. Examples of stakeholder groups are employees, customers, investors and representatives of the local communities where REC operates. The stakeholders are consulted with on different subjects through both formal and informal channels. Employees are e.g. regularly consulted on health and safety issues through the formal health and safety committees. Other work related subjects will be discussed with the union representatives where this is a formalized procedure as in Norway. The most important subject in 2011 regarding employees has been the organization restructuring and shutdown of capacity in Norway. In this context the unions have been involved in the whole process. A close dialogue was also kept with representatives for the regional and local governments and other affected stakeholders.

#### Customer relations

REC works to maintain customer relations by various means. Since 2009 REC Solar has conducted an annual customer satisfaction survey, which is distributed to business partners involved in the solar module markets. Customers can also provide feedback directly online, related to their own products.

The annual survey covers a range of themes including marketing, the REC Partner Program, claims, logistics, and product / technical issues. It also seeks feedback on REC's brand and market perception. A comparison of findings from 2009 to 2011 is illustrated in the chart below, in terms of customers overall satisfaction with REC, whether they would recommend REC, and how working with REC compares with other providers. The findings indicate positive improvements in REC Solar customer satisfaction.

#### Overall customer satisfaction and likehood of recommending REC



\* on a scale of 0 to 6, where 0 is poor / very unlikely and 6 is excellent / very likely

REC Wafer and REC Silicon engage with customers more in relation to specific technical issues, and so meet with customers face-to-face or via formal technical exchange events which are organized by REC Silicon bi-annually. These events are attended by REC management and REC experts in engineering and manufacturing, in order to provide customers with the level of service and insight they require.

#### Investor relations

REC has a strong relationship with its investors. Senior management engages in dialogues with investor groups on a frequent basis. Through increasingly strong focus on sustainability among the investors, this has influenced REC in improving in more transparent sustainability reporting. REC will continue to develop its reporting and disclosure, which will be used as a basis against which to measure and drive continual improvements in sustainability performance.

#### Community engagement

REC recognizes that it is a key player in the communities in which it operates. In 2011, REC made a total of 81 investments or donations across all sites, with a total value of approximately one million NOK.

REC Silicon has established a community affairs strategy to guide the provision of strategic support to charitable organizations and increasing local community participation. REC Silicon also seeks to reinforce relationships with local authorities, industrial and community neighbors

through participation in community affiliations. REC Silicon is currently involved in or supporting local emergency planning committees, hospitals, and local fire departments. REC Silicon also operates an employee volunteer program, where employees can personally support community projects and organizations, with the support of senior management.

REC Wafer supports local community activities for children and youth, while there were no specific charity donations in Singapore.

#### Memberships

REC is a member of various industry bodies and organizations. REC has been a full member of PV CYCLE since 2008. PV CYCLE is a not-forprofit association of solar manufacturers, working to establish operational collection and recycling solutions for end-of-life PV modules. REC has been represented on the Board since 2010. REC is also active in several of the working groups of the European Photovoltaic Industry Association (EPIA), e.g. the Sustainability Development Working Group. Through our membership in EPIA, we contribute to the European development of predictable, sustainable and just frame conditions for solar energy.

REC is also supporting Bellona (NGO), in their work to strive for increased use of solar energy, through influence on political energy and climate processes.

#### Product responsibility

The process of further developing products, whether it is lower cost polysilicon, thinner wafers, more efficient solar cells or attractive solar panels, is a continuous process at REC. While commercial considerations are critical for the technological innovations, additional factors like environmental, safety and health impact plays an increasingly important role. The market development pushes REC to provide highly efficient products at a low cost, and at the same time remain a responsible citizen. REC has adopted the principle of product stewardship promoting the development of reduced health and environmental impacts from our products. Product stewardship is seeked ensured in the whole lifecycle from R&D, design, sourcing, manufacturing, distribution, installation, operation, maintenance, decommissioning through disposal as well as recycling. All products are in compliance with relevant prevailing legislative regulations. The table below indicates the life cycle stages where health and safety impacts for the various product categories are assessed for improvement.

#### Life cycle stages where health and safety impacts of the products are assessed for improvement

STAGE	POLYSILICON	SILICON GASES	WAFERS	MODULES
Development of product concept		Х	Х	х
Research & development		Х	Х	Х
Certification		Х		Х
Manufacturing and production		Х	Х	Х
Marketing and promotion	Х	X	Х	Х
Storage distribution and supply		X		Х
Product use and service		Х		Х
Disposal, reuse or recycling	· · · · · · · · · · · · · · · · · · ·	Х		Х

#### **Product certifications**

REC modules are designed to meet the highest quality standards and provide stable output over the lifetime of the product. Our most recent solar module, the REC Peak Energy Series, is certified according to CE, UL 1703, IEC 61215 and IEC 61730. Our internal qualification requirements exceed the requirements in the referenced standards.

REC wafers and modules are also certified to benefit from the ten percent premium available as part of an Italian photovoltaic incentive scheme for solar systems containing European components.

#### Material and product safety

REC Silicon provides material safety data sheets (MSDS) for all of its product families. The data sheets are available online on the REC website in a variety of languages, and provide details of all relevant classifications or regulatory information required for respective countries and regions.

The data sheets provide, alongside other pertinent information, information on the product content, the safe use of the product and emergency response, toxicological and ecological information, and advice on product disposal. REC Silicon also publishes additional technical notices to address other specific issues encountered where advice is required. Customers are also provided upon request, with declarations that products are compliant according to relevant legislations such as REACH, RoHS, and the WEEE Directives.

REC Solar provides product data sheets as well as installation instructions and guidelines for modules to ensure the product safety for the customers.

#### Recycling of modules

Waste management is a part of REC's approach to a sustainable solar energy industry. The EU Directive on Waste from Electrical and Electronic Equipment (WEEE) is a directive governing the handling of waste from the producers of electrical and electronic equipment. PV is not included in the current WEEE directive, but is included in the recast of the directive that will come into force in 2012. With the long lifetime of PV modules and most PV systems being installed quite recently, the current volumes of PV module waste are low. The European PV industry, through the association PV CYCLE, is dedicated to the collection and recycling of end-of-life PV modules, focusing on establishing collective solutions in Europe for fulfilling the potential WEEE requirements.

REC supports the work undertaken by PV CYCLE, and is using this common platform to work towards a cost efficient and sustainable system for the collection and recycling of PV modules at the end of their lifetime.

# **GRI-INDEX**

The page numbers in the index specify where answers are provided to each indicator in the annual report from REC for 2011.

Reported fully
Reported partly
n.req.C Not required for Level C
n.a. Not applicable
n.r. Not reported

DISCLOS	URE TO GRI STANDARD	PAGE	CROSS-REFERENCES/COMMENTS	STATU
	STRATEGY AND ANALYSIS			
1.1	CEO Statement about the relevance of sustainability to the organisation and its strategy	8-9	Letter from CEO	•
1.2	Description of key impacts, risks, and opportunities	19-20, 67-71	n.req.C. Described partly in Report from BoD and Financial risk notes	0
	ORGANIZATIONAL PROFILE			
2.1	Name of the organization.	1	REC	•
2.2	Primary brands, products, and/or services	12-16	Report from BoD	•
2.3	Operational structure of the organization	11-12	Report from BoD	•
2.4	Location of organization's headquarters.	7	Sandvika, Norway	_
2.5	Countries where the organization operates	6-7	······································	_
2.6	Nature of ownership and legal form.	12,32-34	Report from BoD and Shareholder Matters in Annual Report	•
2.7	Markets served	12-13	Report from BoD	•
2.8	Scale of the reporting organization	4-5		•
2.9	Significant changes during the reporting period regarding size, structure, or ownership	11-16	Report from BoD	_
2.10	Awards received in the reporting period.	12-13	2011 Solar Industry Award and 2011 Photon Magazine field test	•
	REPORT PARAMETERS			
3.1	Reporting period (e.g. fiscal/calendar year) for information provided.		Calendar year (1.1.2011-31.12.2011)	•
3.2	Date of most recent previous report (if any).	···· •	No previous report	•
3.3	Reporting cycle (annual, biennial, etc.)	•••••••••	Intention is to report annually	•
3.4	Contact point for questions regarding the report or its contents.	34	Contact details to VP&IR Officer	•
3.5	Process for defining the report content (Materiality)		Content has been defined by using GRI as guidance, benchmarking against competitors, and through stakeholder relations	•
3.6	Boundary of the report	35	This GRI report comprises the REC Group as a whole, including 100% owned subsidiaries	•
3.7	Any specific limitations on the scope or boundary of the report	35		•
3.8	Basis for reporting on joint ventures, subsidiaries, etc.	••••	100% owned subsidiaries are included.	•
3.9	Data measurement techniques and the bases of calculations	•	n.req.C	
3,10	Explanation of the effect of any re-statements of information provided in earlier reports		No earlier GRI reports exist	•
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods		No earlier GRI reports exist	•
3.12	Table identifying the location of the Standard Disclosures in the report.	43-46	This table	_
3.13	Policy and current practice with regard to seeking external assurance for the report	··· •	n.req.C	
	GOVERNANCE, COMMITMENTS, AND ENGAGEMENT			
1.1	Governance structure of the organization	26-29		
1.2	Indicate whether the Chair of the highest governance body is also an executive officer	10	The Chairman is not an executive officer in REC	•
1.3	The number of members of the board that are independent and/or non-executive members.	28		•
1.4	Mechanisms for shareholders and employees to provide recommendations or direction to the board.	27-28	Through elected employee representatives in the Board	
4.5	Linkage between compensation for members of board and management and the organization's performance - economic, social and environmental	29-30	n.req.C BoD report on Corporate Governance	•
1.6	Processes in place for the board to ensure conflicts of interest are avoided.	27	n.req.C BoD report on Corporate Governance	
4.7	Process for determining the qualifications and expertise of the board for guiding the organization's strategy on economic, environmental, and social topics.	28	n.req.C BoD report on Corporate Governance	•

DISCLOS	URE TO GRI STANDARD	PAGE	CROSS-REFERENCES/COMMENTS	STATI
1.8	Internally developed statements of mission or values, codes of conduct, and principles	12, 26	n.reg.C	•
9	Procedures of the highest governance body for overseeing the organization's	28-30	n.req.C	
.5	identification and management of performance	20 30	BoD report on Corporate Governance	
	8		BoD assesses sustainability performance	
			quarterly	
,10	Processes for evaluating the board's own performance	28-29	n.req.C	•
			BoD report on Corporate Governance	• • • • • • • • • • • • • • • • • • • •
1.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization		n.req.C	
4.12	Externally developed economic, environmental, and social charters, principles,	••••••	n.req.C	• • • • • • • • • • • • • • • • • • • •
1.12	or other initiatives		плеце	
l.13	Memberships in associations	• • • • • • • • • • • • • • • • • • • •	n.req.C	•••••
1.14	List of stakeholder groups engaged by the organization	41-42		
4.15	Basis for identification and selection of stakeholders with whom to engage	41		
1.16	Approaches to stakeholder engagements.	. *	n.reg.C	••••••
1.17	Key topics and concerns that have been raised through stakeholder engagement	•••••	n.reg.C	• · · · · · · · · · · · · · · · · · · ·
	ney topics and esticetis that here seem asset the eaglistation of the end of		64.6	• · · · · · · · · · · · · · · · · · · ·
	ECONOMIC PERFORMANCE INDICATORS			
C1	Direct economic value generated and distributed, including revenues, operating costs,	37		
	employee compensation, donations and other community investments, retained earnings,			
	and payments to capital providers and governments.			• • • • • • • • • • • • • • • • • • • •
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.		n.r.	
	Coverage of the organization's defined benefit plan obligations		n.r.	• • • • • • • • • • • • • • • • • • • •
C4	Significant financial assistance received from government		n.r.	• • • • • • • • • • • • • • • • • • • •
.c.	Range of ratios of standard entry level wage by gender compared to local minimum wage	. *	n.r.	•
.cs :C6	Policy, practices, and proportion of spending on locally-based suppliers		n.r.	•
				• • • • • • • • • • • • • • • • • • • •
EC7	Procedures for local hiring and proportion of senior management hired from the local community		n.r.	
EC8	Development and impact of infrastructure investments and services provided primarily for	. *	n.r.	• · · · · · · · · · · · · · · · · · · ·
 EC9	public benefit  Understanding and describing significant indirect economic impacts		n.r.	•
	0	. •		•
	ENVIRONMENTAL PERFORMANCE INDICATORS			
EN1	Materials used by weight or volume	39	Reported on main raw materials used to manufacture the solar modules	•
 N2	Percentage of materials used that are recycled input materials	. •	n.r.	• • • • • • • • • • • • • • • • • • • •
EN3	Direct energy consumption by primary energy source	39	1111.	
EN4	Indirect energy consumption by primary source	39	Figures represent electricity purchased.	
1114	man ect energy consumption by primary source	39	Primary energy consumption to produce the electricity has not been estimated	
 N5	Energy saved due to conservation and efficiency improvements	40	Reduction achievements n.r.	O
N6	Initiatives to provide energy-efficient or renewable energy based products and services.	8-9, 12	CEO statement & REC Mission	
		. <b>.</b>	Reduction achievements n.r.	
	Initiatives to reduce indirect energy consumption and reductions achieved.	40	Reduction achievements n.r.	C
	T-1-1114	39		
N8	Total water withdrawal by source			•
N8 N9	Water sources significantly affected by withdrawal of water.		n.r.	• • • • • • • • • • • • • • • • • • • •
EN8 EN9 EN10	Water sources significantly affected by withdrawal of water. Percentage and total volume of water recycled and reused		n.r.	•••••
EN8 EN9 EN10	Water sources significantly affected by withdrawal of water.			
EN8 EN9 EN10 EN11	Water sources significantly affected by withdrawal of water.  Percentage and total volume of water recycled and reused  Location and size of land owned, leased, managed in, or adjacent to, protected areas and		n.r.	
EN8 EN9 EN10 EN11	Water sources significantly affected by withdrawal of water.  Percentage and total volume of water recycled and reused  Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value		n.r. n.r.	
EN7 EN8 EN9 EN10 EN11 EN12 EN13	Water sources significantly affected by withdrawal of water.  Percentage and total volume of water recycled and reused  Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value  Description of significant impacts of activities, products, and services on biodiversity		n.r.	
EN8 EN9 EN10 EN11 EN12 EN13	Water sources significantly affected by withdrawal of water.  Percentage and total volume of water recycled and reused  Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value  Description of significant impacts of activities, products, and services on biodiversity  Habitats protected or restored.  Strategies, current actions, and future plans for managing impacts on biodiversity.  Number of IUCN Red List species and national conservation list species with habitats in areas		n.r. n.r. n.r.	
N8 N9 N10 N11 N12 N13 N14	Water sources significantly affected by withdrawal of water.  Percentage and total volume of water recycled and reused  Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value  Description of significant impacts of activities, products, and services on biodiversity  Habitats protected or restored.  Strategies, current actions, and future plans for managing impacts on biodiversity.  Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations.		n.r. n.r. n.r. n.r. n.r.	
N8 N9 N10 N11 N12 N13	Water sources significantly affected by withdrawal of water.  Percentage and total volume of water recycled and reused  Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value  Description of significant impacts of activities, products, and services on biodiversity  Habitats protected or restored.  Strategies, current actions, and future plans for managing impacts on biodiversity.  Number of IUCN Red List species and national conservation list species with habitats in areas		n.r. n.r. n.r. n.r. n.r.	

DISCLOS	JRE TO GRI STANDARD	PAGE	CROSS-REFERENCES/COMMENTS	STATU
N18	Initiatives to reduce greenhouse gas emissions and reductions achieved.		n.r.	
N19	Emissions of ozone-depleting substances by weight	39	11.1.	
N19 N20	NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions by type and weight	39	Reported on $NO_x$	
	······································	39		0
N21	Total water discharge by quality and destination	. <b>.</b>	Volumes reported	0
N22	Total weight of waste by type and disposal method	39		
N23	Total number and volume of significant spills	39-40	No spills were regarded as significant. Reported also on permit limit breaches	
N24	Weight of transported, imported, exported, or treated waste deemed hazardous.		n.r.	
N25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.		n.r.	
N26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation		n.a.	
N27	Percentage of products sold and their packaging materials that are reclaimed by category		n.r.	
N28	Monetary value of significant fines and total number of non-monetary sanctions for non- compliance with environmental laws and regulations	36		•
N29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.		n.r.	•
N30	Total environmental protection expenditures and investments by type.		n.r.	
	LABOR PRACTICES AND DECENT WORK			
A1	Total workforce by employment type, employment contract, and region, broken down by gender	37		•
A2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	37	n.r. on new hires	0
A3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operations.		n.r.	
A15	Return to work and retention rates after parental leave, by gender	•••••	n.r.	
A4	Percentage of employees covered by collective bargaining agreements	37	Estimated	0
A5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements		n.r.	
A6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programs.	38	All employees at manufacturing sites and headquarters are represented in health and safety committees. This amounts to approximately 97% of all REC employees	•
A7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work- related fatalities by region and by gender.	38	n.r. on occupational diseases and lost days	0
A8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases		n.a.	•••••
A9	Health and safety topics covered in formal agreements with trade unions.		n.r.	
410	Average hours of training per year per employee by gender, and by employee category	. • · · · · · · · · · · · · · · · · · ·	n.r.	
A11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		n.r.	•••••
A12	Percentage of employees receiving regular performance and career development reviews by gender	38		0
A13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	36-37	Reported on Board of Directors for REC Group	0
A14	Ratio of basic salary of men to women by employee category, by significant locations of operations		n.r.	
	HUMAN RIGHTS			•••••
IR1	Percentage and total number of significant investment agreements and contracts that		n.r.	
IR2	include clauses incorporating human rights, or that have undergone human rights screening  Percentage of significant suppliers and contractors and other business partners that have	41	Reported on significant suppliers	0
IR3	undergone screening on human rights and actions taken  Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.		n.r.	•••••
IR4	rights that are relevant to operations, including the percentage or employees trained.  Total number of incidents of discrimination and corrective actions taken	36	No incidents were reported	
		· • · · · · · · · · · · · · · · · · · ·	······································	
IR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	41	No violations or risks were reported through whistleblowing channel or human rights screening of significant suppliers	0

DISCLOS	JRE TO GRI STANDARD	PAGE	CROSS-REFERENCES/COMMENTS	STATUS
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective elimination of child labour	41	No violations or risks were reported through whistleblowing channel or human rights screening of significant suppliers	0
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	41	No violations or risks were reported through whistleblowing channel or human rights screening of significant suppliers	0
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	•	n.a.	•
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	•	n.a.	
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	•	n.r.	•
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.		n.r.	
	SOCIETY			
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	41-42		0
S09	Operations with significant potential or actual negative impacts on local communities.	•	n.r.	•
S010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.		n.r.	
S02	Percentage and total number of business units analyzed for risks related to corruption		n.r.	
S03	Percentage of employees trained in organization's anti-corruption policies and procedures		n.r.	
S04	Actions taken in response to incidents of corruption	36		
S05	Public policy positions and participation in public policy development and lobbying		n.r.	*
S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.		n.r.	
S07	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.	36	No incidents were reported	•
508	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	36		
	PRODUCT RESPONSIBILTY			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	42		•
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.		n.r.	
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	42		•
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.		n.r.	•
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	41		•
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing		n.r.	
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.		n.r.	
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data		n.a.	
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	36	No incidents were reported	0







- 1. REC AE Series solar modules installed at a vineyard in France.
- 2. Employee working at REC's wafer production facility in Glomfjord, Norway.
- 3. REC Peak Energy Black solar modules installed on a museum rooftop in Los Angeles, USA.

# FINANCIAL STATEMENTS REC GROUP & REC ASA

# **CONTENTS REC GROUP**

## Page

50	Consolidated statement of financial position
52	Consolidated statement of income
53	Consolidated statement of comprehensive income
54	Details of consolidated comprehensive income
55	Consolidated statement of changes in equity
56	Consolidated statement of cash flows
57	Index of the notes to the consolidated financial statements
<b>-</b> 0	Notes to the consolidated financial statements

# **CONTENTS REC ASA**

## Page

136	Balance sheet (NGAAP)
138	Income statement (NGAAP)
139	Statement of cash flows (NGAAP)
140	Index of the notes to the financial statement
141	Notes to the financial statements

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION **REC GROUP**

(NOK IN MILLION)	NOTES	2011	2010
ASSETS			
Non-current assets			
Goodwill	6,7	263	587
Other intangible assets	6	398	536
Total intangible assets	6	661	1 123
Land and buildings	6	3 179	8150
Machinery and equipment	6	11 534	17 136
Other tangible assets	6	318	439
Assets under construction	6	395	861
Total property, plant and equipment	6	15 425	26 586
Prepaid lease, non-current	6	198	104
Prepaid capex		0	29
Investments in associates	8	74	174
Other non-current receivables etc.	12	1 091	1 085
Embedded derivatives	11	5	4
Other derivatives	11	74	192
Financial assets and prepayments		1 244	1 455
Deferred tax assets	18	5	336
Total non-current assets		17 534	29 634
Current assets			
Inventories	13	2 383	2 495
Prepaid lease, current	6	11	11
Trade and other receivables	12	2 553	2 953
Assets held for sale		14	21
Current tax assets	18	70	319
Other derivatives	11	310	582
Cash and cash equivalents	14	1 596	849
Total current assets		6 936	7 231
Total assets		24 470	36 865

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION REC GROUP

(NOK IN MILLION)	NOTES	2011	2010
EQUITY AND LIABILITIES			
Shareholders' equity			
Share capital		997	997
Share premium and other paid-in capital		16 356	16 356
Paid-in capital	•••••	17 353	17 353
Other equity and retained earnings		4 868	3 809
Profit and loss for the period from total operations		-10 030	989
Other equity and comprehensive income		-5 161	4 798
Total shareholders' equity		12 192	22 151
Non-current liabilities			
Retirement benefit obligations	19	125	94
Deferred tax liabilities	18	2 518	1804
Provisions	20	447	288
Embedded derivatives	11	7	144
Other derivatives	11	86	41
Non-current financial liabilities, interest bearing	17	6 113	8 592
Non-current prepayments, interest calculation	20	214	479
Total non-current liabilities		9 511	11 443
Current liabilities			
Trade payables and other liabilities	20	1 742	2 508
Provisions	20	354	85
Current tax liabilities	18	29	200
Embedded derivatives	11	55	140
Other derivatives	11	79	20
Current financial liabilities, interest bearing	17	159	194
Current prepayments, interest calculation	20	349	124
Total current liabilities		2 767	3 271
Total liabilities		12 278	14714
Total equity and liabilities		24 470	36 865

Sandvika, March 20, 2012

Bjørn M. Wiggen Chairman of the Board

Hilde Myrberg Member of the Board

Heléne Vibbleus Bergquist Member of the Board

> Hans Ødegård Hans Øtegård Member of the Board

Tore Schiøte Member of the Board

Mimi K. Berdal Member of the Board

Odd Christopher Hansen Member of the Board

Rolf B. Nilsen Member of the Board Svein Tore Holsether Member of the Board

Bernt Reitan Member of the Board

Tommy Kristensen Member of the Board

Silje Johnsen Member of the Board

Ole Enger President and CEO

# CONSOLIDATED STATEMENT OF INCOME **REC GROUP**

(NOK IN MILLION)	NOTES	2011	2010
Revenues	5	13 366	13 776
Cost of materials	13	-5 835	-5 498
Changes in inventories and write downs	13	85	518
Employee benefit expenses	24	-2 001	-2 211
Other operating expenses	22	-3 334	-3 284
Other income and expenses	23	586	231
EBITDA		2 867	3 532
Depreciation	6	-2 142	-2 395
Amortization	6	-135	-81
Impairment	6, 7	-10 097	-38
Total depreciation, amortization and impairment		-12 375	-2514
EBIT		-9 508	1018
Share of profit/loss of associates	8, 25	-97	1
Financial income	25	51	35
Net financial expenses	25	-693	-1 134
Net currency gains/losses	25	-055	544
Net gain/loss derivatives and fair value hedge	25	108	875
Impairment and gain/loss on financial assets	25	1	-1
Fair value adjustment convertible bond	25	841	481
Net financial items		205	801
Profit/loss before tax from continuing operations		-9 303	1818
9.1			
Income tax expense from continuing operations	18	-726	-930
Profit/loss for the period from continuing operations		-10 030	889
Profit/loss for the period from discontinued operations, net of tax	9	0	101
Profit/loss from the period from total operations		-10 030	989
Attributable to:			
Owners of REC ASA		-10 030	989
Earnings per share for profit/loss attributable to the equity holders of REC ASA (in NOK per share)			
From continuing operations			
-basic	26	-10.06	0.96
-diluted	26	-10.06	0.51
From total operations			
-basic	26	-10.06	1.07
-diluted	26	-10.06	0.61

 $EBITDA is earnings\ before\ net\ financial\ items, income\ taxes, depreciation, amortization\ and\ impairment.$   $EBIT\ is\ earnings\ before\ net\ financial\ items\ and\ income\ taxes.$ 

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME REC GROUP

(NOK IN MILLION)	2011	2010
Profit /loss for the period from total operations	-10 030	989
Other comprehensive income, net of tax:	•	
Currency translation differences	100	341
Actuarial gain/loss on defined benefit pension schemes	-26	-4
Cash flow hedges	0	-19
Total other comprehensive income for the period	75	318
Total comprehensive income for the period	-9 955	1307
Total comprehensive income for the period attributable to:		
Owners of REC ASA	-9 955	1 307

 $\label{lem:presented} Details of comprehensive income is presented on the next page.$ 

(NOK IN MILLION)	TRANSLATION DIFFERENCES	TAX	PENSION	CASH FLOW HEDGE	ACQUISITION	CHANGE IN ACCOUNTING PRINCIPLE	PROFIT/LOSS FROM TOTAL OPERATIONS	TOTAL
Year 2010								
Accumulated at January 1, 2010	-341	22	0	26	234	-50	2 507	2 399
Profit for the period from total operations	0	0	0	0	0	0	989	989
Other comprehensive income:		•	•				•	
Currency translation differences	346	-5	0	0	0	0	0	341
Actuarial gain/loss on defined benefit pension schemes	0	-2	-3	0	0	0	0	-4
Cash flow hedges								
- valuation gain/losses taken to equity	0	0	0	1	0	0	0	1
- transferred to profit/loss for the period*	0	8	0	-27	0	0	0	-20
Total other comprehensive income for the period	346	1	-3	-26	0	0	0	318
Total comprehensive income for the period	346	1	-3	-26	0	0	989	1307
Accumulated at December 31, 2010	6	23	-3	0	234	-50	3 497	3 706
Year 2011								
Accumulated at January 1, 2011	6	23	-3	0	234	-50	3 497	3 706
Loss for the period from total operations	0	0	0	0	0	0	-10 030	-10 030
Other comprehensive income:	•••••	······································	•	•	•	•	•	
Currency translation differences	105	-5	0	0	0	0	0	100
Actuarial gain/loss on defined benefit pension schemes	0	-7	-19	0	0	0	0	-26
Total other comprehensive income for the period	105	-12	-19	0	0	0	0	75
Total comprehensive income for the period	105	-12	-19	0	0	0	-10 030	-9 955
Accumulated at December 31, 2011	111	11	-22	0	234	-50	-6 533	-6 249
Total comprehensive income for the period attributable to:								
Owners of REC ASA	105	-12	-19	0	0	0	-10 030	-9 955

## \* Cash flow hedge - transferred to profit/loss for the period affected the following line items in the consolidated statement of income

(NOK IN MILLION)	2011	2010
Revenues	0	27
Total	0	27

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY REC GROUP

			ATTRIBUTABLE	TO EQUITY HOLDERS (	OF REC ASA		
(NOK IN MILLION)	SHARE CAPITAL	SHARE PREMIUM	OTHER PAID-IN CAPITAL	TOTAL PAID-IN CAPITAL	OTHER EQUITY	COMPREHENSIVE INCOME	TOTAL EQUITY
Year 2010							
At January 1, 2010	665	12481	283	13 428	1 082	2 399	16 909
Equity share option plan	0	0	0	0	9	0	9
Share issue	332	3 593	0	3 926	0	0	3 926
Total comprehensive income for the period	0	0	0	0	0	1 307	1 307
At December 31, 2010	997	16 073	283	17 353	1 091	3 706	22 151
Year 2011							
At January 1, 2011	997	16 073	283	17 353	1091	3 706	22 151
Equity share option plan	0	0	0	0	-4	0	-4
Total comprehensive income for the period	0	0	0	0	0	-9 955	-9 955
At December 31, 2011	997	16 073	283	17 353	1 087	-6 249	12 192

# CONSOLIDATED STATEMENT OF CASH FLOWS **REC GROUP**

(NOK IN MILLION)	2011	2010
Cash flows from operating activities		
Profit/loss before tax from total operations <sup>1)</sup>	-9 303	1 781
Income taxes paid/received	302	147
Depreciation, amortization and impairment	12 375	2 5 2 0
Fair vaule adjustment convertible bond	-841	-481
Associates, impairment financial assets, gains/losses on sale	48	83
Changes in receivables, prepayments from customers etc.	-149	-716
Changes in inventories	134	-614
Changes in payables, accrued and prepaid expenses	-238	-58
Changes in provisions	307	-262
Changes in VAT and other public taxes and duties	23	294
Changes in derivatives	317	-234
Currency effects not cash flow or not related to operating activities	-11	-429
Other items <sup>2)</sup>	135	454
Net cash flow from operating activities	3 098	2 485
Cash flows from investing activities		
Cash proceeds for shares (incl. associates)	0	3
Cash payments for shares (incl. associates)	-5	0
Proceeds from finance receivables and restricted cash <sup>3)</sup>	55	121
Payments finance receivables and restricted cash <sup>3)</sup>	-59	-131
Proceeds from sale of property, plant and equipment and intangible assets	45	0
Payments for property, plant and equipment and intangible assets	-729	-4 452
Proceeds from investment grants	51	163
Proceeds from sale of subsidiaries and joint ventures, net of cash sold	34	-34
Net cash flow from investing activities	-609	-4 329
Cash flows from financing activities		
Increase in equity	0	3 888
Payments of borrowings and up-front/waiver loan fees	-5 302	-19 231
Proceeds from borrowings <sup>4)</sup>	3 570	16361
Net cash flow from financing activities	-1732	1018
Effect on cash and cash equivalents of changes in foreign exchange rates	-10	-14
Net increase/decrease in cash and cash equivalents	748	-840
Cash and cash equivalents at the beginning of the period	849	1 688
Cash and cash equivalents at the end of the period	1 596	849
<sup>1)</sup> PROFIT/LOSS FROM TOTAL OPERATIONS CONSISTS OF		
(NOK IN MILLION)	2011	2010
Profit/loss before tax from continuing operations	-9 303	1818
Profit/loss before tax from discontinued operations	0	-38
Profit/loss before tax from total operations	-9 303	1 781

Other items consist primarily of expensing of up-front/waiver loan fees.
 Proceeds/payments from finance receivables and restricted cash include also loans, non-current receivables and non-current prepaid cost.
 Proceeds from borrowings include prepayments, interest calculation.

# INDEX OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS REC GROUP

NOTE		PAGE	NOTE		PAGE
1	General information	58	4.2	Key sources of estimation uncertainty	
2	Summary of significant accounting policies	58		- critical accounting estimates	72
2.1	Basis of preparation and statement of compliance	58	5	Segment information	75
2.2	Consolidation	58	6	Fixed assets	80
2.3	Segment reporting	59	7	Impairments of cash-generating units and goodwill	84
2.4	Foreign currency translation	59	8	Investments in associates and joint ventures	89
2.5	Current/non-current	59	9	Discontinued operations	91
2.6	Property, plant and equipment	59	10	Related party transactions	92
2.7	Intangible assets	59	11	Derivative financial instruments	93
2.8	Impairment and derecognition of non-financial assets	60	12	Details receivables	97
2.9	Financial assets	60	13	Inventories	98
2.10	Accounting for derivative financial instruments		14	Cash and cash equivalents	99
	and hedging activities	60	15	Shareholder information	100
2.11	Trade receivables	61	16	Compensation to the management and board, loans	
2.12	Cash and cash equivalents and restricted bank accounts	61		and shareholdings	101
2.13	Paid-in equity capital	61	17	Borrowings	107
2.14	Borrowings	61	18	Income tax expense and deferred tax assets and liabilities	110
2.15	Inventories and construction contract costs	62	19	Retirement benefit obligations and expenses	113
2.16	Income tax	62	20	Trade payables, provisions and other non-interest	
2.17	Provisions	62		bearing liabilities	116
2.18	Pension/post retirement obligations	63	21	Government grants	117
2.19	Revenue recognition	63	22	Other operating expenses	118
2.20	Interest and dividend income	63	23	Other income and expenses	119
2.21	Leases	63	24	Employee benefits	120
2.22	Government grants	64	25	Financial income and expenses	120
2.23	Statement of cash flows	64	26	Earnings per share	122
2.24	Adoption of new and revised standards and interpretations	64	27	Dividends per share	123
3	Financial risk management	67	28	Research and development	123
3.1	Financial risk factors	67	29	Commitments, guarantees, pledges	123
3.2	Fair value estimation	69	30	Other information financial instruments	126
3.3	Capital structure and financing	69	31	Contingent liabilities and contingent assets	133
4	Critical accounting judgments and key sources of		32	Share-based compensation	133
	estimation uncertainty	71	33	Events after the reporting period	135
4.1	Critical judgments in applying the REC Group's				
	accounting policies	71			

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS REC GROUP

## **01** GENERAL INFORMATION

Renewable Energy Corporation ASA (the Company/REC ASA) and its subsidiaries (together REC/the REC Group) have a significant presence in the international solar energy industry. The areas of operation are principally the development and sale of products related to the photovoltaic (PV) industry. The REC Group is engaged in production of silane gas and polysilicon for the solar and electronic industry, manufacturing of solar wafers, cells, and

modules, and development of PV systems. The Company is a public limited liability company incorporated and domiciled in Norway. The address of its registered office is Kjørboveien 29, Sandvika.

These consolidated financial statements have been approved for issue by the Board of Directors on March 20, 2012 and are subject to approval by the Annual General Meeting on May 22, 2012.

# 02 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

### 2.1 BASIS OF PREPARATION AND STATEMENT OF COMPLIANCE

The financial statements are presented in NOK, rounded to the nearest million, unless otherwise stated. As a result of rounding adjustments, the figures in one or more rows or columns included in the financial statements and notes may not add up to the total of that row or column.

The consolidated financial statements of the REC Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and the Norwegian Accounting Act. The consolidated financial statements have been prepared under the historical cost convention, as modified by impairment of some assets, the revaluation of derivative instruments and a EUR convertible bond loan measured at fair value as well as fair value adjustments of parts of the fixed interest rate NOK bond loans. The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the REC Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in note 4.

#### 2.2 CONSOLIDATION

#### (A) Subsidiaries

Subsidiaries are all entities over which the REC Group has the power to govern the financial and operating policies, generally requiring a shareholding of more than one half of the voting rights. Subsidiaries are fully consolidated from the date on which control is transferred to the REC Group. They are de-consolidated from the date that control ceases.

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the REC Group. The consideration

transferred of an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. The excess of the consideration transferred over the fair value of REC Group's share of the identifiable net assets acquired is recorded as goodwill (see note 2.7). If the consideration transferred is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the statement of income. Step acquisitions: an increase in ownership of a jointly controlled entity or an associate that becomes a subsidiary is accounted for using the acquisition method as at the date of control. An increase in ownership in a subsidiary is accounted for in accordance with the requirements of IAS 27 Consolidated and Separate Financial Statements as a transaction with equity holders with no change in the carrying amounts of assets or liabilities. At December 31, 2011 and 2010 and for the annual periods ending on these dates, all REC Subsidiaries have been owned 100 percent by REC, with no non-controlling interests.

Intercompany transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized gains have been present on intercompany sales of intermediate products.

## (B) Jointly controlled entities

The REC Group's interests in jointly controlled entities are accounted for by proportionate consolidation. Accordingly, the REC Group combines its share of the jointly controlled entities' individual income and expenses, assets and liabilities and cash flows on a line-by-line basis with similar items in the REC Group's financial statements. Unrealized gains on transactions between the REC Group and its jointly controlled entities are eliminated to the extent of REC Group's interest in the entities. An increase in ownership of a shareholding that becomes a jointly controlled entity is accounted for in accordance with the requirements of IFRS 3 Business Combinations with goodwill being recognized at each step

of the acquisition when applicable (see note 2.7). Subsequent to the sale of Sovello AG in 2010 and the reporting of the same as discontinued operations (see note 9), REC has only limited interests in jointly controlled entities in the PV systems area (see note 8).

#### (C) Associates

Associates are entities over which the REC Group has significant influence but not control or joint control, generally encompassing a shareholding of between 20 percent and 50 percent of the voting rights. Investments in associates are accounted for by the equity method of accounting and are initially recognized at cost (see note 2.7). The REC Group's share of its associates' post-investment profits or losses and amortization and impairment of fair value adjustments are recognized in the statement of income. The cumulative post-investment movements are adjusted against the carrying amount of the investment. When the REC Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the REC Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the associate. Unrealized gains on transactions between the REC Group and its associates are eliminated to the extent of the REC Group's interest in the associates. The only associate of any significance for the periods presented is Mainstream Energy Inc. (see note 8).

#### 2.3 SEGMENT REPORTING

An operating segment is a distinguishable component of the REC Group that is engaged in providing products that are subject to risks and returns that are different from those of other operating segments; this also corresponds to the internal management reporting in the REC Group. The Group Management is headed by the Chief Executive Officer (CEO), and the CEO is the one that makes decisions across segments. Consequently, REC regards the CEO as the chief operating decision maker. Geographical information breakdown is based on the REC Group's major markets and site locations (see note 5).

### 2.4 FOREIGN CURRENCY TRANSLATION

#### (A) Functional and presentation currency

Items included in the financial statements of each of the REC Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in NOK which is the parent company's functional and presentation currency.

#### (B) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the reporting date exchange rates. Foreign exchange gains and losses resulting from the settlement or the translation of monetary assets and liabilities are recognized in the statement of income, except when deferred in equity as qualifying cash flow hedges, qualifying net investment hedges or as a part of a net investment.

#### (C) Group companies

The results and financial position of all the REC Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- (i) Assets and liabilities for each statement of financial position presented are translated at the closing rate;
- (ii) Income and expenses for each statement of income are translated at average exchange rates for the year; and
- (iii) All resulting exchange differences from translation are recognized as a separate component of other comprehensive income (OCI).

On consolidation, exchange differences arising from the translation of the net investment in foreign entities, including monetary items that are regarded as a part of the net investment, and of borrowings and other currency instruments designated as hedges of such investments, are included in other comprehensive income (OCI). When a foreign operation is disposed, such exchange differences are recognized in the statement of income as part of the gain or loss on sale. The REC Group did not at December 31, 2011 or 2010 hold any borrowings or other currency instruments accounted for as net investment hedges. At December 31, 2011 and 2010, REC regarded approximately USD 130 million loans to REC Silicon as a part of the net investment in REC Silicon.

#### 2.5 CURRENT/NON-CURRENT

An asset/liability is classified as current when it is expected/due to be realized or settled within 12 months after the reporting date.

#### 2.6 PROPERTY, PLANT AND EQUIPMENT

Land and buildings consist primarily of operating plants and offices. All property, plant and equipment are stated at historical cost less accumulated depreciation and un-reversed impairment losses. Historical cost includes expenditures that are directly attributable to the acquisition, construction or installation of the items. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the REC Group and the cost of the item can be measured reliably. All other costs are charged to the statement of income during the financial period in which they are incurred. Borrowing costs incurred for the construction of any qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use. For the REC Group, capitalization of borrowing costs is limited to the total amount of external borrowing costs incurred for the parent company and subsidiaries during the relevant periods. Land is not depreciated. Depreciation on other assets is calculated using the straight-line method, to their residual values over their estimated useful lives. The assets' residual values, if any, depreciation method and useful lives are reviewed at least annually and related depreciation rates are adjusted prospectively. Depreciation commences when the assets are ready for their intended use.

## 2.7 INTANGIBLE ASSETS

#### (A) Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the REC Group's share of the net identifiable assets of the acquired subsidiary/associate/jointly controlled entity at the date of acquisition. Goodwill related to associates is included in the carrying value of investments in associates. Goodwill is carried at cost less accumulated impairment losses.

#### (B) Other intangible assets

Other intangible assets that have a definite useful life are carried at historical cost less accumulated amortization and un-reversed impairment losses. Amortization is calculated using the straight-line method to allocate the cost of other intangible assets over their estimated useful lives. Amortization commences when the assets are ready for their intended use. The REC Group has no intangible assets with indefinite lives other than goodwill. The assets' residual values, if any, amortization method and useful lives are reviewed at least annually and related amortization rates are adjusted prospectively.

#### (C) Research and development

Research expenditures are recognized as an expense as incurred. Costs incurred on development projects (relating to the design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes or systems) are capitalized as intangible assets when it is probable that the project will be successful considering its commercial and technological feasibility, and costs can be measured reliably. Other development expenditures are recognized as an expense as incurred. Development costs previously recognized as an expense are not recognized as an asset in subsequent periods. Development costs with a finite useful life that have been capitalized are amortized from the time the assets are ready for their intended use, which normally is at commencement of the commercial use.

#### 2.8 IMPAIRMENT AND DERECOGNITION **OF NON-FINANCIAL ASSETS**

Goodwill and other intangible assets that have an indefinite useful life are not subject to amortization and are tested at least annually for impairment. Assets that are subject to depreciation or amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized in a separate line item as a part of earnings before interest and taxes (EBIT) in the statement of income for the amount by which the asset's carrying amount exceeds its estimated recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Goodwill is allocated to individual or groups of cash-generating units for the purpose of impairment testing. Generally, any indicated impairment for a specific cash-generating unit is first allocated to goodwill, then proportionately to other non-current assets in the cash-generating unit, but not lower than the individual or group of assets' recoverable amount, if determinable. See note 7 for information on cash-generating units and the significant impairment losses

recognized in 2011. Assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Losses on derecognition include assets that are disposed of and assets with no foreseeable future economic benefits. Gains and losses on disposals are determined by comparing proceeds with carrying amount and are reported as a part of the statement of income. When applicable, gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the disposed entity. Losses due to assets assessed as having no future economic benefits are reported as an impairment loss.

#### 2.9 FINANCIAL ASSETS

The REC Group classifies its financial assets primarily in the following categories: at fair value through profit or loss, and loans and receivables. For the years ended December 31, 2011 and 2010, the REC Group had insignificant available-for-sale financial assets and had no held-to-maturity financial assets. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

The category financial assets at fair value through profit or loss has two sub-categories: financial assets held for trading, and those designated at fair value through profit or loss at inception. A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by management. Derivatives are also categorized as held for trading unless they are designated as hedges in hedge accounting. Gains or losses arising from changes in the fair value are recognized in the statement of income as part of financial income or expenses. For the years ended December 31, 2011 and 2010, the REC Group had only derivatives in this category.

The category loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables are carried at amortized cost which for current receivables approximates to historical cost.

Investments are initially recognized at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Investments are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the REC Group has transferred substantially all risks and rewards of ownership.

#### 2.10 ACCOUNTING FOR DERIVATIVE FINANCIAL **INSTRUMENTS AND HEDGING ACTIVITIES**

The REC Group uses derivative financial instruments to hedge a portion of its risks associated with interest rate and foreign currency fluctuations. Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative, as long as the REC Group has no intention and ability to settle the contracts net. The method of recognizing the resulting gain or loss

depends on whether the derivative is designated and qualifies as a hedging instrument, and if so, the nature of the item being hedged. According to IAS 39, derivatives are categorized as held for trading unless they are designated and qualify as hedging instruments.

Derivatives embedded in other financial instruments or other nonfinancial host contracts are treated as separate derivatives when their risk and characteristics are not closely related to those of the host contract and the host contract is not carried at fair value with gains or losses reported in profit or loss. Currently, for the REC Group this is relevant for currency derivatives embedded in committed sales contracts in which the currency in the contract is not the functional currency of one of the parties to the contract or a commonly used currency (see note 4.1(D)). The embedded currency derivative is separated based on the forward currency rates at the date of the contract and the host contract is treated as a sales contract in the relevant REC entity's functional currency.

Historically, the REC Group has applied cash flow hedge accounting for a portion of its risks associated with foreign currency fluctuations related to highly probable future purchase or sales transactions. However, at December 31, 2011 and 2010 REC had no hedge accounting for currency risk and the only remaining designated hedge instruments related to fair value interest rate hedge of NOK bonds.

At the inception of a hedge relationship, the REC Group formally designates and documents the hedge relationship to which the REC Group wishes to apply hedge accounting and the risk management objective and the strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the hedging instrument's effectiveness in offsetting the exposure to change in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

A cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss. The effective portion of the gain or loss on the hedging instrument is recognized in equity through other comprehensive income, while the ineffective portion is recognized in profit or loss. Amounts recognized in equity through other comprehensive income are transferred to profit or loss when the hedged transaction affects profit or loss, such as when a forecasted sale or purchase occurs. If the forecasted transaction is no longer expected to occur, amounts previously recognized in equity through other comprehensive income are transferred to profit or loss. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, amounts previously recognized in equity remain in equity until the forecasted transaction occurs. If the related transaction is not expected to occur, the amount is taken to profit or loss.

A fair value hedge is a hedge of the exposure to changes in fair value of a recognized asset or liability or an unrecognized firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss. The gain or loss from remeasuring the hedging instrument at fair value (for a derivative hedging instrument) or the foreign currency component of its carrying amount measured in accordance with IAS 21 (for a non-derivative hedging instrument) shall be recognized in profit or loss; and the gain or loss on the hedged item attributable to the hedged risk shall adjust the carrying amount of the hedged item and be recognized in profit or loss. Fair value hedge accounting shall be discontinued prospectively if the hedging instrument expires or is sold, terminated or exercised (for this purpose, the replacement or rollover of a hedging instrument into another hedging instrument is not an expiration or termination if such replacement or rollover is part of the entity's documented hedging strategy); the hedge no longer meets the criteria for hedge accounting in IAS 39; or the designation is revoked.

Starting from the end of the third quarter 2009, REC has applied fair value hedge accounting for the NIBOR interest part of fixed rate NOK bond loans (hedge items) using interest rate derivatives. The change in fair value of the part of the fixed interest bond relating to NIBOR, as well as the derivatives is recognized to profit or loss as parts of financial items. The part of the fixed rate bond that represents the credit risk premium at the inception (pricing) of the bond as well as the variable NIBOR rate of the derivatives are recognized at amortized cost (reported as interest expense).

#### 2.11 TRADE RECEIVABLES

Trade receivables are recognized initially at fair value and subsequently measured at amortized cost, less provisions for impairment. A provision for impairment of trade receivables is recognized in the statement of income and is established when there is objective evidence that the REC Group will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganization, and default or delinquency in payments, are considered indicators that the trade receivable is impaired.

#### 2.12 CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash in hand and demand deposits at banks.

#### 2.13 PAID-IN EQUITY CAPITAL

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

#### 2.14 BORROWINGS

Borrowings are recognized initially at fair value, net of transaction costs incurred unless it is at fair value through profit or loss. Borrowings that are not at fair value through profit or loss are subsequently stated at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the statement of income over the period the borrowings are outstanding using the effective interest method.

Commitment fees for the bank credit and guarantee facilities are recognized as part of interest expenses as incurred.

REC ASA established a fixed rate convertible bond in the fourth quarter of 2009 that is denominated in a foreign currency (EUR). Following IFRIC guidance, a foreign currency convertible bond is not a compound financial instrument and is classified wholly as a liability in the financial statements. Following IAS 39, by definition, foreign currency denominated convertible debt contains embedded derivative in relation to the conversion option, and the foreign exchange rates must be remeasured to market at reporting date. For the 2009 convertible bond, REC recognizes the change in the fair value of the whole convertible bond, and not just the embedded derivative, through profit or loss as a part of financial income or expenses.

REC ASA established a fixed rate Norwegian Krone bond at the end of the third quarter of 2009 and repurchased parts in 2011 and issued further Norwegian Krone bonds. REC has fair value hedged the NIBOR parts of the fixed interest using interest rate swaps. The change in fair value of the hedged part is recognized through profit or loss.

A financial liability (or a part of a financial liability) is removed from the statement of financial position when, and only when, it is extinguished—i.e. when the obligation specified in the contract is discharged or cancelled or expires. An exchange between REC and an existing lender of debt instruments with substantially different terms shall be accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, a substantial modification of the terms of an existing financial liability or a part of it shall be accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, shall be recognized in profit or loss. The repayment and cancelling of debt in 2010 in relation to the establishment of the new debt structure and repurchase of parts of the Norwegian Krone bonds in 2011 were accounted for as extinguishment of debt.

#### 2.15 INVENTORIES AND CONSTRUCTION CONTRACT COSTS

Inventories are stated at the lower of cost or net realizable value. Cost for inventory with different nature or use is determined using the first-in, first-out (FIFO) or average cost method. The cost of finished goods and work in progress comprises raw materials, direct labor, other direct costs and related production overheads (based on normal operating capacity). Net realizable value is the estimated selling price in the ordinary course of business, less the estimated variable and incremental costs to complete and sell the asset.

The REC Group is integrated in the value chain, and REC entities sell goods to other REC entities. Consequently, finished goods for one REC entity become raw materials or work in progress for another REC entity. The classification by the separate entities is also used in the classification in REC's consolidated financial statements.

Eligible costs relating to building of PV systems for sale in the ordinary course of business in REC Systems has been accounted for as inventories or construction contract costs, as applicable.

#### 2.16 INCOME TAX

Income tax expense represents the total of the tax currently payable (current tax) and the change in deferred tax allocated to the statement of income. The current tax is based on taxable profit (and in some instances loss) for the year. Taxable profit/loss differs from profit/loss before tax as reported in the statement of income because it excludes items of income or expense that are taxable or deductible in other years (temporary differences) and it further excludes items that are never taxable or deductible (permanent differences). Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, if the deferred income tax arises from initial recognition of an asset or liability in a transaction other than a business combination, that at the time of the transaction affects neither accounting nor taxable profit nor loss, it is not recognized. For the REC Group this is relevant for some buildings in Singapore and some government grants.

Current and deferred tax is determined using tax rates and laws that have been enacted or substantially enacted at the reporting date and are expected to apply when the related tax asset is realized or the tax liability is settled. Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized (see note 4.2 (C)). Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and the REC Group intends to settle its current tax assets and current tax liabilities on a net basis.

Deferred tax is provided on undistributed earnings in subsidiaries, associates and jointly controlled entities to the extent that the future dividend is taxable, except where the timing of any dividend is controlled by the REC Group and it is probable that the dividend will not be distributed in the foreseeable future. For REC this is in practice only relevant for undistributed earnings from REC Silicon in the USA, on which no deferred tax has been recognized (see notes 4 and 18).

#### 2.17 PROVISIONS

Provisions for environmental restoration, asset retirement obligations, restructuring costs, long-term bonuses, product warranties, onerous contracts, loss on financial guarantees and legal claims are recognized when: the REC Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognized for future operating losses. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of

statements, REC Group

obligations may be small. Assessment of fair value and likelihood is made at each reporting date. Provisions are measured at the management's best estimate of the expenditures expected to be required to settle the obligation at the reporting date, and are discounted to present value where the effect is material and the distribution in time can be reliably estimated. In 2011 REC recognized significant provisions in relation to the close down of parts of the Norwegian operations (see notes 4 and 20).

#### 2.18 PENSION/POST RETIREMENT OBLIGATIONS

A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the reporting date less the fair value of plan assets.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity via other comprehensive income in the period in which they arise.

Gains or losses on the curtailment or settlement of a defined benefit plan are recognized when the curtailment or settlement occurs. A curtailment occurs when the Group either is demonstrably committed to make a material reduction in the number of employees covered by a plan; or amends the terms of a defined benefit plan such that a material element of future service by current employees will no longer qualify for benefits, or will qualify only for reduced benefits. In 2011, the REC Group recognized gains on the curtailment of defined benefit plans in connection with restructuring in Norway (see note 19).

For defined contribution plans, the REC Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. When sufficient information is not available to use defined benefit accounting for a multi-employer plan that is a defined benefit plan, the plan is accounted for as if it were a defined contribution plan, which for REC Group is relevant for an early retirement plan in Norway and a pension plan in Sweden (see note 19).

#### 2.19 REVENUE RECOGNITION

Revenues are primarily generated from sale of goods: polysilicon, silane gas, wafers, solar cells and solar modules. Starting in 2010, REC Group has also realized revenues from sale of PV systems.

Revenue comprises the fair value for the sale of goods and services, net of value-added tax, rebates, discounts and expected returns.

Revenues are normally reported gross with a separate recording of expenses to vendors of products or services. Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred (transferred significant risks and rewards of ownership and control) or services have been rendered, the price is fixed or determinable, collectability is reasonably assured (probable that future economic benefits will be realized) and the costs can be

measured reliably. Recognition of revenues from construction contracts also depends on being able to measure reliably the stage of contract completion.

The REC Group's opinion is that it has no significant difficulties in deciding when delivery has occurred, except to some extent for the PV system projects. Delivery is normally according to terms in the relevant contracts. When REC products are sold with a right of return for damaged goods, experience is used to estimate and provide for such returns at the time of sale. For the PV system projects, judgment is needed to decide if it is a construction contract or sale of goods or services, which affects when revenue shall be recognized. In 2010 the REC Group had limited experience in sale of PV systems and the probability of realizing future economic benefits effectively limited some revenue recognition for 2010. Sales of PV systems that are realized by sale of special purpose entities are also accounted for as mentioned above.

When sub-contractors are used to perform parts of the production, e.g. wafer cutting or solar cell or module production, revenues are not recognized on the delivery to these sub-contractors. Instead a cost for the production service is recognized at the time the revenue for sale to the customer is recognized.

The REC Group has some long-term contracts in different segments where sales prices and volumes are predetermined, with some adjusting mechanisms. The contracts are often take-and/or-pay contracts. The volumes and prices may vary between years, and some are declining over time and some increasing. The customer may also be able to choose various product types and qualities each period. The REC Group has determined that each year's prices and quantities are separate deliveries and revenues should be recognized according to the contract terms for the individual year.

Some products, primarily solar modules, are sold with product warranties. The expected warranty amounts are recognized as an expense at the time of sale, and are adjusted for subsequent changes in estimates or actual outcomes (see notes 4 and 20).

#### 2.20 INTEREST AND DIVIDEND INCOME

Interest income is accrued on a time basis. Dividend income from investments is recognized when the shareholders' rights to receive payment have been established, normally on the declaration date.

#### **2.21 LEASES**

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. Other leases are classified as operating leases. The evaluation is based on the substance of the transaction. The criteria that primarily has been the decisive factor for the REC Group in concluding that a finance lease exists is when the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset at the inception of the lease. In determining minimum lease terms and payments it has been taken into consideration the possibility of termination of contracts.

According to IFRIC 4 Determining whether an arrangement contains a lease the REC Group may enter into an arrangement that does not take the legal form of a lease but conveys a right to use an asset in return for a payment or series of payments. Determining whether an arrangement is, or contains, a lease shall be based on the substance of the arrangement and requires an assessment of whether: (a) fulfillment of the arrangement is dependent on the use of a specific asset; and (b) the arrangement conveys a right to use the asset (see note 4).

Assets held under finance leases are recognized as assets of the REC Group at their estimated fair values at the inception of the lease or, if lower, at the present value of the minimum lease payments. The leased assets are depreciated over the shorter of the useful life of the asset or the lease term. The corresponding liability to the lessor is included in the statement of financial position as an interest bearing liability. Payments made under operating leases (net of any incentives received from the lessor) are charged to the statement of income on a straight-line basis over the period of the lease.

Significant prepayments made in an operating lease for the REC Group as the lessee are amortized over the minimum lease term and included as a part of amortization in the statement of income.

#### **2.22 GOVERNMENT GRANTS**

Government grants are recognized at their fair values when there is reasonable assurance that the grants will be received and the REC Group will comply with all attached conditions (see note 21). Government grants related to assets are presented in the statement of financial position as a reduction to the carrying amount of the assets and reduce depreciation in the statement of income. Government grants relating to income are deducted in reporting the related expenses.

#### 2.23 STATEMENT OF CASH FLOWS

The Group presents the statement of cash flows using the indirect method. Cash inflows and outflows are shown separately for investing and financing activities, while operating activities include both cash and non-cash line items. Interest received and paid and dividends received are reported as a part of operating activities, except interest costs capitalized as part of the construction of a noncurrent asset, that are included in investing activities. The statement of cash flows includes discontinued operations prior to their disposal.

Operating activities include all cash flow effects from derivatives, and the difference between the amounts reported as gains or losses in the statement of income and net amounts paid or received is reported in the line item "change in derivatives". REC Group is sensitive to changes in currency exchange rates and recognize currency gains and losses in the statement of income, primarily reported by REC ASA. The net currency gains or losses are split into items estimated to relate to borrowings (finance activities), noncurrent financial assets and investments (investing activities) and unrealized gains or losses on cash and cash equivalents held at the end of the periods. These amounts are included in the line item under operating activities "currency effects not cash flow or not related to operating activities" as an adjustment to the amount reported in the

statement of income and reclassified as relevant. The remaining currency gains or losses are consequently included as part of operating activities.

Investing activities include cash flows related to non-current receivables and non-current prepayments (assets), even if these relates to purchase or sale of goods and services.

Financing activities include cash flows related to issue of new shares, net of costs for the capital increase. The income tax effect on these costs does not materialize as cash flow in the same period, and is included in the separate line under operating activities for income taxes paid/received. Proceeds from borrowings include prepayments received from customers on which interest is calculated. Payments of borrowing include the main parts of payments of up-front and waiver loan fees and costs for loan and guarantee facilities.

#### 2.24 ADOPTION OF NEW AND REVISED STANDARDS AND **INTERPRETATIONS**

The accounting policies adopted are consistent with those of the previous financial year. In addition, the REC Group has adopted the following new and amended standards and interpretations issued by the IASB and approved by the EU that are relevant to its operations and effective for annual reporting periods beginning on January 1, 2011, none of which has impacted the Group's consolidated financial statements for 2011:

- IFRS 7 Financial Instruments Disclosure requirements for the transfer of financial assets
- IAS 24 Related Party Disclosures revised
- IAS 32 Financial Instruments: Presentation Classification of Rights Issues
- IFRIC 14 Prepayments of a Minimum Funding Requirement amended
- IFRIC 19 Extinguishing Financial Liabilities with Equity Instruments
- Improvements to IFRSs issued May 2010

The Group has not early adopted any standards or interpretations in 2011.

At the date of authorisation of these financial statements, the following standards and interpretations that could affect the Group were issued but not effective:

IFRS 9 Financial Instruments and related amendments to IFRS 7 regarding transition (effective from January 1, 2015, but not yet approved by the EU). The present IFRS 9 is phase one of the IASB's project plan for the replacement of IAS 39, that consists of three main phases. The three phases are:

Phase one: Classification and measurement. IFRS 9 Financial Instruments was published in November 2009 and contained requirements for financial assets. Financial assets will be held at either fair value or amortised cost, except for equity investments not held for trading which may be held at fair value through equity. Requirements for financial liabilities were added to IFRS 9 in October 2010. Most of the requirements for financial liabilities were carried forward unchanged from IAS 39. However, some changes were made to the fair value option for financial liabilities to address the issue of own credit risk. Gains and losses on own credit arising from financial liabilities designated at fair value through profit or loss will be excluded from the statement of income and instead taken to other comprehensive income. In December 2011, the Board amended IFRS 9 to require application for annual periods beginning on or after January 1, 2015 and to not require the restatement of comparative-period financial statements upon initial application. In November 2011, the Board tentatively decided to consider making limited modifications to IFRS 9.

- Phase two: Impairment methodology. The supplementary document Financial Instruments: Impairment was published in January 2011. The comment period closed on April 1, 2011 and redeliberations are on-going.
- Phase three: Hedge accounting. The exposure draft Hedge Accounting was published in December 2010. The comment period closed on 9 March 2011 and redeliberations have concluded.

The potential impact of the standard on the REC Group's consolidated financial statements has not been concluded. However, as the REC Group accounts for a EUR convertible bond at fair value through profit or loss, gains and losses on own credit will according to phase one be excluded from the statement of income and instead taken to other comprehensive income.

IAS 12 Deferred tax: Recovery of Underlying Assets - amendments (effective from annual periods beginning on or after January 1, 2012, but not yet approved by the EU). IAS 12 requires an entity to measure the deferred tax relating to an asset depending on whether the entity expects to recover the carrying amount of the asset through use or sale. It can be difficult to assess when the asset is measured using the fair value model in IAS 40. The amendment provides a practical solution by introducing a presumption that recovery of the carrying amount will, normally be through sale. The same applies to non-depreciable asset measured using the revaluation model in IAS 16.

The evaluation is that the REC Group has no such assets, and the amendments should have no effect for the REC Group.

Improvements to IFRSs (effective for annual periods beginning on or after January 1, 2012). The changes are primarily in order to remove inconsistencies and to clarify the wording of standards and interpretations. There are separate transition provisions for each standard. These changes have limited effect for the REC Group.

IFRS 10 Consolidated Financial Statements (effective from January 1, 2013. Earlier application is permitted, but it is not yet approved

by the EU). IFRS 10 builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included within the consolidated financial statements of the parent company. IFRS 10 introduces a single control model to assess whether an investee should be consolidated. This control model requires entities to perform the following in determining whether control exists;

- Identify how decisions about the relevant activities are made;
- Assess whether the entity has power over the relevant activities by considering only the entity's substantive rights;
- Assess whether the entity is exposed to variability in returns; and
- Assess whether the entity is able to use its power over the investee to affect returns for its own benefit;
- Control should be assessed on a continuous basis and should be reassessed as facts and circumstances change.

REC believes it has no significant entities for which the determination of control is difficult to assess, and that entities that are jointly controlled are not included in scope of IFRS 10, and as such believes that IFRS 10 will have limited effect for the REC Group.

IFRS 11 Joint Arrangements (effective from January 1, 2013. Earlier application is permitted, but it is not yet approved by the EU). The IFRS supersedes IAS 31 Interests in Joint Ventures and SIC-13 Jointly Controlled Entities—Non-Monetary Contributions by Venturers. IFRS 11 establishes that classification of the joint arrangement depends on whether parties have rights to and obligations for the underlying assets and liabilities. According to IFRS 11, joint arrangements are divided into two types, each having its own accounting model.

- Joint operations whereby the jointly controlling parties, known as joint operators, have rights to assets and obligations for the liabilities, relating to the arrangement;
- Joint ventures whereby the joint controlling parties, known as joint venturers, have rights to the net assets of the arrangement.

In terms of IFRS 11, all joint ventures will have to be equity accounted.

The REC Group currently accounts for jointly controlled entities (joint ventures) using proportionate consolidation. After the sale of Sovello in the beginning of 2010, REC currently has limited jointly controlled entities (see note 8). When implementing IFRS 11 and IAS 28 (2011), REC Group's jointly controlled entities need to be accounted for according to the equity method, with restatement of comparative figures.

IAS 28 Investments in Associates and Joint Ventures (2011) (effective from January 1, 2013. Earlier application is permitted, but it is not yet approved by the EU). IAS 28 (2011) supersedes

IAS 28 Investments in Associates (2008) and carries forward the existing accounting and disclosure requirements with limited amendments. These include:

- Investment in a joint venture shall be accounted for using the equity method;
- IFRS 5 is applicable to an investment, or a portion of an investment, in an associate or a joint venture that meets the criteria to be classified as held-for-sale; and
- If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the entity continues to apply the equity method and does not remeasure the retained interest.

The preliminary evaluation is that the effect for the REC Group is that its investments in joint ventures must be accounted for using the equity method. See the discussion related to IFRS 11.

IFRS 12 Disclosure of Interests in Other Entities (effective from January 1, 2013. Earlier application is permitted, but it is not yet approved by the EU). IFRS 12 combines, in a single standard, the disclosure requirements for subsidiaries, associates and joint arrangements, as well as unconsolidated structured entities (special purpose vehicles and other off balance sheet vehicles). The required disclosures aim to provide information to enable user to evaluate:

- The nature of, and risks associated with, an entity's interests in other entities: and
- The effects of those interests on the entity's financial position, financial performance and cash flows.

REC has not concluded on the effects of IFRS 12 on its disclosures. The adoption of IFRS 12 may increase the level of disclosure provided by the REC Group but without concluding REC currently expects the effects to be limited due to the REC Group's relatively uncomplicated structure and involvement in other entities.

IFRS 13 Fair Value Measurement (effective from January 1, 2013. Earlier application is permitted, but it is not yet approved by the EU). IFRS 13 requirements do not extend the use of fair value accounting, but provide guidance on how it should be applied where its use is already required or permitted by other standards within IFRSs. The standard will be applied prospectively and comparatives will not be restated. IFRS 13 introduces a single source of guidance on fair value measurement for both financial and non-financial assets and liabilities by defining fair value, establishing a framework for measuring fair value and setting out disclosures requirements for fair value measurements. The key principles in IFRS 13 are as follows:

- Fair value is an exit price;
- Measurement considers characteristics of the asset or liability and not entity-specific characteristics;

- Measurement assumes a transaction in the entity's principle (or most advantageous) market between market participants;
- Price is not adjusted for transaction costs;
- Measurement maximises the use of relevant observable inputs and minimises the use of unobservable inputs;
- The three-level fair value hierarchy is extended to all fair value measurements.

The REC Group has not concluded on the effect of IFRS 13. A preliminary evaluation is that the REC Group already complies with the main requirements for its existing fair value measurements and disclosures, but expects some additional disclosures for its annual financial statements and quarterly reports. However, IFRS 13 introduce a new definition of "an active market", and has changed the definition in IAS 36 Impairment of assets of "an active market". The wording of the new definition in IAS 36 is different from the current, and it is unclear for the REC Group if this is intentional and if it changes the IAS 36 definition in substance. If so, it may change the REC Group's cash-generating units with potential impairment effects if a current cash-generating unit is split into several cash-generating units, of which one or more may have estimated recoverable amounts below its carrying values. See note 7 for further discussion of cash-generating units.

Amendments to IAS 19 Employee Benefits (effective from January 1, 2013. Earlier application is permitted, but it is not yet approved by the EU). The amendments relate broadly to the accounting for defined benefit obligations and termination benefits. For defined benefit plans the amendments include:

- Remeasurements ("actuarial gains and losses") are recognised immediately in other comprehensive income. The corridor method and the recognition of actuarial gains and losses in profit or loss are no longer permitted;
- $\label{thm:expected} Expected \, returns \, on \, plan \, assets \, are \, calculated \, based \, on \, the \,$ rates used to discount the defined benefit obligation;
- Increased disclosure requirements for defined benefit plans, including characteristics of defined benefit plans and the risks that entities are exposed to through participation in those plans.

The REC Group's preliminary evaluation is that the amendments to IAS 19 for defined benefit plans will not have significant effects, especially as the REC Group already recognizes actuarial gains or losses to other comprehensive income (what to be included in actuarial gains or losses will however be somewhat changed). Furthermore, the REC Group expects limited effect of the change in estimated return on plan assets to be included in profit or loss, with corresponding opposite effect on remeasurements to other comprehensive income. The REC Group may elect to present net interest as part of financial items in the statement of income instead of included as part of pension expense. Some more disclosures may be required.

The amended IAS 19 also made some changes to the definition and recognition of termination benefits. It clarified that benefits payable in exchange for services are not termination benefits. Termination benefits shall not be recognized before the earlier of when the entity no longer is able to withdraw an offer of those benefits and when recognizing restructuring costs.

The REC Group recognized termination benefits and restructuring costs at the end of 2011. Some of these costs will be incurred in 2012 for conducting the restructuring and close downs of the cell and parts of the wafer production activities in Norway, both costs for employees and for external parties. The REC Group's current interpretation is that these services to be performed in 2012 in relation to the restructurings do not provide any future economic benefits, as they are to perform the close down of the operations, and as such should not be deferred according to the amended IAS 19. Assuming this current evaluation is correct, the REC Group's current evaluation is that the amendments to IAS 19 in relation to termination benefits should not have significant effects on the financial statements as of December 31, 2011.

Amendments to IAS 1 Presentation of Financial Statements (effective for financial years beginning on or after July 1, 2012. Earlier application is permitted, but it is not yet approved by the EU). The amendments to IAS 1 require companies preparing financial statements in accordance with IFRSs to group together items within other comprehensive income that may be reclassified to the profit or loss section of the statement of income. The changes do not address the issue of which items of income and expense should be included in profit or loss or other comprehensive income.

The preliminary evaluation is that the REC Group expects to make some adjustments in its presentation of other comprehensive income at implementation of the amended IAS 1.

Amendments to IAS 32 Financial Instruments- Presentation: Offsetting Financial Assets and Financial Liabilities (effective for annual periods beginning on or after January 1, 2014. Earlier application is permitted, but it is not yet approved by the EU). The amendments clarify:

- The meaning of 'currently has a legally enforceable right of set-off'; and
- That some gross settlement systems may be considered equivalent to net settlement.

The preliminary evaluation is that these clarifications have no significant effect for the REC Group.

Amendments to IFRS 7 Financial Instruments - Disclosures: Offsetting Financial Assets and Financial Liabilities (effective retrospectively for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods. Earlier application is permitted, but it is not yet approved by the EU). It amends the required disclosures to include information that will enable users of an entity's financial statements to evaluate the effect or potential effect of netting arrangements, including rights of set-off associated with the entity's recognised financial assets and recognised financial liabilities, on the entity's financial position.

The preliminary evaluation is that these amendments have no significant effect for the REC Group.

The management anticipates that these standards and interpretations will be adopted at the dates stated above provided that the standards and interpretations are approved by the EU.

#### 03 FINANCIAL RISK MANAGEMENT

#### 3.1 FINANCIAL RISK FACTORS

The REC Group's activities expose it to a variety of financial risks, including currency risk, interest-rate risk, liquidity risk, credit risk, refinancing risk and others.

The goals for the REC Group finance policy and the treasury operations are primarily to minimize the risk for financial distress, secure long term funding, reduce refinancing risk, hedge currency risk of expected future net cash flows and manage interest rate risk. REC's finance policy sets the framework and limits for hedging activities in the REC Group. It defines risk management objectives, responsibilities and operational requirements. The REC Group finance policy was revised in December 2011 with limited changes from 2010.

All hedging transactions are undertaken in order to reducing negative impacts of changes in financial markets on net cash flow. The REC Group uses financial instruments to hedge net exposures arising from operating, financing and investment activities. The REC Group has centralized its treasury function to REC ASA. By concentrating financial management and operations in REC ASA, economies of scale and better control of financial risks are achieved.

The disclosures that are required regarding financial risks below focus on the risks that arise from financial instruments and how they have been managed. However, from management's perspective some of the financial instruments, especially currency derivatives, are entered into with the purpose of reducing risks from commercial transactions while the existence of these financial instruments expose the company for risks.

#### (A) Currency risk

REC operates internationally and is exposed to currency risk. The Group is primarily exposed to fluctuations in US Dollar (USD), Euro (EUR), Singapore Dollar (SGD) and Norwegian Krone (NOK), arising from commercial transactions in currencies other than the entities' functional currencies, recognized assets and liabilities, and net investments in foreign operations.

REC's primary focus is hedging the currency risk of external net cash flow of the Group in currencies other than NOK. NOK is the functional currency of the parent company REC ASA and the reporting currency for the REC Group. Net cash flow is defined as the consolidated external cash flows from operations, finance costs and capital expenditure. The REC Group's policy is to hedge between 50 and 100 percent of forecasted consolidated external net cash flow on a 24 month rolling basis. The purpose is to reduce the currency risk of the expected future net cash flows for the Group measured in NOK.

To manage currency risk arising from commercial transactions, REC entities use various forward contracts or options. In addition REC swaps parts of the currency exposure of interest bearing debt from NOK to EUR and USD since future cash flows are estimated to arise from these currencies. REC ASA manages the currency risk on an overall REC Group level and establishes external foreign exchange rate contracts with banks.

See note 30 for currency sensitivities of derivatives and other financial assets and liabilities. Entering into currency derivative contracts increase currency risk from financial instruments related to the financial statements even if the purpose is to reduce the currency risk of estimated future cash flows in relation to NOK. This is because by entering into currency derivative contracts REC establishes financial instruments and consequently exposes itself for changes in the fair value or cash flows of the financial instruments. In addition, recognized financial assets and liabilities (especially internal receivables and payables and external interest bearing liabilities) in currencies other than the separate entities functional currencies are affected by changes in currency rates.

In 2010 and 2011, REC has not used hedge accounting according to IAS 39 Financial Instruments Recognition and Measurement for currency hedges.

Currency developments will also affect translation of the statement of income and financial position of foreign entities, as well as other financial items in foreign currencies such as cash equivalents, receivables, debt and derivatives.

## (B) Credit risk

REC has historically realized limited losses on trade receivables, but in 2010 it increased provisions for loss on trade receivables and realized these losses in 2011. Policies are in place to ensure that sales of products are made to customers with an appropriate credit history in combination with requirements for various payment guarantees or prepayments and to some extent credit insurance. However, the difficult market conditions have increased credit risks related to counterparties. REC has also experienced some disputes when it has been necessary to call on bank guarantees from

customers. Credit risk may also increase by abrupt changes in market conditions by changes in government incentives. See note 30 for further discussion of credit risk related to receivables. Due to the close down of parts of REC Wafer's production capacity, REC Silicon is more exposed to spot sales. This may increase the credit risk. Generally a more challenging and competitive market environment may increase credit risk through sales to financially weaker customers, extended payment terms and sales into new and immature markets.

Derivative counterparties and cash transactions are limited to highcredit-quality financial institutions. For derivatives traded with banks, the credit risk is regarded as limited to any positive market value, as ISDA (International Swaps and Derivatives Association) or master netting agreements are in place and some interest rate derivative instruments are settled net. REC only enters into derivative contracts with a defined group of banks. All the banks currently used as derivative counterparties have credit ratings in the A or higher categories assigned by Standard & Poor's or Moody's.

Any positive fair values in embedded derivatives relate to contractually committed future sales of wafers. Parts of these long term contracts are secured by bank guarantees from high-creditquality banks. Some of REC Wafer's prices for deliveries in 2010, 2011 and some future years were originally pre-defined in longterm contracts. However, due to the market developments, REC Wafer has had to make downward adjustments compared to the original amounts in sales contracts and in some cases called on bank guarantees to protect its interest. In some circumstances REC is involved in legal proceedings with its customers. Any legal proceedings in relation to the contracts and bank guarantees encounter procedural risk and may take time to resolve. REC Wafer has also entered into agreements for contract settlements, of which some contracts contained embedded derivatives. REC had insignificant positive fair values in embedded derivatives at December 31, 2011 and 2010.

#### (C) Liquidity risk

According to the finance policy, REC shall ensure as far as possible given the market situation that sufficient liquidity is available for periods with volatility in operating cash flows, and maintain flexibility for possible new investments by keeping one or more long-term committed revolving credit facilities and/or cash on deposit.

Prudent liquidity risk management implies maintaining sufficient cash and cash equivalents and having availability to funding due to the dynamic nature of the underlying businesses.

The liquidity risk has increased in the second half of 2011, due to the difficult financial market and the future market uncertainty and risk related to REC's products.

For further details regarding the financing of REC ASA and available liquidity (see notes 3.3, 17 and 33). It should be noted the maturity schedules of REC's borrowings, with significant maturities in 2013 and 2014. REC will work on reducing these maturity risks, primarily through refinancing of debt.

#### (D) Interest rate risk

Changes in market interest rates affect the fair value of assets and liabilities or the variability in cash payments. The REC Group is exposed to interest rate risk through funding and cash management activities, primarily in REC ASA. Cash in bank accounts and bank borrowings have historically primarily carried variable interest rates, while bonds to a large extent are fixed rate. REC has borrowings through drawdown on credit facilities, bonds, convertible bond and finance leases.

Borrowings through REC ASA are primarily exposed to changes in USD, EUR and NOK interest rates. REC ASA has entered into interest rate derivatives, both to swap variable interest to fixed and to swap fixed rate exposure to variable interest rates (see note 11).

Interest hedging instruments have been used to control the debt's exposure towards interest rate fluctuations within the framework defined in the finance policy. The debt's price sensitivity towards fluctuations or volatility in interest rates is measured by modified duration. Market interest rate volatility affects the pricing of the net debt and is also impacting the Group's net interest costs. Interest rate fluctuations affect the pricing of the debt instruments less when the modified duration is low. The modified duration expresses the price effect of a one percent change in interest rates measured by years. The net debt of REC Group shall not have a modified duration exceeding 3 years. Normally, the modified duration for REC Group should be between 0.5 - 2.0 years. At December, 31 2011 the modified duration was 1.6 years (excluding finance lease debt).

Interest income and interest expense in the statement of income, as well as interest receipts and payments, are influenced by interest rate changes for financial instruments that carry variable interest rates. Fair values of fixed rate instruments and interest derivatives are affected by interest rate changes. See note 30 for interest rate sensitivity.

(E) Hedging of risk related to supply of raw material/commodities

According to the finance policy, REC subsidiaries that have a high portion of total costs from a specific input factor may hedge the risk of significant negative movements in prices. The extent of a significant negative movement is evaluated in each case considering the effect of price increases and price volatility for the relevant input factor on the operating results for the subsidiary. Price risk for the input factor should be hedged primarily through long-term contracts. Financial instruments may also be used for hedging significant changes in the price of important input factors. As of year-end 2011 and 2010, no such hedges have been conducted, except entering into some energy purchase contracts.

#### 3.2 FAIR VALUE ESTIMATION

Fair value estimation is discussed in note 30.

#### 3.3 CAPITAL STRUCTURE AND FINANCING

REC aims to have a profitable growth and shall seek to maintain a sustainable capital structure and maintain access to various sources of funding. The main reason for this is the high industry volatility and operational risks which could significantly impact EBITDA and cash flow from operations and REC's financial key ratios and borrowing terms going forward.

In determining the appropriate capital structure for the REC Group, various factors have been considered. These include risks associated with the REC Group's business profile, the fact that the PV industry has high capital intensity and the expected unfavorable impact on the demand for REC Group's products and higher cost of capital from increased interest rates. Also, PV is a relatively new business with limited history and is still dependent on governmental incentives in various countries.

REC shall maintain access to various sources of funding. Due to the dynamic nature of the underlying businesses, REC aims to maintain a high degree of financial flexibility by keeping sufficient cash and cash equivalents or committed credit facilities available. REC shall at all times strive to have sufficient equity capital to implement the business strategies and have financial flexibility in relation to possible new investments. Taking into account the market volatility and the risk related to future cash flows, REC shall aim to maintain a long term capital structure corresponding to an "Investment Grade" rating.

See the consolidated statement of changes in equity for the equity of the REC Group and note 17 for REC Group's interest bearing liabilities. The significant loss for the year has reduced equity considerably at December 31, 2011 compared to the previous year. Equity amounted to NOK 12.2 billion at December 31, 2011, compared to NOK 22.2 billion at the end of 2010. The equity ratio (calculated on book values) was approximately 50 percent at December 31, 2011 compared to approximately 60 percent at December 31, 2010. REC's targets for equity capital is reflected in the discussion above relating to the finance policy, and the bank loan agreement has a minimum equity ratio requirement (and with a different definition from the calculations referred to above), see below. At December 31, 2011 REC had unused revolving credit facility of NOK 6.5 billion. The net debt of the REC Group (calculated on book values) was NOK 4.7 billion at December 31, 2011, a decrease of NOK 3.2 billion from the end of 2010. Net debt includes bank debt, senior domestic bonds partially at fair value, the convertible bond at fair value and finance leases, reduced by bank deposits. Due to the REC Group's own credit, the fair values of REC's interest bearing liabilities are below the notional amounts and the amounts that shall be repaid at maturity (see note 30). The equity and net debt definitions for the covenant calculations differ in some aspects from the calculations above, especially because the EUR convertible bond is regarded as equity for the covenant calculations, and exclusion of some finance lease liabilities.

REC ASA's bank debt facilities have borrowing limits defined in NOK even if the majority of this debt both will be drawn and serviced by other currencies (e.g. EUR and USD). The NOK exchange rate affects the amounts available under the multi-currency credit facilities with limits determined in NOK as REC mainly will borrow in USD and EUR. Starting at the end of the first quarter 2012, the total amounts available in the revolving bank credit facilities will be reduced by NOK 350 million quarterly. The residual principal amount shall be repaid in the beginning of June 2013.

According to REC's finance policy, REC shall at all times maintain financial ratios within the limits defined in the loan agreements of REC ASA and subsidiaries, and take the necessary measures that are available to avoid financial distress. Neither the senior NOK

bonds nor the convertible EUR bond contains financial covenants. There is cross default between all the loan agreements above certain threshold amounts. Please refer to note 17 for further information on the loan agreements. The calculations of financial covenants have certain adjustments compared to the reported IFRS numbers. At December 31, 2011, REC complied with all financial covenants in the loan agreements.

The solar market is expected to remain challenging in 2012 and REC's margins and cash flow are hence expected to be lower than in 2011. REC currently has adequate liquidity and ample headroom in its banking facilities, within its agreed financial covenant levels. However, the Company has for some time had discussions with its bank group to improve its flexibility in the loan agreement going forward allowing the company to focus on further cost improvement initiatives. The amendments discussed address among other things the extension of the final maturity date, covenant levels and definitions allowing for shut down of assets

in Norway (costs related to shut downs) and capital expenditures in relation to further cost improvements of the operations.

REC's bank credit and guarantee facilities agreement previously had restrictions on the amount of capital expenditure, other investments or acquisitions if the financial ratios are weaker than defined thresholds. Due to satisfactory level of the ratio net debt/ EBITDA (leverage ratio) in the two consecutive third and fourth quarters of 2010, the restrictions do no longer apply. According to the agreements, REC ASA can pay dividends in future financial years as long as REC Group is in compliance with the financial covenants after the distribution of any dividends. However, REC ASA had no distributable equity at December 31, 2011.

Below is shown the calculation of leverage ratio (net debt/EBITDA), interest coverage ratio and equity ratio under the 2010 bank credit facility.

(NOK IN MILLION, EXCEPT RATIOS)	2011	2010
Interest bearing financial liabilities, excluding prepayments interest calculation (see note 17)	6 272	8 786
Less convertible bond included above, reported as equity for the covenant calculation	-1315	-2175
Less finance lease in capacity lease contracts (max NOK 1,250 million)	-861	-965
Less cash and cash equivalents	-1 596	-849
Less any net interest bearing debt held in proportionally consolidated joint ventures	2	0
Net debt for covenant calculation	2 502	4 797
EBITDA REC Group	2867	3 532
Exclude EBITDA effects of any plant closures in 2010 and a specific legal proceeding*	-27	65
Exclude EBITDA of any proportionally consolidated joint ventures	7	9
Exclude EBITDA effect of eliminated internal profit on sale to proportionally consolidated joint ventures	0	-7
Nominal EBITDA REC Group for for covenant calculation	2 848	3 599
Total assets REC Group	24 470	36 865
Exclude total assets of proportionally consolidated joint ventures	-35	-9
Include carrying value of investment in shares in proportionally consolidated joint ventures	53	19
Total assets REC Group for covenant calculation	24 488	36 875
Total equity REC Group	12 192	22 152
Add convertible bond, reported as equity for the covenant calculation - principal amount	2 481	2 500
Deduct comprehensive income (in period of ownership) of proportionally consolidated joint ventures	18	10
Total equity for covenant calculation	14 691	24 662
Financial income	51	35
Financial expenses before capitalization of borrowing costs	-705	-1 381
Deduct calculated net interest	17	14
Deduct interest for capacity finance leases	46	74
Deduct expensed, add some of the paid up-front fees	105	461
Net interest paid for covenant calculation	-486	-798
Leverage ratio	0.88	1.33
Equity ratio	60.00%	66.88%
Interest cover ratio	5.85	4.51

<sup>\*</sup> The exclusion for any plant disclosures was in effect only up to June 30, 2011 and do not apply for any subsequent plant closures. The exclusion for effects of a legal proceeding related to a specific legal proceeding that was concluded in 2011.

Capacity lease contracts means any finance lease arrangements in which a supplier conveys a right to a member of the Group to use assets together with related services, including arrangements to provide a member of the Group with rights to capacity or take-or-pay and similar contracts. The fulfillment of the arrangement is dependent on the use of specific assets, and the arrangement conveys a right to use the asset, as defined in IFRIC 4 and IAS 17. Such finance lease liabilities are exempt from the net debt definition. Also, even though not explicitly stated in the agreement, for the calculation of the interest cover ratio REC has interpreted that interest expenses reported for capacity lease contracts are not costs related to financing, and has consequently excluded these from the calculation of net interest paid.

The covenants are measured at the end of each quarter.

From the 12 month period which ended on September 30, 2011 the leverage ratio (net debt/EBITDA) was not to exceed 3.50. For subsequent quarters the 12 month maximum leverage ratio requirement decreases steadily to 2.50 for the period ending December 31, 2012 and for each relevant period thereafter.

The equity ratio shall never be lower than 30.00 percent.

The interest cover ratio in respect of any 12 month period shall be equal to or exceed specified ratios. The measurement started for the period ending September 30, 2011 with the ratio 2.25 and increases steadily to 3.25 for the period ending March 31, 2013 and for each relevant period thereafter.

The credit facility contain, among other things negative pledge clauses, restrictions in providing any security interest on any of the REC Group's assets, acquiring or disposing of assets or businesses, providing of financial support and incurring financial indebtedness. In the event of change of control of REC ASA's shares, the loans shall be repaid in full, see the report from the Board of Directors. There are no restrictions on annual capital expenditure.

See note 33 for amendments to the bank credit facility agreement after the reporting period.

#### 04CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

#### 4.1 CRITICAL JUDGMENTS IN APPLYING THE **REC GROUP'S ACCOUNTING POLICIES**

Management's judgments in applying the REC Group's accounting policies having the most significant effect on amounts recognized in the financial statements or reported as note disclosures are discussed below and in the relevant notes.

#### (A) Deferred tax on undistributed earnings

According to current regulations and tax treaty between Norway and the USA, withholding tax of  $15\,\mathrm{percent}$  would apply on any dividends paid by the REC Group's operations in the USA to the parent company in Norway. REC ASA controls the distribution of future dividends from the US operations, and has determined that those profits will not be distributed in the foreseeable future. Consequently, REC ASA has not recognized a deferred tax liability on these undistributed earnings. If, at a later point in time these evaluations change or dividends are distributed under the current regulations and tax treaty, additional tax expense will be recognized in the relevant periods.

#### (B) Functional currencies

The REC Group's presentation currency and the parent company's (REC ASA's) functional currency is Norwegian Krone. The management has evaluated the functional currency of the different REC entities. For some entities the facts and circumstances are mixed and the conclusion is not readily apparent, as revenues and expenses currently are in several currencies and deliveries are made to several countries. Currently, pricing is determined by

demand for products in several markets and from government incentives. Government incentives and the relative attractiveness of selling to different countries change over time. Europe is currently, and in the foreseeable future, the main market for REC Solar cells and modules entities, and it has been determined that EUR is the functional currency for these. The changes in facts and circumstances during 2011 that led to change in management's judgment of the composition of Cash-generating units also affected management's judgment of functional currency for the Singaporean entities, and now it evaluates that EUR is the functional currency of all the entities in the integrated plant in Singapore.

Functional currency affects the reporting of currency gains and losses and exchange differences as well as hedging strategies and effects. The evaluation of what is the functional currency for the separate entities may change over time if there are relevant and significant changes in facts or circumstances. A change in functional currency must be made prospectively from the date of the change.

### (C) Development expenditures

The REC Group conducts numerous research and development activities and projects. Some costs incurred in the development phase of an intangible asset may be capitalized if the recognition criteria are fulfilled. Costs that at the time they are incurred do not fulfill the requirements are expensed and cannot be capitalized at a later stage. Consequently, there may be development costs that cannot be capitalized because the REC Group cannot demonstrate that all requirements are fulfilled at the relevant points in time. At year-end

2011 and 2010, most development costs have been expensed, except some costs relating to the Fluidized Bed Reactor (FBR) project in REC Silicon and some furnace development activities in REC Wafer (see note 6) and development of software systems for own use.

#### (D) Embedded derivatives

According to IAS 39 Financial Instruments: Recognition and Measurement an embedded foreign currency derivative in a host contract for the sale of a non-financial item where the price is denominated in a foreign currency is closely related to the host contract provided it is not leveraged, does not contain an option feature, and requires payments denominated in one of the following currencies:

- (i) The functional currency of any substantial party to that contract;
- (ii) The currency in which the price of the related good or service that is acquired or delivered is routinely denominated in commercial transactions around the world (such as the US dollar for crude oil transactions); or
- (iii) A currency that is commonly used in contracts to purchase or sell non-financial items in the economic environment in which the transaction takes place (e.g. a relatively stable and liquid currency that is commonly used in local business transactions or external trade).

REC's understanding is that the exception in (ii) above is not relevant for the products sold by REC. REC believes that there are different interpretations in practice for number (iii) above. REC has interpreted this narrowly, and that this exception is relevant only for a few countries that REC has trade relations with and that it usually refers to the situation in which the local currency of a country is not stable, causing businesses in that environment generally to adopt a more stable and liquid currency for internal and cross-border trade. For REC this means that most contracts that are not denominated in the functional currency of any substantial party to that contract contain embedded currency derivatives that must be separated and fair valued. Currently, this is relevant for some wafer sales contracts in USD.

Competent standard setting bodies or others may provide clarifications in the future that can affect REC's future interpretation of these IAS 39 regulations.

## (E) Leases

IFRIC 4 Determining whether an Arrangement contains a Lease requires that the determination of whether an arrangement is or contains a lease should be based on the substance of the arrangement. If an arrangement contains a lease, the requirements of IAS 17 Leases shall apply to the lease element of the arrangement. Other elements of the arrangement not within the scope of IAS 17 shall be accounted for in accordance with other standards.

Some arrangements in which the REC Group is a party include payments for the right to use the assets and payments for other elements in the arrangement (e.g. for output from a facility). The fair

value of the assets, the lease and other elements in the arrangement may not be available for the REC Group, and the REC Group has to make its best estimate of these values. This may also affect the determination of whether the leases are finance or operating leases. In some instances, REC Group is not able to reliably estimate these values. In addition, a contract may also require substantial judgment to decide if it contains right to use an asset according to IFRIC 4 and consequently if it includes a lease.

For the 2011 and 2010 note disclosures the future minimum payments for lease and other elements in some arrangements in REC Silicon and REC Wafer Pte Ltd have been determined to contain operating leases but are reported as part of purchase commitments (see note 29) as the REC Group is not able to reliably estimate and separate the values of the different components.

REC Wafer has several capacity contracts that have been determined to contain leases and purchases of goods and services. The lease parts are for production facilities and equipment for production and recovery of exhausted slurry, and contain operating and finance leases (see notes 6 and 29). The contracts are separated into finance leases, operating leases and commodity and service executory contracts, based on estimates of fair values of the different components.

In 2007, REC Solar determined that a lease of a production building was a finance lease.

The conclusions, carrying amounts and note disclosures were, among other things, affected by the REC Group's estimates of fair values.

# 4.2 KEY SOURCES OF ESTIMATION UNCERTAINTY - CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in accordance with International Financial Reporting Standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, as well as the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts included in or affecting the REC Group's financial statements and related disclosures must be estimated, requiring management to make assumptions with respect to values or conditions which cannot be known with certainty at the time the financial statements are prepared. A "critical accounting estimate" is one which is both important to the portrayal of the company's financial condition and results and requires management to make estimates about the effect of matters that are inherently uncertain, and which are subjective or complex. Management evaluates such estimates on an ongoing basis, based upon historical results and experience, consultation with experts, utilizing trends and other methods considered reasonable in the particular circumstances, as well as forecasts as to how these might change in the future.

#### (A) Impairment

The REC Group tests annually whether goodwill or intangible assets not ready for their intended use, have suffered any impairment.

Property, plant and equipment, other intangible and financial assets are tested for impairment when circumstances indicate there may be a potential impairment. Factors management considers important and which could trigger an impairment review include; significant fall in market values; a significant underperformance relative to historical or projected future operating results; significant changes in the use of the assets or the strategy for the overall business, including assets that are decided to be phased out or replaced and assets that are damaged or taken out of use; significant negative industry or economic trends; and significant cost overruns in the development of assets. In practice, the significant drop in sales prices during 2011 has been a strong impairment indicator.

The recoverable amounts of assets and cash-generating units have primarily been determined based on value-in-use calculations. These calculations require the use of estimates including, but not limited to estimates of future performance, revenue generating capacity of the assets, reinvestment levels and assumptions of the future market conditions. Changes in circumstances and in management's evaluations and assumptions may give rise to impairment losses in the relevant periods. According to IAS 36 Impairment of assets, cash flow projections shall exclude any estimated future cash inflows or outflows expected to arise from future restructurings or from improving or enhancing the asset's performance. To the best of management's judgment, the cash flows do not include restructuring or effects from expansion and enhancement investments that are not committed. However, in the cash flow estimates with ongoing reduction in prices and costs and a number of process improvement initiatives initiated and planned (see note 7), REC may not have been able to identify and exclude all effects that relates to asset enhancements or new technologies according to IAS 36. In 2011, significant impairment charges were recognized (see notes 6 and 7).

Financial assets are also periodically reviewed for objective evidence of impairment. See note 8 for impairment of shares in the associate Mainstream Energy Inc. in 2011. In 2010, provisions for losses on trade receivables were recognized (see notes 3, 12 and 30).

The uncertain future market developments and operational risks and the sensitivity to changes in key assumptions have increased the risk that impairments may occur also in future periods.

## (B) Depreciation and amortization

Depreciation and amortization are based on management estimates of the future useful lives of property, plant and equipment and intangible assets. Estimates may change due to technological developments, competition, changes in market conditions, expectations for replacements or disposal of assets and other factors. Technological developments are difficult to predict and the REC Group's views on the trends and pace of development may change over time. Management periodically reviews the expected future useful lives of property, plant and equipment and intangible assets taking into consideration the factors mentioned above and other important factors. In case of significant changes in estimated useful lives, depreciation and amortization charges are adjusted prospectively (see note 6). In the case of replacements or

disposals any remaining carrying value will be recognized to the statement of income, net of any proceeds receivable.

Significant changes in key assumptions (especially sales prices) in the impairment tests in 2011 gave rise to material impairment charges. This has reduced the remaining depreciable amounts, and some assets have been decided to be taken out of use because they are no longer competitive (in 2011 it was decided to close down parts of the production capacity in Norway). Impairment of assets that are still in use has to a minor extent affected REC's evaluation of useful lives for these assets.

## (C) Income taxes

The REC Group is subject to income taxes in several jurisdictions. Judgment is required in determining the provision for income taxes. There are transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The REC Group recognizes liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made. If the actual outcome differs from management's current estimates, REC Group will need to increase or decrease current and deferred tax assets or liabilities.

The REC Group companies perform significant transactions with each other and with other related parties. These are primarily sale of products to the next step in the production chain, financing arrangements and to some extent services for the benefit of the other party. The REC Group companies shall negotiate terms and conditions as between unrelated parties, including transfer prices. For some of the products there are limited directly comparable sales to external parties and the information on directly comparable transactions between external parties are limited. For some of the products, prices in the spot market and in long-term contracts are significantly different. In addition prices in long-term contracts vary significantly, among other things based on at which point in time the contracts were entered into and the length of the contracts. Tax authorities of the different countries may have different views on the transfer prices used with potential negative effects for the REC Group.

Several entities in the REC Group reported losses for 2011 and 2010, giving rise to deferred tax assets. IAS 12 Income Taxes states that a deferred tax asset shall be recognized for all deductible temporary differences to the extent it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. When an entity has a history of recent losses, the entity recognizes a deferred tax asset arising from unused tax losses only to the extent that the entity has sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized by the entity. IAS 12 also states that unused tax losses is strong evidence that future taxable profit may not be available. Even though parts of the losses result from identifiable causes which may be regarded as unlikely to recur, the current highly volatile and uncertain market development has

increased uncertainty of future profit forecasts, and REC has recognized only parts of the deferred tax assets (see note 18).

## (D) Provisions

REC has provided some warranties in connection with the sale of solar modules and PV systems. REC solar modules sold from September 1, 2011 include a ten year limited product warranty and a 25 year linear power output warranty, that guarantees at least 97 percent output during the first year of performance and a maximum 0.7 percent reduction of power output per year from year 2-25. Solar modules sold prior to this has a five year limited warranty that the product is free of defects in materials and workmanship, a ten year limited warranty of 90 percent power output and a 25 year limited warranty of 80 percent power output of the solar modules ("old warranty"). Warranties are customary in the market for solar modules. The warranties are not sold stand alone. If a defect occurs or the product does not reach the warranted power output levels during the warranty period, REC will, at its sole option repair or replace or supply additional modules, or refund the current market price of an equivalent product at the time of the claim (for the old warranty the original price, with annual reduction for the output warranty). The REC Group believes that the materials in the solar modules made by REC are capable of producing a relatively steady output for a period of at least 25 years. However, neither the REC Group nor any of its competitors have a 25-year history. Management's estimates of warranty provisions take this into consideration.

During 2011 additional tests have been made, research has been studied and REC believes the quality of its modules have improved. It is also expected that the cost of producing modules will be further reduced going forward, which will also reduce the outflow of economic resources needed to fulfill any warranty claims. REC believes the risk for claims under the warranties are low, but cannot rule out the possibility that a large claim may occur as there is past history for claims under the product warranty and new materials and production processes are introduced. In determining the estimated provision, REC has made references to the estimates made by its competitors. As the estimates and timing are highly uncertain, REC has not discounted the provisions but instead estimated it as a percentage of revenues at the time of sale of the modules. The warranty provision at December 31, 2011 was 0.8 percent of revenues from sale of solar modules. This is in line with the previous year, but in addition came some other short-term

specific events that were identified, especially problems with junction boxes discovered at the end of 2008 (see note 20).

REC guarantees minimum performance of some PV systems that are constructed and sold by REC (liquidated damages for any shortfall of guaranteed power output for twenty years), primarily measured during the second year of operation. REC has evaluated that it is not probable that REC will incur outflow of economic resources under this guaranty, and has not recognized any provision. REC also has a limited warranty for faults and defects during the first two years of operation of a PV system, for which only a minor provision has been recognized.

The REC Group has at December 31, 2011 also recognized significant provisions for restructuring, onerous contracts and asset retirement and restoration obligations. A large part of these relates to the decisions to close down the cells and parts of the wafer production capacities in Norway, and the restoration of the leased land in Singapore after the end of the lease period. See note 20 for more information.

Management believes that the assumptions are reasonable, but they are inherently uncertain and unpredictable and, as a result, future estimates and actual results may differ significantly from the current estimates.

## (E) Embedded derivatives

REC has wafer sales contracts for which embedded derivatives have been separated and accounted for as derivatives (see note 4.1(D)). The contracts state future cash flows, with some limited adjustment mechanisms. However, REC has experienced that contracts have been terminated, renegotiated or not complied with. Consequently, REC needs to estimate the future cash flows in the separate contracts. If it is probable that a customer will not honor the contract or that changes will be agreed, REC has made downwards adjustments of the estimated future cash flows. The reductions of estimated cash flows were significant in 2009, and the estimated cash flows were increased during 2010. During 2011 the estimated cash flows have again been significantly reduced. Estimating fair value of these embedded derivatives also requires use of discounting, and the estimation of credit risk in the discount rates is uncertain as these are not readily observable in the market (see notes 3, 11, 25 and 30).

#### 05 SEGMENT INFORMATION

The segment information presented shows the main components of the REC Group's business that is evaluated on a regular basis by the chief operating decision maker.

The term "chief operating decision maker" (CODM) is taken from IFRS 8 Operating segments and identifies a function, not necessarily a manager with a specific title. That function is to allocate resources to and assess the performance of the operating segments of an entity. The REC Board of Directors is responsible for the overall strategy of the company, approving annual budgets and major investments, internal controls etc. The Board periodically receives information about the performance of the company. REC understands the term CODM as relating to an operating level, and not on a strategic decision level. The Group Management consists of the segment managers and corporate functions. It periodically receives information on the operations, and some decisions are made in Group Management meetings. The Group Management is headed by the Chief Executive Officer (CEO), and the CEO is the one that makes decisions across segments. Consequently, REC regards the CEO as the CODM.

Financial and operational information are prepared specifically for each segment for the purpose of assessing performance and allocating resources. Segment results are disclosed in accordance with IFRS, which is the same basis as presented internally. However, the internal reporting also shows a breakdown of operating expenses included in EBITDA that are not shown separately in the tables below. The financial market currently focuses on EBITDA as measurement of segment results. Consequently, this is also the primary focus of REC management with regards to segment results. However, in the internal reporting EBIT is also shown, the difference to EBITDA being depreciation, amortization and impairment. Amounts for assets and liabilities, financial income and expenses are not shown per segment in the internal reporting. Consequently, it is REC's understanding that such details are not required to be presented per segment in the tables below. However, for the 2011 and 2010 reporting REC has elected to present amounts for noncurrent assets per segment, and also condensed statements of financial position per segment.

The REC Group's primary format for reporting segment information is operating segments. The REC Group's segments are managed separately and each segment represents a strategic business area that offers products different from the other segments. The REC Group's segments are REC Silicon, REC Wafer and REC Solar. In addition, the REC Group reports "Other operations".

In the fourth quarter of 2010 REC changed the composition of its segments by moving the wafer operation in Singapore from the REC Wafer segment to the REC Solar segment. From the fourth quarter of 2010 REC's segments consist of REC Silicon, REC Wafer (Norway) and REC Solar (wafers, cells & modules in Singapore and cells & modules in Scandinavia).

REC Silicon produces silane gas, solar grade polysilicon for the photovoltaic industry as well as electronic grade polysilicon for the electronic industry. REC Silicon is comprised of the operating companies REC Solar Grade Silicon LLC (SGS) and REC Advanced Silicon Materials LLC (ASiMI) located in the USA. Revenues are mainly based on long term contracts for silane gas and electronic grade polysilicon, while solar grade polysilicon is sold externally in the spot market and internally to REC Wafer and REC Solar on longterm contracts based on arms-length terms, conditions and market expectations that existed at the time terms were fixed. As a consequence of the market development, internal prices were reduced during the fourth quarter 2011. In the second half of 2011 the share of solar grade polysilicon sold internally decreased to 30 percent, compared to 70 percent in the first half, as a consequence of reduced wafer production capacity in REC Wafer (Norway).

REC Wafer is comprised of multicrystalline wafer manufacturing in Glomfjord and Herøya (Norway) and monocrystalline wafer manufacturing at a separate plant in Glomfjord. The main customers have been located in Asia and Europe, while a part of the production is sold internally to REC Solar at arms-length prices. Revenues have historically been based on long term take-and/or-pay contracts with most of the contracts supported by bank guarantees or prepayments. In 2010, 2011 and the beginning of 2012, REC wafer accepted to terminate a majority of these contracts by receiving cancellation fees. During the second half of 2011 the oldest multi plants at Herøya and Glomfjord were closed down, and at the end of 2011 it was decided to temporary halt 60 percent of the remaining wafer multi production capacity at Herøya due to a further weakening of the PV market. At the end of 2011, revenues were primarily based on spot sales mainly to Asian customers.

REC Solar is comprised of an integrated plant in Singapore producing multicrystaline wafers, solar cells and modules, REC Site Services (Singapore) and development of PV systems. It also included solar cells manufacturing in Narvik (Norway) that was decided to be closed down in the fourth quarter 2011 and solar modules production in Glava (Sweden) that was decided to be closed down at the end of the third quarter 2010. The wafers and solar cells are primarily used internally to produce solar modules in Singapore. REC Systems pursues project development opportunities based on REC solar modules in selected segments with limited capital exposure. REC Solar has established sales companies and offices in Europe, USA and Asia. Europe has traditionally been REC Solar's main market, with Germany as the largest. Revenues are based on short term contracts and will therefore be influenced by market fluctuations.

"Other operations" consist of companies and activities that in themselves are not significant enough to be reported as separate segments. It includes primarily REC ASA with Group functions and activities (see separate financial statements).

Sovello AG was 33.33 percent owned and jointly controlled by REC ASA, EverGreen Solar Inc. and Q-Cells AG. Sovello AG was sold and deconsolidated from April 2010 and is re-presented as discontinued operations.

Intercompany sales and transfers within the REC Group are based on arms-length prices. Intercompany service transactions are based on cost based prices.

Refer to the separate report from the Board of Directors for discussion of segment performance.

No single customer represented more than ten percent of the consolidated external revenues for the Group in 2011 or 2010.

## Segment information for the year ended December 31, 2011

(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OTHER OPERATIONS	ELIMINATIONS	REC GROUP
Revenues - External	3 645	3 867	5 852	3	0	13 366
Revenues - Internal	1940	547	5	89	-2 580	0
Total revenues	5 585	4 4 1 3	5 856	92	-2 580	13 366
EBITDA	2781	21	-30	-140	234	2 867
Depreciation and amortization	-961	-417	-874	-26	0	-2 278
Impairment	-20	-5 807	-4 206	-64	0	-10 097
EBIT	1801	-6 203	-5 110	-230	234	-9 508
Additions of non-current assets	157	252	288	10	0	707
Non-current assets at December 31*	11 269	34	4916	66	0	16 285

<sup>\*</sup> Non-current assets include property, plant, equipment, intangibles, prepaid capex and prepaid lease.

In 2011 all segments recognized write downs of, and realized losses on sales of inventories, primarily in REC Wafer and REC Solar. Included in the EBITDA for REC Wafer for 2011 is income for cancellation of wafer sales contracts of NOK 945 million, restructuring costs of NOK 161 million and expenses for onerous contracts of NOK 132 million. Included in the EBITDA for REC Solar for 2011 is a gain on sale of subsidiary of NOK 47 million, restructuring costs of NOK 56 million and expenses for onerous contracts of NOK 43 million. See note 7 for impairments of fixed and intangible assets in 2011.

## Segment information for the year ended December 31, 2010

,						ADJUSTMENT FOR		
(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OTHER OPERATIONS	SOVELLO	DISCONTIUNED OPERATIONS	ELIMINATIONS	REC GROUP
Revenues - External	3 146	5 057	5 573	1	114	-114	0	13 776
Revenues - Internal	2 099	1747	51	98	0	0	-3 995	0
Total revenues	5 245	6 804	5 624	99	114	-114	-3 995	13 776
EBITDA	2 735	808	228	-149	1	-1	-91	3 532
Depreciation and amortization	-875	-781	-796	-23	0	0	0	-2 476
Impairment	-6	-11	-21	0	-6	6	0	-38
EBIT	1853	16	-589	-172	-5	5	-91	1018
Additions of non-current assets	232	1003	2 279	57	6	0	0	3 577
Non-current assets at December 31*	11872	6 006	9818	147	0	0	0	27 842

<sup>\*</sup> Non-current assets include property, plant, equipment, intangibles, prepaid capex and prepaid lease.

Included in the EBITDA for REC Wafer for 2010 is a gain of NOK 304 million related to a cancellation fee received for a wafer sales contract. Included in the EBITDA for REC Solar for 2010 are costs for restructuring and reversal of provisions for repair of junction boxes, with net costs of NOK 27 million.

# Condensed statement of financial position

REC Site Services Pte Ltd is owned by REC ASA, and REC Wafer Pte Ltd is owned by REC Wafer Norway AS. These shareholdings (carrying value of shares in subsidiaries, after any impairment of shares) and related financing are included in the condensed statement of financial position figures for REC ASA and REC Wafer Norway AS, respectively. These shareholdings (before any impairment of shares) are eliminated to equity in the column "elimination". The condensed statement of financial position for REC Solar includes the equity of REC Site Services Pte Ltd and REC Wafer Pte Ltd.

# Condensed statement of financial position at December 31, 2011

(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OTHER	ELIMINATION	REC GROUP
Intangible assets	568	0	77	17	0	661
Property, plant and equipment	10701	34	4 641	49	0	15 425
Prepaid lease, non-current	0	0	198	0	0	198
Financial assets and prepayments	825	989	257	9 646	-10 474	1 244
Deferred tax assets	0	0	4	0	2	5
Non-current assets	12094	1 023	5 177	9712	-10 472	17 534
Inventories	742	308	1 413	0	-80	2 383
Prepaid lease, current	0	0	11	0	0	11
Trade and other receivables	764	661	1 226	461	-559	2 553
Assets held for sale	0	14	0	0	0	14
Current income tax assets	64	0	6	0	0	70
Current derivatives	0	0	0	310	0	310
Cash and cash equivalents	537	11	902	3 046	-2900	1 596
Total current assets	2 106	993	3 559	3817	-3 539	6 936
Total assets	14 200	2016	8 736	13 529	-14 012	24 470
Equity	4 929	-1 432	2 830	6 733	-868	12 192
Pension/retirement benefit liabilities	91	20	5	9	0	125
Deferred tax liabilities	2 182	0	9	0	326	2518
Provisions	0	114	332	2	0	447
Non-current derivatives	0	7	0	86	0	94
Non-current financial liabilities interest bearing	6 1 2 6	687	180	6 412	-7 292	6 113
Non-current prepayments, interest calculation	200	14	0	0	0	214
Other non-current liabilities	0	113	0	0	-113	0
Non-current liabilities	8 599	956	526	6 509	-7 079	9 5 1 1
Trade payables and other liabilities	515	358	1 231	199	-561	1742
Provisions	0	234	114	6	0	354
Current income tax liabilities	0	0	29	0	0	29
Current derivatives	0	55	0	79	0	134
Current financial liabilities, interest bearing	1	1 653	4 006	3	-5 504	159
Current prepayments, interest calculation	157	192	0	0	0	349
Current liabilities	673	2 493	5 380	287	-6 065	2767
Total liabilities	9 272	3 448	5 906	6 796	-13 144	12 278
Equity and liabilities	14 200	2016	8 736	13 529	-14 012	24 470

# Condensed statement of financial position at December 31, 2010 $\,$

(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OTHER	ELIMINATION	REC GROUP
Intangible assets	583	396	62	82	0	1123
Property, plant and equipment	11 269	5 6 1 0	9 642	65	0	26 586
Prepaid capex non-current	19	0	10	0	0	29
Prepaid lease, non-current	0	0	104	0	0	104
Financial assets and prepayments	818	3 269	241	14 102	-16 974	1 455
Deferred tax assets	0	357	209	0	-229	336
Non-current assets	12689	9 631	10 268	14 249	-17 204	29 634
Inventories	513	878	1 418	0	-314	2 495
Prepaid lease, current	0	0	11	0	0	11
Trade and other receivables	860	1 059	1 473	309	-748	2 953
Assets held for sale	0	21	0	0	0	21
Current income tax assets	318	0	1	0	0	319
Current derivatives	0	193	0	598	-208	582
Cash and cash equivalents	378	10	1 227	12802	-13 570	849
Total current assets	2 0 6 9	2 163	4 131	13 709	-14 840	7 231
Total assets	14758	11 794	14399	27 958	-32 044	36 865
Equity	4 007	1 191	5 820	19 937	-8 804	22 151
Pension/retirement benefit liabilities	42	23	11	17	0	94
Deferred tax liabilities	1557	0	93	277	-123	1804
Provisions	0	0	286	1	0	288
Non-current derivatives	0	144	0	80	-39	186
Non-current financial liabilities interest bearing	8 227	815	992	7 111	-8 552	8 592
Non-current prepayments, interest calculation	332	147	0	0	0	479
Non-current liabilities	10 159	1 129	1 382	7 487	-8714	11 443
Trade payables and other liabilities	513	1 147	1 405	191	-748	2 508
Provisions	5	0	78	2	0	85
Current income tax liabilities	0	0	19	180	0	200
Current derivatives	0	155	0	213	-208	160
Current financial liabilities, interest bearing	1	8 1 2 0	5 695	-53	-13 570	194
Current prepayments, interest calculation	74	51	0	0	0	124
Current liabilities	593	9 473	7 198	534	-14 526	3 271
Total liabilities	10751	10 602	8 579	8 0 2 1	-23 240	14714
Equity and liabilities	14 758	11 794	14399	27 958	-32 044	36 865

# Geographic distribution of non-current assets based on company location

, ,		
(NOK IN MILLION)	2011	2010
Norway	154	6 583
USA	11 311	11918
Singapore	4 815	9 292
Other countries	5	48
Total non-current assets*	16 285	27 842

 $<sup>^* \</sup> Non-current\ assets\ include\ property,\ plant,\ equipment,\ intangibles,\ prepaid\ capex\ and\ prepaid\ lease.$ 

# $Geographic \ distribution \ of \ external \ revenues \ based \ on \ customer \ location \ for \ the \ year \ ended \ December \ 31,2011$

(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OTHER OPERATIONS	REC GROUP
Germany	112	332	1 527	0	1 970
•	8	9	1631	0	1 648
Italy					
Spain	0	170	336	0	506
France	27	0	474	0	501
Netherlands	0	0	431	0	432
United Kingdom	12	0	369	0	382
Other Europe	79	188	280	2	549
USA	174	124	382	1	681
China	1 422	886	10	0	2318
Hong Kong	413	275	6	0	694
Japan	783	983	7	0	1773
South Korea	100	137	0	0	236
Taiwan	468	731	31	0	1 230
Other Asia	34	11	111	0	155
Oceania	0	0	188	0	188
Other countries	15	21	67	0	103
Total external revenues	3 645	3 867	5 852	3	13 366

# $Geographic \ distribution \ of \ external \ revenues \ based \ on \ customer \ location \ for \ the \ year \ ended \ December \ 31,2010$

deographic distribution of external revenues based off cas	torner tocation for the year t	OTHER					
(NOK IN MILLION)	REC SILICON	REC WAFER	REC SOLAR	OPERATIONS	REC GROUP		
Germany	177	1176	1 569	0	2922		
Italy	0	13	1 339	0	1352		
Spain	0	0	585	0	585		
France	24	0	328	0	352		
Netherlands	0	74	307	0	381		
United Kingdom	17	0	3	0	20		
Other Europe	6	524	650	1	1 181		
USA	234	89	499	0	822		
China	1 285	322	33	0	1 640		
Hong Kong	6	642	1	0	650		
Japan	737	823	91	0	1651		
South Korea	231	320	0	0	550		
Taiwan	366	887	14	0	1 267		
Other Asia	27	86	84	0	197		
Oceania	0	0	69	0	69		
Other countries	35	100	0	0	136		
Total external revenues	3146	5 057	5 573	1	13 776		

 $Customer\ location\ is\ based\ on\ the\ invoicing\ address.\ Customers\ may\ distribute\ the\ products\ to\ other\ countries.$ 

# Revenues by category

(NOK IN MILLION)	2011	2010
Polysilicon	2 939	2 371
Silane gas	663	878
Silane gas Wafers and ingots Solar cells	3 829	4 987
Solar cells	37	74
Solar modules	4 680	5 096
PV systems*	1 082	256
PV systems* Other	136	114
Total revenues	13 366	13 776

 $<sup>^{*}</sup>$  PV systems include NOK 785 million construction contract revenues in 2011 and NOK 150 million in 2010. At December 31, 2011 there were no construction contracts in progress.

#### 06 **FIXED ASSETS**

# Property, plant and equipment

Carrying value at January 1, 2010         2955         10 803         167         10 473         24 398           Exchange differences         60         12         0         344         416           Net additions*         5696         8648         371         9544         5170           Government grant - reduction to cost price         29         530         4         398         961           Disposals         1         2         -1         -8         -10           Depreciation         498         1806         -91         0         2395           Impairment - continuing operations         36         13         -1         0         2395           Impairment - discontinued operations         0         -2         0         -4         -6           Carrying value at December 31, 2010         8150         17136         439         861         26 586           At December 31, 2010         8150         17136         439         861         26 586           Carrying value at December 31, 2010         8150         17136         439         861         26 586           Exchange differences         30         157         3         -6         124           Net a	(NOK IN MILLION)	LAND AND BUILDINGS	MACHINERY AND EQUIPMENT	OTHER TANGIBLE FIXED ASSETS	ASSETS UNDER CONSTRUCTION	TOTAL
Net additions*         5696         8648         371         9544         5170           Government grant - reduction to cost price         -29         -530         -4         -398         -961           Disposals         1         -2         -1         -8         -10           Depreciation         -498         -1806         -91         0         -2395           Impairment - continuing operations         -36         13         -1         0         -25           Impairment - discontinued operations         0         -2         0         -4         -6           Carrying value at December 31, 2010         8150         17 136         439         861         26 586           At December 31, 2010         8150         17 136         439         861         26 586           At December 31, 2010         8150         17 136         439         861         26 586           Carrying value at December 31, 2010         8150         17 136         439         861         26 586           Exchange differences         -30         157         3         -6         124           Net additions*         17         678         61         -449         462           Government	Carrying value at January 1, 2010	2955	10 803	167	10 473	24 398
Government grant - reduction to cost price         -29         -530         -4         -398         -961           Disposals         1         -2         -1         -8         -10           Depreciation         -498         -1806         -91         0         -2395           Impairment - continuing operations         -36         13         -1         0         -25           Impairment - discontinued operations         0         -2         0         -4         -6           Carrying value at December 31, 2010         8150         17136         439         861         26 586           At December 31, 2010         8150         17136         700         882         33 057           Accumulated depreciation and impairment         -1 341         -4 848         -261         -21         -6 471           Carrying value at December 31, 2010         8150         17 136         439         861         26 586           Exchange differences         -30         157         3         -6         124           Net additions*         17         678         61         -449         462           Government grant - reduction to cost price**         0         13         0         1         -9	Exchange differences	60	12	0	344	416
Disposals         1         -2         -1         -8         -10           Depreciation         -498         -1806         -91         0         -2395           Impairment - continuing operations         -36         13         -1         0         -25           Impairment - discontinued operations         0         -2         0         4         -6           Carrying value at December 31, 2010         8150         17136         439         861         26586           At December 31, 2010         8         -8         -7         0         882         33 057           Accumulated depreciation and impairment         -1341         4848         -261         -21         -6 471           Carrying value at December 31, 2010         8150         17136         439         861         26 586           Exchange differences         -30         157         3         6         124           Exchange differences         -30         157         3         6         124           Exchange differences         -30         157         3         6         124           Net additions*         -1         -3         0         13         2           Depreciation	Net additions*	5 696	8 648	371	-9 544	5 170
Depreciation         498         -1806         -91         0         -2395           Impairment - continuing operations         -36         13         -1         0         -25           Impairment - discontinued operations         0         -2         0         -4         -6           Carrying value at December 31, 2010         8150         17136         439         861         26586           At December 31, 2010         8         -8         -8         33 057         882         33 057           Accumulated depreciation and impairment         -1341         -4 848         -261         -21         -6 471           Carrying value at December 31, 2010         8 150         17 136         439         861         26 586           Carrying value at January 1, 2011         8 150         17 136         439         861         26 586           Exchange differences         -30         157         3         -6         124           Net additions*         172         678         61         -449         462           Government grant - reduction to cost price**         0         13         0         13         27           Disposals         -11         -37         0         0 <t< td=""><td>Government grant - reduction to cost price</td><td>-29</td><td>-530</td><td>-4</td><td>-398</td><td>-961</td></t<>	Government grant - reduction to cost price	-29	-530	-4	-398	-961
Impairment - continuing operations         -36         13         -1         0         -25           Impairment - discontinued operations         0         -2         0         -4         -6           Carrying value at December 31, 2010         8150         17 136         439         861         26 586           At December 31, 2010         8150         71 136         700         882         33 057           Accumulated depreciation and impairment         1 341         4 848         -261         -21         -6 471           Carrying value at December 31, 2010         8150         17 136         439         861         26 586           Exchange differences         -30         157         3         -6         124           Net additions*         172         678         61         -449         462           Government grant - reduction to cost price**         0         13         0         13         27           Disposals         -11         -37         0         0         -49           Depreciation         -396         -1649         -97         0         -2142           Impairment ***         -4706         -4764         -88         -24         -9582	Disposals	1	-2	-1	-8	-10
Impairment - discontinued operations         0         -2         0         -4         -6           Carrying value at December 31, 2010         8150         17 136         439         861         26 586           At December 31, 2010         30         882         33 057           Accumulated depreciation and impairment         -1 341         -4 848         -261         -21         -6 471           Carrying value at December 31, 2010         8 150         17 136         439         861         26 586           Carrying value at January 1, 2011         8 150         17 136         439         861         26 586           Exchange differences         -30         157         3         -6         124           Net additions*         172         678         61         -449         462           Government grant - reduction to cost price**         0         13         0         13         27           Disposals         -11         -37         0         0         -49           Depreciation         -396         -1649         -97         0         -2142           Impairment ***         -4706         -4764         -88         -24         -9582           Carrying value at December	Depreciation	-498	-1806	-91	0	-2 395
Carrying value at December 31, 2010       8 150       17 136       439       861       26 586         At December 31, 2010       Cost price       9 491       21 983       700       882       33 057         Accumulated depreciation and impairment       -1 341       -4 848       -261       -21       -6 471         Carrying value at December 31, 2010       8 150       17 136       439       861       26 586         Carrying value at January 1, 2011       8 150       17 136       439       861       26 586         Exchange differences       -30       157       3       -6       124         Net additions*       172       678       61       -449       462         Government grant - reduction to cost price**       0       13       0       13       20         Disposals       -11       -37       0       0       -49         Depreciation       -396       -1649       -97       0       -2142         Impairment ****       -4 706       -4 764       -88       -24       -9 582         Carrying value at December 31, 2011       3 179       11 534       318       395       15 425         At December 31, 2011       3 179	Impairment - continuing operations	-36	13	-1	0	-25
At December 31, 2010  Cost price 9491 21983 700 882 33 057  Accumulated depreciation and impairment -1 341 -4 848 -261 -21 -6 471  Carrying value at December 31, 2010 8150 17 136 439 861 26 586  Carrying value at January 1, 2011 8150 17 136 439 861 26 586  Exchange differences -30 157 3 -6 124  Net additions* 172 678 61 -449 462  Government grant - reduction to cost price** 0 13 0 13 27  Disposals -11 -37 0 0 -49  Depreciation -396 -1 649 -97 0 -2 142  Impairment *** -4706 -4764 88 -24 -9 582  Carrying value at December 31, 2011  Cost price 9583 22734 730 437 33 484  Accumulated depreciation and impairment -6 404 -11 200 -412 -42 -18 058	Impairment - discontinued operations	0	-2	0	-4	-6
Cost price         9 491         21 983         700         882         33 057           Accumulated depreciation and impairment         -1 341         -4 848         -261         -21         -6 471           Carrying value at December 31, 2010         8 150         17 136         439         861         26 586           Carrying value at January 1, 2011         8 150         17 136         439         861         26 586           Exchange differences         -30         157         3         -6         124           Net additions*         172         678         61         -449         462           Government grant - reduction to cost price**         0         13         0         13         27           Disposals         -11         -37         0         0         -49           Depreciation         -396         -1 649         -97         0         -2 142           Impairment ***         -4 706         -4 764         -88         -24         -9 582           Carrying value at December 31, 2011         3 179         11 534         318         395         15 425           At December 31, 2011         5 20 3         2 2734         730         437         33 484	Carrying value at December 31, 2010	8 150	17 136	439	861	26 586
Accumulated depreciation and impairment       -1 341       -4 848       -261       -21       -6 471         Carrying value at December 31, 2010       8 150       17 136       439       861       26 586         Carrying value at January 1, 2011       8 150       17 136       439       861       26 586         Exchange differences       -30       157       3       -6       124         Net additions*       172       678       61       -449       462         Government grant - reduction to cost price**       0       13       0       13       27         Disposals       -11       -37       0       0       -49         Depreciation       -396       -1649       -97       0       -2142         Impairment ****       -4706       -4764       -88       -24       -9582         Carrying value at December 31, 2011       3179       11 534       318       395       15 425         At December 31, 2011       9583       22734       730       437       33 484         Accumulated depreciation and impairment       -6 404       -11 200       -412       -42       -18 058	At December 31, 2010					
Carrying value at December 31, 2010       8 150       17 136       439       861       26 586         Carrying value at January 1, 2011       8 150       17 136       439       861       26 586         Exchange differences       -30       157       3       -6       124         Net additions*       172       678       61       -449       462         Government grant - reduction to cost price**       0       13       0       13       27         Disposals       -11       -37       0       0       -49         Depreciation       -396       -1649       -97       0       -2142         Impairment ****       -4706       -4764       -88       -24       -9 582         Carrying value at December 31, 2011       3 179       11 534       318       395       15 425         At December 31, 2011       9 583       22 734       730       437       33 484         Accumulated depreciation and impairment       -6 404       -11 200       -412       -42       -18 058	Cost price	9 491	21 983	700	882	33 057
Carrying value at January 1, 2011       8 150       17 136       439       861       26 586         Exchange differences       -30       157       3       -6       124         Net additions*       172       678       61       -449       462         Government grant - reduction to cost price***       0       13       0       13       27         Disposals       -11       -37       0       0       -49         Depreciation       -396       -1 649       -97       0       -2 142         Impairment ****       -4706       -4764       -88       -24       -9 582         Carrying value at December 31, 2011       3 179       11 534       318       395       15 425         At December 31, 2011       9 583       22 734       730       437       33 484         Accumulated depreciation and impairment       -6 404       -11 200       -412       -42       -18 058	Accumulated depreciation and impairment	-1 341	-4 848	-261	-21	-6 471
Exchange differences       -30       157       3       -6       124         Net additions*       172       678       61       -449       462         Government grant - reduction to cost price**       0       13       0       13       27         Disposals       -11       -37       0       0       -49         Depreciation       -396       -1649       -97       0       -2142         Impairment ****       -4706       -4764       -88       -24       -9 582         Carrying value at December 31, 2011       3 179       11 534       318       395       15 425         At December 31, 2011       9 583       22 734       730       437       33 484         Accumulated depreciation and impairment       -6 404       -11 200       -412       -42       -18 058	Carrying value at December 31, 2010	8 150	17 136	439	861	26 586
Net additions*         172         678         61         -449         462           Government grant - reduction to cost price**         0         13         0         13         27           Disposals         -11         -37         0         0         -49           Depreciation         -396         -1649         -97         0         -2142           Impairment ****         -4706         -4764         -88         -24         -9 582           Carrying value at December 31, 2011         3179         11 534         318         395         15 425           At December 31, 2011         5         5         22 734         730         437         33 484           Accumulated depreciation and impairment         -6 404         -11 200         -412         -42         -18 058	Carrying value at January 1, 2011	8150	17 136	439	861	26 586
Government grant - reduction to cost price**         0         13         0         13         27           Disposals         -11         -37         0         0         -49           Depreciation         -396         -1649         -97         0         -2142           Impairment ****         -4706         -4764         -88         -24         -9582           Carrying value at December 31, 2011         3179         11534         318         395         15425           At December 31, 2011         5         22734         730         437         33 484           Accumulated depreciation and impairment         -6 404         -11 200         -412         -42         -18 058	Exchange differences	-30	157	3	-6	124
Disposals         -11         -37         0         0         -49           Depreciation         -396         -1649         -97         0         -2142           Impairment ****         -4706         -4764         -88         -24         -9582           Carrying value at December 31, 2011         3179         11534         318         395         15 425           At December 31, 2011	Net additions*	172	678	61	-449	462
Depreciation         -396         -1649         -97         0         -2142           Impairment ****         -4706         -4764         -88         -24         -9582           Carrying value at December 31, 2011         3179         11534         318         395         15 425           At December 31, 2011           Cost price         9583         22734         730         437         33 484           Accumulated depreciation and impairment         -6404         -11 200         -412         -42         -18 058	Government grant - reduction to cost price**	0	13	0	13	27
Impairment ****         -4706         -4764         -88         -24         -9582           Carrying value at December 31, 2011         3179         11534         318         395         15 425           At December 31, 2011           Cost price         9583         22734         730         437         33 484           Accumulated depreciation and impairment         -6 404         -11 200         -412         -42         -18 058	Disposals	-11	-37	0	0	-49
Carrying value at December 31, 2011     3 179     11 534     318     395     15 425       At December 31, 2011       Cost price     9 583     22 734     730     437     33 484       Accumulated depreciation and impairment     -6 404     -11 200     -412     -42     -18 058	Depreciation	-396	-1 649	-97	0	-2 142
At December 31, 2011  Cost price 9 583 22 734 730 437 33 484  Accumulated depreciation and impairment -6 404 -11 200 -412 -42 -18 058	Impairment ***	-4 706	-4764	-88	-24	-9 582
Cost price         9 583         22734         730         437         33 484           Accumulated depreciation and impairment         -6 404         -11 200         -412         -42         -18 058	Carrying value at December 31, 2011	3 179	11 534	318	395	15 425
Accumulated depreciation and impairment -6 404 -11 200 -412 -42 <b>-18 058</b>	At December 31, 2011					
	Cost price	9 583	22734	730	437	33 484
Carrying value at December 31, 2011 3 179 11 534 318 395 <b>15 425</b>	Accumulated depreciation and impairment	-6 404	-11 200	-412	-42	-18 058
	Carrying value at December 31, 2011	3 179	11 534	318	395	15 425

Net additions include transfers from assets under construction.
 The positive amounts for 2011 are due to adjustments for government grants recognized in previous periods (see note 21).
 See note 7 for details of impairments.

## Specification of useful lives and depreciation

Estimated useful life for the asset class other tangible fixed assets is 3-30 years. Assets under construction are not yet ready for their intended use, and depreciation has not started.

The tables below show specifications of useful lives and estimated depreciation in 2011 and 2012 for the asset class land and buildings and asset class machinery and equipment.

## Specification of useful lives and depreciation year-end 2010 for land and buildings, and machinery and equipment

### LAND AND BUILDINGS

(NOK IN MILLION)	USEFUL LIVES (RANGE IN YEARS)	WEIGHTED AVERAGE USEFUL LIVES (YEARS) <sup>1)</sup>	IMPAIRMENT 2010	DEPRECIATION 2010	COST PRICE, DECEMBER 31, 2010	CARRYING VALUE, DECEMBER 31, 2010	ESTIMATED DEPRECIATION 2011 <sup>2)</sup>
REC Silicon	10-32	30	0	25	731	639	24
REC Wafer	10-20	16	3	175	3 157	2358	163
REC Solar	7 - 28	21	33	293	5 569	5 124	308
Other operations	2-10	5	0	5	35	29	5
Total	•••••••••••••••••••••••••••••••••••••••		36	498	9 491	8 150	500

### MACHINERY AND EQUIPMENT

(NOK IN MILLION)	USEFUL LIVES (RANGE IN YEARS)	WEIGHTED AVERAGE USEFUL LIVES (YEARS) <sup>1)</sup>	IMPAIRMENT 2010	DEPRECIATION 2010	COST PRICE, DECEMBER 31, 2010	CARRYING VALUE, DECEMBER 31, 2010	ESTIMATED DEPRECIATION 2011 2)
REC Silicon	2 - 20	14	6	785	11 341	9 808	835
REC Wafer	5-10	7	8	567	5 234	2964	690
REC Solar	3 - 28	9	-29	445	5 367	4 333	616
Other operations	3-5	3	2	9	42	30	12
Total	•		-13	1 806	21 983	17 136	2153

# Specification of useful lives and depreciation yea-end 2011 for land and buildings, and machinery and equipment

# LAND AND BUILDINGS

(NOK IN MILLION)	USEFUL LIVES (RANGE IN YEARS)	WEIGHTED AVERAGE USEFUL LIVES (YEARS) 1)	IMPAIRMENT 2011	DEPRECIATION 2011	COST PRICE, DECEMBER 31, 2011	CARRYING VALUE, DECEMBER 31, 2011	ESTIMATED DEPRECIATION 2012 2)
REC Silicon	5-32	29	0	26	809	687	35
REC Wafer	10-20	17	2368	97	3 264	0	0
REC Solar	10 - 28	21	2338	268	5 475	2 468	159
Other operations	3-10	7	0	6	35	23	6
Total			4706	396	9 583	3 179	200

## MACHINERY AND EQUIPMENT

(NOK IN MILLION)	USEFUL LIVES (RANGE IN YEARS)	WEIGHTED AVERAGE USEFUL LIVES (YEARS) 1)	IMPAIRMENT 2011	DEPRECIATION 2011	COST PRICE, DECEMBER 31, 2011	CARRYING VALUE, DECEMBER 31, 2011	ESTIMATED DEPRECIATION 2012 2)
REC Silicon	2 - 20	14	20	817	11919	9 481	848
REC Wafer	5-10	8	3 0 0 5	299	5 625	34	0
REC Solar	5 - 28	10	1738	522	5 149	1 996	313
Other operations	3-5	3	2	11	41	22	12
Total			4764	1 649	22734	11 534	1 173

1) Weighted average useful lives per class of assets are estimated by weighing the individual assets' useful lives with their relative part of the segment's total cost price.
2) Estimated depreciation is calculated based on cost price and estimated useful lives at December 31, translated to NOK at December 31 exchange rates. For impaired assets

The effects of the annual analysis for 2011 and 2010 resulted in only minor changes in estimated useful lives. The significant impairments during 2011 affected depreciation in 2011 and will affect depreciation in 2012, as illustrated above.

the depreciation is calculated based on the remaining carrying values and estimated remaining useful lives at December 31. It does not include assets under construction and other construction is calculated based on the remaining carrying values and estimated remaining useful lives at December 31. It does not include assets under construction and other carrying values and estimated remaining useful lives at December 31. It does not include assets under construction and other carrying values and estimated remaining useful lives at December 31. It does not include assets under construction and other carrying values and estimated remaining useful lives at December 31. It does not include assets under construction and other carrying values and estimated remaining useful lives at December 31. It does not include assets under construction and other carrying values are carrying values and other carrying values are carrying values and other carrying values are carrying values at the carrying values and other carrying values are carrying values at the carrying values and other carrying values are carrying values at the carrying values are carrying values at the carrying values at the carrying values at the carrying values are carrying values at the carrying value at the carrying values at the carror effects of any additions or disposals subsequent to December 31 for each year. The actual depreciation may deviate from the estimates in the table due to, among other things, changes in currency exchange rates, changes in estimated useful lives, impairments, additions and disposals. Estimated depreciation cannot be calculated as cost price divided by weighted average useful life. Depreciation in 2011 was lower than estimated, primarily due to the significant impairments recognized during the year.

## Finance leases included in property, plant and equipment at December 31

			TOTAL
Carrying value at January 1, 2010	249	458	707
Net additions	319	325	644
Depreciation	-53	-118	-171
Carrying value at December 31, 2010	515	665	1 180
Cost - capitalized finance leases	606	875	1 481
Accumulated depreciation and impairment	-91	-210	-301
Carrying value at December 31, 2010	515	665	1 180
Carrying value at January 1, 2011	515	665	1 180
Net additions	0	105	105
Depreciation	-28	-69	-97
Impairment	-422	-701	-1 123
Carrying value at December 31, 2011	65	0	65
Cost - capitalized finance leases	606	980	1 586
Accumulated depreciation and impairment	-541	-980	-1 522
Carrying value at December 31, 2011	65	0	65

Finance leases at December 31, 2011 and 2010 were primarily leases of production equipment and part of the building structure for production and recovery of exhausted slurry for REC Wafer and a lease of the second cell plant in REC ScanCell.

Slurry is the cutting fluid used when sawing silicon blocks into wafers. The slurry plants are built adjacent to REC Wafer's plants at Herøya and Glomfjord, Norway. The agreements are capacity agreements in which REC Wafer at inception expected to take all of the output from the plants (see note 29). The finance lease elements of the agreements are for the machinery and part of the building structure and are fixed according to the total capital expenditures incurred. The carrying values were zero and NOK 994 million at December 31, 2011 and 2010, respectively. The minimum contract terms for the total contracts are until December 31, 2018, and shall be prolonged automatically for two-year periods unless terminated by either party with twelve months notice. The assets under the financial leases are paid over five to ten years. Assets paid over five years have an extension option that is included as part of estimated lease term.

The cell plant was completed at the end of 2007. The minimum contract term is until 2022. The lease agreement has a renewal option of two periods of five years each. The carrying values were NOK 65 million and NOK 186 million at December 31, 2011 and 2010, respectively.

The assets under finance leases are depreciated over the shorter of estimated useful lives and lease term.

# Intangible assets

intaligible assets		ACCETCUNIDED	CLICTOMED		
(NOK IN MILLION)	GOODWILL	ASSETS UNDER DEVELOPMENT	CUSTOMER RELATIONSHIPS	OTHER	TOTAL
Carrying value at January 1, 2010	584	161	59	257	1 060
Exchange differences	4	-1	1	4	7
Net additions*	0	-14	0	69	54
Internal development	0	84	0	0	84
Amortization***	0	0	-6	-63	-69
Impairment **	0	0	0	-13	-13
Carrying value at December 31, 2010	587	230	53	253	1 123
At December 31, 2010					
Cost price	626	230	115	503	1 474
Accumulated amortization and impairment	-38	0	-62	-250	-351
Carrying value at December 31, 2010	587	230	53	253	1 123
Carrying value at January 1, 2011	587	230	53	253	1 123
Exchange differences	6	-6	1	11	11
Net additions*	0	-190	0	311	121
Internal development	0	45	0	0	45
Amortization***	0	0	-6	-118	-124
Impairment **	-330	-62	0	-123	-515
Carrying value at December 31, 2011	263	16	48	333	661
At December 31, 2011					
Cost price	632	79	118	847	1 676
Accumulated amortization and impairment	-368	-63	-70	-514	-1 015
Carrying value at December 31, 2011	263	16	48	333	661

Net additions include transfers from assets under construction.

The intangible assets except goodwill included above have estimated finite useful lives, over which the assets are amortized on a straight-line basis. Intangible assets under construction are not ready for their intended use, and consequently amortization has not started. At December 31, 2011 and 2010 assets under construction related primarily to SAP implementation in REC Silicon and at December 31, 2010 also REC ASA's technology agreement with SiGen for mono wafer cutting. The technology agreement was impaired in 2011, reflecting the uncertainty related to wafer production assets and the potential of this technology. At December 31, 2011 and 2010 customer relationships were related to pre-existing relationships at the time of acquisition of ASiMI and SGS, and are amortized over a period of 10 to 16 years. Other intangible assets at December 31, 2011 were primarily related to software (3-8 years) and FBR technology in REC Silicon (20 years). At December 31, 2010 it also included furnace technology in REC Wafer that was impaired in 2011.

# Prepaid lease

(NOK IN MILLION)	2011	2010
Carrying value at January 1	115	39
Exchange differences	2	2
Addition	104	86
Amortization	-12	-12
Carrying value at December 31	209	115

## Distribution of total prepaid lease

Distribution of total prepara lease		
(NOK IN MILLION)	2011	2010
Current	11	11
Non-current	198	104
Total	209	115

Prepaid lease relates to lease of land in Singapore. See note 29 for further information.

See note 7 for details of impairments.

<sup>\*\*\*</sup> Total amortization in the statement of income consists of amortization of intangible assets in the table above and amortization of prepaid lease in the table below.

#### 07 IMPAIRMENTS OF CASH-GENERATING UNITS AND GOODWILL

Goodwill is allocated to the cash-generating units or groups of cash-generating units at December 31 as follows:

## Carrying amount of goodwill at December 31

(NOK IN MILLION)	2011	2010
REC Silicon	263	257
REC Wafer Multi	0	330
Total REC Group	263	587

In 2011, goodwill related to REC Wafer Multi was written down to zero.

#### **CASH-GENERATING UNITS**

Recoverable amount shall be estimated for the individual asset. The recoverable amount of an individual asset cannot be determined if the asset's value in use cannot be estimated to be close to its fair value less costs to sell and the asset does not generate cash inflows that are largely independent of those from other assets. In such cases, value in use and, therefore, recoverable amount, can be determined only for the asset's cash-generating unit.

An asset's cash-generating unit is the smallest group of assets that includes the asset and generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Identification of an asset's cash-generating unit involves judgment by the REC management.

Management monitors the operations primarily by segments, but also by product lines and by individual locations. The different segments sell primarily products to external parties that are different from products of the other segments. Part of REC Silicon's production of polysilicon is sold internally to REC Wafer and REC Solar, and REC Wafer to some extent sell wafers to REC Solar. REC Silicon and REC Solar produces intermediate products in its own value chain. If an active market exists for the output produced by an asset or group of assets, that asset or group of assets shall be identified as a cash-generating unit, even if some or all of the output is used internally. An active market is a market in which all the following conditions exist: (a) the items traded within the market are homogeneous; (b) willing buyers and sellers can normally be found at any time; and (c) prices are available to the public.

Starting in the second quarter 2011, REC decided to temporary close down the cell production in REC ScanCell Norway and parts of the multi wafer production in Norway (the oldest plants). In the fourth quarter 2011, REC decided on a permanent close down of these. In connection with the second quarter 2011 impairment tests, REC management evaluated that changes in facts and circumstances had lead to changes in cash-generating units. The new cash-generating units are REC Silicon, REC Wafer Multi Norway, REC Wafer Mono, REC Singapore and REC ScanCell. The previous cash-generating units were REC Silicon, REC Wafer Multi, REC Wafer Mono, REC Solar Cells (Norway), REC Solar Cells

(Singapore) and REC Modules. Consequently, REC Wafer Multi no longer includes Wafer production in Singapore. Cell production in REC ScanCell is no longer included with REC Cells in Singapore, and REC's operations in Singapore are now regarded as one cash-generating unit (including REC sales companies). The new cash-generating unit definition had only a marginal effect on the total impairment charges at June 30, 2011 and would have had no effect on the impairment tests at year-end 2010.

REC Silicon produces polysilicon that is used in the electronic and solar industry. REC Silicon also produces silane gas used in its production of polysilicon and some is sold externally. REC Silicon currently supplies a large percentage of the total silane gas market in the world. Management has evaluated that it is currently not an active market as defined in IAS 36 for the large amount of silane that is used internally, and that the silane producing assets consequently need to be grouped with polysilicon producing assets. Management's judgment is further that the polysilicon plants constitute one cash-generating unit, as customer contracts can be fulfilled by either plant, and REC can elect to produce the products from whichever plant (with some adjustments). Therefore, management judgment is that the future cash inflows for the polysilicon plants cannot be determined individually. REC Silicon is consequently regarded as one cash-generating unit.

REC Wafer produces multi and mono wafers. Mono wafers have higher solar efficiency, are sold separately from multi wafers in separate contracts and to different customers, are used in different cell production, and can by REC only be produced at a separate plant in Glomfjord. Management has evaluated that the multi and mono wafers have separate cash inflows. Consequently, the mono wafer plant in Glomfjord is a separate cash-generating unit.

REC Wafer has through 2010 and 2011 primarily sold multi wafers externally, but has also sold internally to REC Solar, primarily in Norway (REC ScanCell) up to the middle of 2011 and some to Singapore. REC Solar's integrated plant in Singapore includes multi wafer production lines that to a large extent are similar to the newest multi wafer lines at Herøya. REC Wafer and REC Solar is headed by the same member of REC Group Management team. The wafer production in Singapore started in 2010 and these wafers are primarily used by REC's cell production in Singapore. At the end of 2010, REC management still evaluated that shipments to external customers and own use could be allocated between the

multi wafer production lines in Norway and Singapore the way REC management found most advantageous. Therefore, at year-end 2010 REC management judgment was that the future cash inflows for the multi wafer production lines could not be determined individually, and the multi wafer producing assets in Norway and Singapore were included in the same cash-generating unit.

The integrated plant in Singapore produces wafers and solar cells that currently primarily are intermediate products in REC Singapore's production of solar modules. At December 31, 2010, REC management evaluated that there existed active markets for multi wafers and multi cells, and previously the Singapore plant was not regarded as one cash-generating unit.

The identification of cash-generating units requires judgment by the management. Even though not a decisive factor, the structure now suggests that Wafer Multi Norway and Wafer Multi Singapore are not part of the same cash-generating unit, and that Singapore is evaluated as one. The cost structure is different between the entities, and any decisions to reduce or close production are now expected to be made based on geographical location.

For the companies and plants that were included in the previous REC Wafer Multi cash-generating unit, the structure and segment reporting has been changed. The change did not immediately impact the wafer product streams, but over time a change has developed. Earlier it was planned to deliver wafers from REC Singapore to REC Wafer Norway's external customers. However, the wafers are no longer regarded as "interchangeable" and the customers now tend to demand traceability to the plant. Management believes this indicates that the wafers are not homogenous.

The Solar industry is gradually becoming more dominated by integrated players. REC Singapore is run as one integrated site and will reduce or increase capacity through its value chain based on sales forecasts for solar modules. In Singapore, REC produces intermediate products that will be produced to optimize its own value chain. Management no longer believes that there is an active market (as defined in IAS 36) for wafers and solar cells produced by REC Singapore, and that cash inflows for wafers and solar cells in Singapore are not independent from cash inflows for solar modules. Consequently, REC Singapore is now regarded as one cashgenerating unit. REC has a number of sales companies that sell REC Singapore solar modules, and these are included in the REC Singapore cash-generating unit.

At the end of 2010, the cell production assets in Norway (REC ScanCell) and in Singapore were regarded as one cashgenerating unit. The solar cell production in REC ScanCell was closed down in 2011 and is consequently evaluated separately for the impairment tests at December 31, 2011.

At the end of 2010, the module production in Singapore was evaluated as a separate cash-generating unit, but is now included in the REC Singapore cash-generating unit. The solar modules production in REC ScanModule in Glava was closed down in 2010.

## **BASIS FOR THE IMPAIRMENT TESTS**

Recoverable amounts for the cash-generating units are primarily based on value in use, except for assets that are taken out of use. Value in use has been estimated by discounted cash flows. The budget process in 2011, as for 2010, was affected by the significant uncertainty of future development in key assumptions, such as future prices, costs and efficiency. The future market development is highly uncertain.

At the end of 2011, the Board of Directors approved a budget for 2012 and was presented business plan figures for 2013 – 2016. Some further work has been conducted on the business plan figures that are used as basis for the impairment tests, primarily to update for recent developments and additional information, due to general quality assurance and to comply with IAS 36 requirements.

The carrying amounts of the cash-generating units include tangible fixed assets, intangible assets and net working capital. EBITDA less capital expenditure and change in working capital has been used as estimates of cash flows for the calculation of recoverable amounts. Estimated tax on EBIT has also been included as appropriate to be consistent with the discount rates used, see below. Assets that are under construction or for which the investments are committed are included, with estimated capital expenditure to complete and estimated future cash flows from their operations. However, REC is according to IAS 36 not allowed to include effects of improvements or enhancements to the assets' performance. The industry is dependent upon such improvements, which will be the basis for a cost competitive position going forward. The exclusion of such investments had a negative effect on some of the estimated values in use, especially for REC Singapore.

To arrive at the estimated recoverable amount, the REC Group uses an estimated stable cash flow and a growth rate factor to estimate a terminal value of infinite future cash flows. However, for the Singapore entities, the period has been limited to the lease term of the land (2038). A growth rate factor of zero for the period subsequent to 2016 has been used in the calculations at year-end 2011, which is the same as for 2010. This is below the average expected growth rate for the photovoltaic industry. Growth rates used for the industry take into consideration effects of future  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ capital expenditure and technology improvements that cannot be included the same way in the impairment test. The lower growth rate also reflects that prices are expected to decline until grid parity is reached. At the same time it is expected that cost savings will be realized through the value chain, among other things due to these price reductions.

According to IAS 36, cash flows and discount rates shall be pre-tax. In deciding the discount rate in practice for the cash-generating units, REC believes that the best basis and what is most commonly used is the WACC (weighted average cost of capital). The cost of a company's market value of debt and equity capital, weighted accordingly to reflect its expected long-term capital structure, gives its WACC. The WACC rates used to discount future cash flows are based on ten year government and swap interest rates (except for REC Singapore where a rate for each year is used) in the relevant markets and take into account estimated risk premiums on debt and equity, gearing and beta. REC believes this takes into consideration the market's assessments of the time value of money and reflects the premium that the market would require from uncertain future cash flows based on the distribution estimated by REC. REC believes that the WACC is the best estimate for the current market-determined rate for REC and that the WACC in most instances best reflects risks specific to the asset for which the cash flow projections have not been adjusted. For assets with special uncertain future cash flows, the cash flows are adjusted instead of adding additional risk adjustments to the WACC.

WACC is a post-tax concept. IAS 36 states that when the basis used to estimate the discount rate is post-tax, that basis is adjusted to

reflect a pre-tax rate. REC's understanding is that the WACC cannot be adjusted to reflect a pre-tax rate by "reversing" the tax effects in the WACC. Consequently, REC has adjusted the estimated EBIT (earnings before financial items and tax) for an estimated tax, referred to as NOPLAT (net operating profit less adjusted taxes). REC believes that it then uses a consistent approach to the cash flows and discount rate. The finance theory states that the enterprise value (value of the cash-generating units) should be the same pre- and post-tax. The corresponding pre-tax discount rate can then be calculated as the rate that will return the same present value for cash flows excluding any tax.

Future cash flows are estimated in different currencies and discounted using discount rates appropriate for that currency.

## Discount rates (%)

	2011		2010	
	POST-TAX	PRE-TAX	POST-TAX	PRE-TAX
REC Silicon (USD)	7.8	11.7	8.7	12.9
REC Wafer Mono (NOK)	8.7	9.9	9.3	11.3
REC Wafer Multi Norway (NOK)	8.7	15.5	9.3	12.0
REC Wafer Multi Singapore (SGD) 1)	NA	NA	9.0/8.6	9.0/9.3
REC ScanModule (EUR)	NA	NA	NA	NA
REC Modules (EUR) 1)	NA	NA	9.4/9.0	9.4/9.8
REC Solar Cells Singapore (EUR) <sup>1)</sup>	NA	NA	9.4/9.0	9.4/9.8
REC Singapore (EUR) 1)2)	7.7 - 9.3	9.1	NA	NA
REC ScanCell Norway (EUR)	NA	NA	8.7	10.5

 $^{1)}\,$  Cash flows generated in Singapore are tax exempt for a period.

The reductions in the discount rates in 2011 compared to 2010 were primarily due to significant reductions in risk free interest rates, partially offset by increased estimated risk premiums.

## Specification of impairments for 2011

(NOK IN MILLION)	LAND AND BUILDINGS	MACHINERY AND EQUIPMENT	OTHER TANGIBLE FIXED ASSETS	ASSETS UNDER CONSTRUCTION	GOODWILL	OTHER INTANGIBLES	TOTAL	REMAINING PPE & INTANGIBLES DEC 31
REC Silicon	0	20	0	0	0	0	20	11 269
REC Wafer Multi Norway	1 962	2410	19	24	330	54	4 799	34
REC Wafer Mono	406	595	0	0	0	7	1 008	0
REC Singapore	2 211	1 544	63	1	0	44	3 863	4617
REC ScanCell	129	192	5	0	0	17	343	85
Other operations	-2	3	0	0	0	63	64	82
Total impairments	4 705	4 764	88	24	330	185	10 097	16 087

In general, for the 2010 impairment tests the demand for solar modules had been higher than expected in 2010 and assets performance had to a large extent been in line with, or better than anticipated when performing the 2009 impairment tests. Going into 2011, the REC Singapore operations and REC ScanCell showed good cost and efficiency improvements, but from the second quarter 2011 the market development turned out much more negative than expected in the 2010 impairment tests. In addition, REC wafer experienced some problems in its cost and quality

improvement initiatives during 2011. At year-end 2011 the market capitalization of REC ASA was still below the carrying amount of equity for the Group.

The estimated values in use of REC's operating assets are sensitive to changes in prices and other key assumptions. There is a risk that the price projections and cost targets that are used in the impairment tests cannot be achieved. This can result in a further reduction of the estimated cash flows and thereby the estimated

<sup>&</sup>lt;sup>2)</sup> For the 2011 impairment test for Singapore it is used a discount rate per year for the land lease period up to 2038. The pre-tax rate of 9.1 percent for Singapore for 2011 is calculated as one rate for the whole period (one post-tax rate calculated the same way would be 8.5 percent).

values in use. This risk is mainly related to market developments, cost and reinvestment levels. On the cost side it include risks related to achievement of improvements without investments that according to IAS 36 Impairment of assets cannot be included in the impairment tests, as well as the ability to reduce raw material cost significantly without reducing quality and reliability. The exclusion of investments that improve or enhance the assets' performance had a negative effect on some of the estimated values in use, especially for REC Singapore.

In the second quarter 2011 the solar market experienced sudden and significant reductions in prices and demand. This market development led market participants, analysts and REC to change their longer term views and assumptions at that time. This especially related to a downward shift in expected future sales prices. The cost improvements had not been realized according to plan in REC Wafer Multi Norway and REC Wafer Mono. Some initiatives to further increase quality have decreased expected future volume and increased cost for REC Wafer Multi Norway. In the second quarter, REC also decided temporarily shut downs of parts of the multi wafer production capacity and solar cell production in REC ScanCell. Consequently, REC recognized impairment charges of NOK 6.5 billion in the second quarter. Of this, NOK 3.8 billion was REC Wafer Multi Norway, NOK 1 billion was REC Wafer Mono, NOK 1.4 billion was REC Singapore and NOK 0.4 billion was REC ScanCell.

In the third quarter 2011, further impairments of NOK 1.2 billion were recognized, primarily in REC Wafer Multi Norway due to the permanent close down of parts of the production capacity, the further depressed wafer market and the uncertainties related to the continuing wafer operations in Norway. The wafer market

(multi and mono) has remained depressed with further price declines, and there are considerable uncertainties related to the ongoing operations of REC Wafer. Consequently, the value in use for the fixed assets of the ongoing operations in REC Wafer Multi Norway and REC Wafer Mono have been estimated to zero. For the ongoing operations, no provisions for losses on contractual commitments have been recognized. If a decision is taken in a subsequent period to close down further production capacity, further losses on contractual commitments should be expected, and the value of working capital may also be negatively affected.

At the end of the fourth quarter 2011 there was continued significant uncertainty of the future market developments. The fourth quarter showed improved demand, but prices continued to decline. REC and external sources have estimated a further downward shift in future sales prices compared to the impairment tests for previous periods. This is the main reason for recognition of further impairment charges in the fourth quarter of NOK 2.5 billion, primarily in the REC Singapore operations.

The estimated value in use of the cash-generating unit REC Silicon is still estimated to be well above its carrying value and the impairments relates to assets taken out of use.

The impairment charges in "other operations" for 2011 are primarily related to a technology development agreement with SiGen for mono wafer cutting.

The fixed assets in the closed down operations in Norway are recognized at its estimated sales values, or zero if not determinable, and for a building under finance lease at its estimated sublease value.

## Specification of impairments (continuing operations) for 2010

(NOK IN MILLION)	PROPERTY, PLANT, EQUIPMENT	INTANGIBLE ASSETS	TOTAL
REC Silicon	6	0	6
REC Wafer	11	0	11
REC Solar - ScanModule	-42	13	-29
REC Solar - Other	49	0	49
Total impairments	25	13	38

In 2010, REC recognized minor impairment charges. During 2010 the main part of the expansions projects were finalized. The development in most operations and market was in line with or improved during 2010 compared to expectations used in the 2009 impairment tests.

## **KEY ASSUMPTIONS AND SENSITIVITIES**

Key assumptions are defined as those to which the units' recoverable amounts are most sensitive. Key assumptions include future revenues (sales prices and volume), cost of the major inputs, conversion costs and efficiency and maintenance capital expenditures. In addition, future cash flows are sensitive to successful achievement of design capacity of the equipment,

successful implementation of technological innovations embedded in these assets and realization of expected future cost reductions and efficiency and quality improvements of the operations. Through tuning of equipment and processes, continuous process improvements, use of improved materials etc, efficiency and volume is expected to improve and unit costs decrease. The sales price decreases is also expected to decrease costs of input, including the cost for maintenance capital expenditure. Optimization of sourcing of input materials is also expected to contribute to cost reductions. Changes in key assumptions going forward will change the estimated recoverable amounts, and may change the conclusions reached at year-end 2011.

#### **REC Silicon**

Sales prices for REC Silicon are expected to decrease significantly in 2012 compared to the average for 2011, largely due to expected weak end user markets, but then to pick up year-by-year in subsequent years but not to return to the average 2011 level. Sales prices were estimated using current market prices adjusted for anticipated changes in market dynamics relative to changes in supply and demand. Where relevant, provisions of contracts with customers for deliveries in future periods are reflected in estimates of pricing and volume. However, as the REC internal demand has decreased, REC Silicon is now more exposed to the spot market prices and demand. Volumes included in the impairment analysis are near full production capacities. Production volumes are expected to increase, through improved utilization of the assets, especially for the granular polysilicon production (FBR).

Increasing production volumes by optimizing plant asset utilization via a number of operational excellence initiatives, and achieving stable and reliable plant operations remain the most important factors to continue to drive down product cost. Furthermore, a strong cost focus on major cost items such as electricity, natural gas, Metallurgical Grade Silicon, professional services and labor is of high priority to further drive down costs.

Estimates of capital expenditure reflect management's best estimate of ongoing maintenance capital required to maintain existing operations.

For REC Silicon, the estimated recoverable amount in excess of carrying amount at year-end 2011 was approximately 70 percent. Compared to the assumptions used an unfavorable change in the estimate for all years of approximately eleven percent for prices, or fourteen percent for volume or six percentage-point for the posttax discount rate would cause the estimated recoverable amount to be reduced to the carrying amount. Parts of the estimated cost improvements are dependent on high capacity utilization of the various production equipment.

## **REC Singapore and REC Wafer**

The solar module prices for REC Singapore and wafer prices for REC Wafer are estimated based on a selection of external sources. However, the estimates from different sources vary considerably and do not cover the period of the impairment tests. Experience has also shown that market demand and prices can change rapidly and significantly and prices are also dependent on government incentives. Sales prices for solar modules and wafers have dropped considerably, starting in 2009. Over time, the wafer sales prices are expected to follow somewhat the same price curve/development as for solar modules.

## **REC Singapore**

REC expects continuous price reductions for solar modules from 2012. Assuming continued oversupply, REC believes that module prices will be predominantly cost driven, although some price variations are seen in the market between "branded" an "non branded" players. This view is in line with external views. The contract portfolio creates a customer basis, but as these are

framework contracts the prices will depend upon the current market price for the relevant period.

Due to the current market over supply, prices in 2011 have declined below many producers' production cost. Mid-term this situation is expected to stabilize during 2013 and therefore prices are believed to level out more. Long term, prices are expected to decline yearon-year, but at a slower pace towards the end of the period. This is what one would expect as prices approaches grid parity.

Estimated conversion cost improvements included in the impairment test are built on the performance improvements observed, expected scale advantages and detailed action plans for the first years. The significant sales price decreases are also expected to decrease costs of input, including maintenance capital expenditure.

REC Singapore's production volumes are expected to increase somewhat compared to 2011 through process improvements. The business plan includes some capital expenditure programs that increase performance that are excluded for these impairment tests. The financial implications of excluding these items, in addition to lower capital expenditure, are decreased volumes available for sale. This means lower sales volume and lower margins (lower efficiency, less economies of scale) compared to the business plan assumptions.

Maintaining the existing assets is expected to require less capital expenditure than the original investments. REC Singapore's current technology is new and required a premium price and was made at a time of high capacity utilization by the capex vendors making them able to charge high prices. As the profitability of the solar industry falls, the industry is likely to pass on some of this burden to its suppliers. There will also be shift from suppliers in Europe to Asia. In Singapore REC invested in infrastructure of a size that can be utilized to serve more plants than REC currently has invested in, and this has made the investment higher than needed for the current plants. From 2016 it is assumed a reinvestment rate on machinery and equipment of half of the original investments. Technical infrastructure is expected to be reinvested at 100 percent and the buildings are not expected to be reinvested.

For REC Singapore an impairment charge was recognized at yearend 2011. Therefore, any unfavorable change in any key assumption  $% \left\{ 1,2,\ldots ,n\right\} =0$ would cause the estimated recoverable amounts to decline further below carrying value. The estimated value in use is very sensitive to changes in key assumptions. Based on the assumptions used in the 2011 impairment tests, one Euro-cent reduction per watt to module prices or one Euro-cent increase in total cash costs for all years would increase impairment by approximately NOK 700 million. An increase in polysilicon price by one USD is estimated to have an effect of approximately NOK 200 million. An increase in annual capital expenditure by NOK 15 million is estimated to have an effect of approximately NOK 150 million. An increase in post-tax discount rate by one percentage point is estimated to have an effect of approximately NOK 400 million. These estimates are based on the 2011 impairment tests, and are translated to NOK using 2011 year-end exchange rate.

## **REC Wafer**

REC decided in the fourth quarter of 2011 to permanently close down the three oldest multi production lines, Herøya 1&2 and Glomfjord Multi. Furthermore, approximately 60 percent of the remaining multi production capacity has been temporarily closed.

In 2011, the spot sales prices for multicrystalline wafers declined by approximately 70 percent from the peak at the end of March 2011. The monocrystalline price development has seen a similar trend. The spot prices at the end of 2011 are believed to be below the cash cost of the marginal producer, mainly due to the need to reduce high inventories throughout the value chain. During 2011 and in the beginning of 2012 most of REC Wafer's long-term sales contracts have been terminated against settlement fees. Consequently, future sales will be based on the prevailing market prices for wafers either through spot sales or market based contracts.

REC expects that after the significant price reductions in 2011 and expected reduction of production capacity for wafers, the wafer prices will improve somewhat in the nearest years, followed by reductions in subsequent years.

The cost improvements for both REC Wafer Mono and Multi have been slower than planned for. However, positive results have been realized at the end of the year by extensive improvement work, and quality has improved. Still, REC Wafer Mono and Multi plants have a weak cost position compared to the industry and need to make significant further improvements to become competitive.

Estimated conversion cost improvements included in the impairment test are built on the performance improvements observed, expected scale advantages and detailed action plans for the first years. The significant sales price decreases are also expected to decrease costs of input, including maintenance capital expenditure.

Volume in 2012 is negatively affected for REC Wafer Multi Norway by the temporary close down of production capacity. In the impairment test it is expected that production starts up in full from the middle of

2012. Production volumes in subsequent years are expected to increase somewhat year-on-year due to process improvements. For REC Wafer Mono one of the key issues is to increase the productivity of the ovens through operational improvements and further implementation of the recharge process. This is expected to substantially improve the production output and correspondingly reduce the cost per unit. For REC Wafer Mono, the utilization of the new production equipment is still in an implementation phase, and volumes are expected to increase year-on-year.

For REC Wafer Multi and Mono, the capital expenditure in the terminal year is estimated based on the initial investment, useful life and an expectation of significant reduced prices on machinery and equipment (50 percent). Technical infrastructure is expected to be reinvested at 100 percent and the buildings are not expected to be reinvested.

The wafer market (multi and mono) has remained depressed with further price declines, and there are considerable uncertainties related to the ongoing operations of REC Wafer at year-end 2011. Consequently, the value in use for the fixed assets of the ongoing operations in REC Wafer Multi Norway and REC Wafer Mono have been estimated to zero. For the ongoing operations, no provisions for losses on contractual commitments have been recognized. If a decision is taken in a subsequent period to close down further production capacity, further losses on contractual commitments should be expected, and the value of working capital may also be negatively affected.

REC decided on March 20, 2012 to permanently close down REC Wafer Mono (see note 33).

## REC ScanCell and the closed down parts of the **REC Wafer Multi Norway operations**

The fixed assets in the closed down operations in Norway are recognized at its estimated sales values, if determinable, otherwise zero. A building under finance lease is recognized at its estimated sublease value.

#### 08 INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

## INVESTMENTS IN ASSOCIATES

(NOK IN MILLION)	2011	2010
At January 1	174	146
Share of profit/loss in associates	-4	1
Impairment	-93	0
Share of profit/loss of associates	-97	1
Investment in associates	0	0
Exchange differences	-4	27
At December 31	74	174

Notes to the consolidated financial statements, REC Group

> Share of profit or loss is after tax and non-controlling interests of associates, including fair value adjustments. The main investment in associates is Mainstream Energy Inc. located in California, USA. In April 2008, REC Solar AS acquired a 20 percent ownership interest and voting right in this company. The investment supports REC's ambition to take an active role in the building of robust and scalable market channels, and marked the entry in the increasingly important US market. Mainstream Energy conducts its operating through AEE Solar Inc., which is one of the largest distributors of renewable energy systems and equipment in the USA, and the large PV system integrator REC Solar Inc. (not to be confused with REC's business segment REC Solar).

> REC recognized impairment on the shares of Mainstream Energy of NOK 93 million in 2011. The estimated recoverable amount was based on different scenarios of estimated future cash flows. The impairment was a result of the challenging market conditions and related reduction in expected margins for Mainstream Energy relative to previous estimates.

REC Wafer Norway AS has a 20 percent ownership interest and voting right in Meløy Bedriftsservice AS. REC Wafer Norway AS is a major customer of this company.

## The REC Group's share of figures for the associates at and for the year ending on December 31\*

(NOK IN MILLION)	ASSETS	LIABILITIES	REVENUES	PROFIT/LOSS
Total 2011	165	91	309	-97
Total 2010	251	77	277	1

<sup>\*</sup> Including fair value adjustments, goodwill and impairments.

# INVESTMENTS IN JOINT VENTURES

At December 31, 2011 and 2010 the REC Group has ownership interests in two joint venture entities in the USA within the REC Systems area. The REC Group's interests in jointly controlled entities are accounted for by proportionate consolidation. Accordingly, the REC Group combines its share of the jointly controlled entities' individual income and expenses, assets and liabilities and cash flows on a line-by-line basis with similar items in the REC Group's financial statements. The aggregate amounts of financial statement items are shown in separate tables below. The net cash flow from financing activities reflects capital contributions to the entities by the REC Group.

## Items from the statement of financial position

(NOK IN MILLION)	2011	2010
Non-current assets	25	6
Current assets	11	3
Total assets	35	9
Non-current liabilities	0	0
Current liabilities	1	0
Total liabilities	1	0

# Items from the statement of income

(NOK IN MILLION)	2011	2010
Revenues	0	0
Operating expenses	-7	-9
Loss after income tax	-7	-9

## Items from the statement of cash flow

(NOK IN MILLION)	2011	2010
Net cash flow from operating activities	-13	-12
Net cash flow from investing activities	-17	-6
Net cash flow from financing activities	31	18
Net cash flow in the period	2	0
Cash and cash equivalents at January 1	0	1
Foreign currency effect on cash and cash equivalents	0	0
Cash and cash equivalents at December 31	2	0

#### 09 DISCONTINUED OPERATIONS

In the first quarter 2010, the owners of Sovello AG entered into an agreement to sell all the Sovello shares and shareholders loans. The acquirer is a fund under the management of Ventizz Capital Partners. The transaction was closed on April 22, 2010. No consideration was received for the shares and shareholders loans. For practical purposes, Sovello has been deconsolidated as from April 1, 2010.

In connection with the sales agreement, Sovello has been reported as a discontinued operation in the consolidated financial statements of REC for all periods presented.

Discontinued operations remain consolidated in the consolidated financial statements until it is disposed of, with the internal transactions between continued and discontinued operations being eliminated in the consolidation. As a consequence, only income and expense from external transactions are reclassified to discontinued operations.

Items that were disposed of or settled in connection with the sale in the second quarter 2010 (shareholder loans and remaining provisions for losses on guarantees and undertakings) were included in assets and liabilities sold. The effects of these items on the statement of income (interest income, currency gains and losses, provision for losses and estimated income taxes related to these) are included as a part of discontinued operations in the statement of income. This means that the results presented will not represent the activities of Sovello on a stand-alone basis. Most line items in the consolidated statement of income have been re-presented for previous periods.

## Amounts for discontinued operations presented in one line item (profit/loss for the period from discontinued operations, net of tax) in the consolidated statement of income

(NOK IN MILLION)	2010
Revenues	114
EBITDA	1
Depreciation and amortization	0
Impairment	-6
EBIT	-5
Net financial items	-33
Loss before tax	-38
Income taxes	138
Profit /loss for the period from discontinued operations, net of tax	101

Profit from discontinued operations in 2010 amounted to NOK 101 million. Of this, the result from Sovello was NOK -18 million and the remaining relates to recognition of net losses and tax benefits related to the sale of Sovello.

Tax benefits have been recognized in 2010 on the realization of losses on REC ASA's shareholder loans to Sovello. In the consolidated statement of income, these estimated tax benefits have been included as part of discontinued operations and has not affected the income tax line as part of continuing operations.

## The net cash flows of Sovello proportionally consolidated in the consolidated statement of cash flow for REC Group

(NOK IN MILLION)	2010
Net cash flow from operating activities	-14
Net cash flow from investing activities	-50
Net cash flow from financing activities	7
Net cash flow in the period	-58
Cash and cash equivalent at January 1	60
Foreign currency effect on cash and cash equivalent	-2
Cash and cash equivalent at December 31	0

## The major classes of assets and liabilities of discontinued operations sold in 2010

(NOK IN MILLION)	2010
Non-current assets	19
Inventories	112
Receivables and other current financial instruments	318
Cash and cash equivalents	34
Total assets	484
Non-current liabilities	4
Current interest bearing liabilities	445
Other current liabilities	134
Total liabilities	583

## Cumulative income or expense recognized in other comprehensive income relating to Sovello at the time of sale in 2010

(NOK IN MILLION)	TRANSLATION DIFFERENCES	CASH FLOW HEDGE	ACQUISITION
Accumulated	30	-1	100

The translation difference and cash flow hedge has been recycled through profit or loss and had a positive effect on the result from discontinued operations. The effect of acquisition of Sovello has been kept permanently in equity and not recycled to profit or loss.

## Earnings per share from discontinued operations

(NOK PER SHARE)	2010
Basic	0.1
Diluted	0.1

#### 10 RELATED PARTY TRANSACTIONS

The amounts below in NOK are calculated at average exchange rates for profit or loss items and at year-end exchange rates for items in the statement of financial position.

The REC Group has related party relationships with its subsidiaries, associates, joint ventures and with its Group Management and Board of Directors and principle shareholders. Transactions with subsidiaries are eliminated on consolidation and are not reported as related party transactions in the consolidated financial statements for the REC Group.

## PRINCIPLE SHAREHOLDER

The principle shareholder in REC ASA that had significant influence over the REC Group at year-end 2011 and 2010 was Orkla ASA with an ownership interest of 39.7 percent.

For the first three months of 2011, up to the time the previous subsidiaries in the Elkem Group were sold by Orkla ASA, REC Silicon bought goods and services for NOK 15 million from companies of the Elkem Group. REC Wafer purchased services for NOK 3 million from Orkla ASA in 2011. REC Group had no accounts payables at year-end 2011 to the Orkla Group.

During 2010, REC bought goods and services for NOK 5 million from Orkla ASA. In 2010, REC Silicon made purchases from the

Elkem Group of NOK 38 million. At December 31, 2010 REC Silicon had no accounts payables to this company.

The rights issue in May 2010 was fully underwritten. Orkla Group guaranteed for 39.7 percent and received underwriting fees of NOK 36 million.

# KEY MANAGEMENT COMPENSATION, SHAREHOLDINGS, LOANS ETC.

Group Management and Board of Directors' compensation, ownership of REC ASA shares and options and loan agreements are shown in note 16.

# **ASSOCIATES**

In April 2008, REC Solar AS acquired a 20 percent ownership interest in Mainstream Energy Inc. In 2011, REC Solar sold modules for NOK 367 million to, and made purchases for NOK 2 million from Mainstream Energy Inc. Group, and had net receivables of NOK 132 million at December 31, 2011. In 2010, REC Solar sold modules for NOK 479 million to the Mainstream Energy Inc. Group, made purchases for NOK 3 million and had net receivables of NOK 210 million at December 31, 2010.

The Norwegian company Meløy Bedriftsservice AS, located at Glomfjord (Norway) is an associate of REC Wafer Norway AS. In 2011, REC Wafer made purchases of NOK 17 million from Meløy Bedriftsservice AS. In 2010, REC Wafer made purchases of NOK 14 million from Meløy Bedriftsservice AS. REC Wafer had no accounts payable at December 31, 2011 or 2010.

## **JOINTLY CONTROLLED ENTITIES**

REC Group contributed equity to jointly controlled entities with NOK 31 million in 2011 (NOK 18 million in 2010 excluding Sovello). Sovello AG became a jointly controlled entity at December 19, 2006. In the first guarter 2010, the owners of Sovello entered into an agreement to sell all the Sovello shares and shareholders loans.

The acquirer is a fund under the management of Ventizz Capital Partners. The transaction was closed on April 22, 2010. No consideration was received for the shares and shareholders loans. For practical purposes, Sovello has been deconsolidated as from April 1, 2010. During the first half of 2010, REC ASA paid the total provisions of EUR 10.8 million recognized at December 31, 2009 to the Sovello banks under the guarantees and undertakings. Sovello accrued interest of NOK 7 million (EUR 1 million) on the loans to REC ASA during the first quarter 2010. From January 1 to April 22, 2010 REC Silicon invoiced USD 10 million for sales of polysilicon to Sovello.

#### 11 **DERIVATIVE FINANCIAL INSTRUMENTS**

## Fair values and carrying amounts at December 31

	2011		2010	
(NOK IN MILLION)	ASSETS	LIABILITIES	ASSETS	LIABILITIES
Foreign exchange forward contracts	310	108	759	23
Interest rate swaps	74	57	16	38
Embedded foreign exchange forward contracts	5	62	4	284
Total	389	228	779	346
- of which designated as hedging instruments*	61	0	16	0

Hedging instruments are 'pay floating-receive fixed' interest rate swaps of the two NOK bonds REC01 (swap of NOK 650 million) and REC03 (swap of NOK 700 million) designated as fair value hedges.

## Distribution of derivatives at December 31

	2011		2010	
(NOK IN MILLION)	ASSETS	LIABILITIES	ASSETS	LIABILITIES
Embedded derivatives, non-current	5	7	4	144
Other derivatives, non-current	74	86	192	41
Total non-current derivatives	79	94	197	186
Embedded derivatives, current	0	55	0	140
Other derivatives, current	310	79	582	20
Total current derivatives	310	134	582	160
Total derivatives	389	228	779	346

The REC Group uses financial derivatives primarily to reduce currency risk and interest rate exposure. The REC Group manages the hedging of net cash flows exposed to foreign exchange rate risk as a portfolio on the basis of anticipated future cash flows.

See also note 3 for information on the REC Group's general policy for covering of currency risk and interest rate risk.

2011 Contractual cash flows in foreign exchange forward contracts at December 31, 2011

5 5		2012	2013
(CURRENCY IN MILLION)		FX FORWARD	FX FORWARD
BOUGHT CURRENCY	SGD/NOK	375	0
	SGD/USD	60	135
	USD/NOK	60	0
SOLD CURRENCY	EUR/NOK	-675	0
	EUR/USD	-15	0
	USD/NOK	-440	0

FX Forward is a foreign exchange forward contract. The table above shows contractual currency amounts by year of maturity. Positive (negative) amounts are the principal amount of the first currency mentioned bought (sold) forward with payment (receipt) of the second currency. The EUR, SGD and USD currencies noted in the table above have spot rates to NOK of 7.75, 4.61 and 5.99 at December 31, 2011.

The table below shows the same contracts, but summarizes the future currency exposure in total for contractual cash flows in foreign exchange forward contracts at year-end 2011 for EUR, SGD and USD.

## Contractual cash flows in foreign exchange forward contracts at December 31, 2011

FUTURE CURRENCY EXPOSURE, BOUGHT CURRENCY (+), SOLD CURRENCY (-) PER YEAR

	E	UR	S	GD	L	JSD
(CURRENCY IN MILLION)	2012	2013	2012	2013	2012	2013
USD/EUR	-15	0	0	0	20	0
EUR/NOK	-675	0	0	0	0	0
USD/NOK	0	0	0	0	-380	0
SGD/NOK	0	0	375	0	0	0
SGD/USD	0	0	60	135	-46	-110
Total	-690	0	435	135	-406	-110

For currency exposure, the REC Group is exposed to estimated net positive future operating cash flows in EUR and USD and estimated net negative cash flows in SGD. The REC Group is hedging these cash flows by entering into derivative transactions for sale of EUR/NOK, EUR/ USD and USD/NOK and purchase of SGD/NOK and SGD/USD forward (FX Forward). The REC Group does not use hedge accounting for the FX Forwards contracts. Compared to December 31, 2010 the REC Group has terminated the SEK forward contracts, increased USD and SGD forward contracts and decreased EUR forward contracts in accordance with currency forecasts and the finance policy. Renewing FX hedges that are maturing has given cash contribution throughout the year 2011 of NOK 573 million.

# Fair values of foreign exchange forward contracts at December 31, 2011

(NOK IN MILLION)		2012 FX FORWARD	2013 FX FORWARD
BOUGHT CURRENCY	SGD/NOK	13	0
	SGD/USD	2	-30
	USD/NOK	11	0
SOLD CURRENCY	EUR/NOK	229	0
	EUR/USD	5	0
	USD/NOK	-28	0
Total		231	-30

The table above shows a specification of fair values, equaling carrying amounts, at December 31, 2011 of currency derivatives distributed by year of maturity and currency. The main reason for the unrealized gains on FX Forwards at December 31,2011 is the appreciation of NOK versus EUR compared to the time the contracts were entered into.

## Principal amounts and fair values of interest rate swaps at December 31, 2011

		PRINCIPAL AMOUNT (CURRENCY IN MILLION)	FAIR VALUE (NOK IN MILLION)
PAY FIXED RATE	USD (2014)	100	-42
	NOK (2021)	160	-12
	NOK (2013)	380	-1
	EUR (2013)	60	-1
RECEIVE FIXED RATE	NOK (2014)	650	19
	NOK (2018)	700	42
	EUR (2014)	60	13
Total			17

The table above shows contractual principle currency amounts in interest rate swaps and a specification of fair values, equaling carrying amounts, at December 31, 2011 distributed by year of maturity and currency. The interest rate swaps have one fixed interest rate against a floating interest rate and there are no other cash flows or principal amounts. The interest rate swaps of NOK 650 million and NOK 700 million, where REC ASA is paying floating interest rate, are fair value hedges of the REC01 and REC03 NOK bonds' fixed rates. The remaining interest swaps are general interest hedging.

## Estimated contractual cash flows in embedded foreign exchange forward contracts at December 31, 2011

(USD IN MILLION)	TOTAL	2012	2013	2014	2015
Total contract value	232	122	66	23	22

Total contract value represents the estimated total contract value for sales of wafers in USD to customers that do not have USD as their functional currency and USD is not regarded as commonly used currency in the countries of the purchasers or seller (see note 4.1(D)).

REC Wafer has entered into sales contracts in USD which is not in the functional currency of either of the contracting parties and USD is not regarded as commonly used currency in the countries of the purchasers or seller (see note 4.1(D)). For accounting purposes this shall be reported as if the commodity sales contracts were in NOK and forward purchases of USD shall be separated and measured at fair value (embedded derivatives) with changes in fair values recognized to profit or loss. The reasons for entering into the sales contracts in USD were partially requests by customers and to provide economic hedges of future purchases of polysilicon in USD in line with REC's finance policy at that time.

These wafer sales contracts state future cash flows, with some limited adjustment mechanisms. However, REC Wafer has in 2010 and 2011experienced that contracts have not been complied with, renegotiated or terminated. If it is probable that a customer will not honor the contract based on individual assessment, REC has made downward adjustment of the estimated future cash flows. The cash flows in some contracts that are disputed by the customers have been reduced to the amount of any bank guarantee or zero. Future cash flows at December 31, 2011 have been decreased compared to the cash flows estimated at December 31, 2010 for the period from 2012 by USD 204 million. Cash flows have been reduced to the most likely amount, but are uncertain and the actual outcome could be higher or lower (see notes 25 and 30).

## **HEDGING ACTIVITIES 2011**

## Fair value hedging

REC ASA issued a NOK 1,250 million (REC01) 11 percent fixed rate bond in the third quarter 2009, with maturity in September 2014. The 11 percent fixed rate consists of a five year fixed interest plus a credit spread of 6.9 percent. At the same time, REC ASA entered into interest rate swaps to convert the fixed interest rate to a (six months) floating NIBOR rate. In April 2011, REC ASA issued two new senior unsecured bonds in the Norwegian market, NOK 500 million (RECO2) and NOK 700 million (RECO3) with five and seven year tenors respectively. As part of the bond offering, REC bought back NOK 600 million of the existing REC01 bond. REC ASA entered into interest rate swaps to convert the fixed interest rate of REC03 to a (six months) floating NIBOR rate. The fixed rate bonds REC01 of NOK 650 million remaining and REC03 of NOK 700 million in combinations with fixed-to-floating interest rate swaps, with matching terms and conditions as the bonds, have been designated as fair value hedge relationships.

The fair value of the interest rate derivatives at December 31, 2011 designated and effective as hedge instruments was a gain of NOK 61 million excluding accumulated interest, and a loss of NOK 61 million on the bonds.

## 2010

The tables below for 2010 are similar to tables above for 2011, refer to the descriptions above for more information.

# Contractual cash flows in foreign exchange forward contracts at December 31, 2010

		2011	2012
(CURRENCY IN MILLION)		FX FORWARD	FX FORWARD
BOUGHT CURRENCY	SEK/NOK	200	0
	SGD/NOK	200	100
	USD/NOK	35	0
SOLD CURRENCY	SEK/NOK	-100	0
	EUR/NOK	-609	-425
	USD/NOK	-250	-200

The SEK, EUR, SGD and USD currencies noted in the table above have spot rates to NOK of 0.87, 7.81, 4.56 and 5.86 at December 31, 2010.

REC increased SGD forward purchases significantly from the beginning of 2010 towards June 2010 for the repayment of a SGD loan. Compared to December 31, 2009 REC ASA increased USD, EUR and SGD future contracts in accordance with currency forecasts and the finance policy.

# Fair value of foreign exchange forward contracts at December 31, 2010

		2011	2012
(NOK IN MILLION)		FX FORWARD	FX FORWARD
BOUGHT CURRENCY	SEK/NOK	8	0
	SGD/NOK	-16	-3
	USD/NOK	2	0
SOLD CURRENCY	SEK/NOK	1	0
	EUR/NOK	381	131
	USD/NOK	187	45
Total		562	173

The main reason for the unrealized gains on FX Forwards at December 31,2010 was the appreciation of NOK versus EUR and USD compared to the time the contracts were entered into.

# Principal amounts and fair value of interest rate swaps at December 31, 2010

		2014 PRINCIPAL AMOUNT (CURRENCY IN MILLION)	2014 FAIR VALUE (NOK IN MILLION)
PAY FIXED RATE	USD	100	-38
RECEIVE FIXED RATE	NOK	1250	16
Total			-22

The interest rate swap of NOK 1,250 million, where REC is paying floating interest rate, was hedge of the fixed interest rate in a NOK bond and the USD fixed rate swap was general interest hedging of floating rate.

## Estimated contractual cash flows in embedded foreign exchange forward contracts at December 31, 2010

(USD IN MILLION)	TOTAL	2011	2012	2013	2014	2015
Total contract value	783	346	211	131	66	29

Future cash flows at December 31, 2010 were increased compared to the cash flows estimated at December 31, 2009 for the period from 2011 by USD 329 million, of which USD 182 million was a new contract.

## **HEDGING ACTIVITIES 2010**

## Cash flow hedging

REC Wafer used hedge accounting up to the fourth quarter of 2008 for parts of its cash flow hedging activities, primarily related to currency hedge of purchase of polysilicon in USD and sale of wafers in EUR. In the fourth quarter of 2008, REC Wafer discontinued its hedge accounting, and subsequently REC ASA and its subsidiaries have had no cash flow hedge accounting. However, amounts previously recognized in equity remained in equity until the forecasted transactions occurred. At December 31, 2010 there were no remaining currency and interest rate cash flow hedges. There was no ineffectiveness recognized in the statement of income that arose from cash flow hedges in 2010.

# Fair value hedging

REC ASA issued a NOK 1,250 million 11 percent fixed rate bond in the third quarter 2009, with maturity in September 2014. The 11 percent fixed rate consists of a five year fixed interest plus a credit spread of 6.9 percent. At the same time, REC ASA entered into interest rate swaps to convert the fixed interest rate to a (six months) floating NIBOR rate.

The fair value of the interest rate derivatives at December 31, 2010 designated and effective as hedge instruments was a gain of NOK 16 million excluding accumulated interest, and a loss of NOK 17 million on the bond.

#### 12 **DETAILS RECEIVABLES**

## Trade and other receivables

(NOK IN MILLION)	2011	2010
Trade receivables	2 145	2412
Less provision for impairment of trade receivables	-9	-102
Trade receivables - net	2 136	2310
Prepaid costs	87	127
VAT and other public taxes and duties receivables	102	286
Government grant current receivables	116	101
Other current receivables	111	129
Total trade and other receivables	2 553	2 953

## Specification of provision for loss on trade receivables

(NOK IN MILLION)	2011	2010
At January 1	-102	-2
Change in provision for loss	92	-102
Change in provision for loss  Exchange difference	1	2
At December 31	-9	-102
Realized loss on trade receivables	-127	-1
Change in provision	92	-102
Loss on trade receivables in the statement of income	-36	-103

The provisions for loss on receivables are based on individual assessments of receivables. The provisions are made to arrive at the best estimate of the amounts recoverable of the receivables, taking into consideration security, probabilities for different outcomes and inherent risk in legal proceedings. The provisions for losses at year-end 2010 were primarily related to two customers. Due to the difficult market situation, credit risk is generally regarded as increased at December 31, 2011 compared to the end of 2010. However, the individual assessments have concluded on only limited provisions for losses on trade receivables at December 31,2011. The actual outcomes may differ from the estimates (see also notes 3 and 30).

## Other non-current receivables etc.

(NOK IN MILLION)	2011	2010
Government grant non-current receivables	797	797
Finance receivables	140	165
Prepaid cost non-current	119	107
Shares available-for-sale	6	1
Total other non-current receivables etc.	1 091	1 085

#### 13 **INVENTORIES**

# Total cost of materials and change in inventories and write downs in the statement of income

(NOK IN MILLION)	2011	2010
Raw materials	-1 724	-1 560
Other material cost	-4 112	-3 938
Change in goods in progress	-150	-28
Change in finished goods	1 173	658
Write downs of inventories	-938	-112
Total cost of materials and changes in inventories and write downs	-5 750	-4 980

## Inventories in the statement of financial position at December 31

(NOK IN MILLION)	2011	2010
Stock of materials, consumables, production supplies	655	773
Spare parts Spare parts	630	554
Work in progress	246	277
Finished goods	1 303	950
Write downs of inventories	-451	-59
Total	2 383	2 495

The REC Group is integrated in the value chain, and REC entities sell goods to each other. Consequently, finished goods for one REC entity become raw materials or work in progress for another REC entity. The classification by the separate entities is also used in the classification in REC's consolidated financial statements.

Elimination of unrealized internal profits has reduced inventory values compared to the sum of the entities' values by NOK 80 million at December 31, 2011 (NOK 314 million at December 31, 2010). This is reported as reduction to stock of materials, consumables, production supplies by NOK 80 million, reduction to finished goods of NOK 220 million and has reduced write downs of inventories by NOK 220 million at December 31, 2011 (reduced stock of materials, consumables, production supplies by NOK 316 million and reduced write downs of inventories by NOK 2 million at December 31, 2010).

# Allocation of write downs of inventories at December 31, 2011

(NOK IN MILLION)	GROSS	WRITE DOWNS	NET
Stock of materials, consumables, production supplies	655	-97	558
Spare parts	630	-180	450
Work in progress	246	-5	241
Finished goods	1 303	-169	1 133
Write downs of inventories	-451	451	0
Total	2 383	0	2 383

During 2011 and at December 31, 2011 inventories have been written down to estimated net realizable values. Prices of finished products have decreased significantly during the year. The decisions in 2011 to close down the cell production and parts of the wafer production in Norway contributed to the main part of the write downs of stock of materials and spare parts.

Below is shown a reconciliation of the change in write downs of inventories in the statement of financial position. The amounts reported as write downs in the statement of income and as realized are affected by the frequency of the valuation and reporting of inventories and write downs. Generally, inventory valuation is performed each month, and this increases the gross amounts reported as write downs in the statement of income and as realized. Realization of write downs in a period may have to be estimated as this may not be generated by the inventory system. In addition comes any additional losses on inventories sold. Inventories that have been sold at a loss (compared to the valuation at the end of the previous month or produced and sold during the same month) will be included in other line items and not as write downs of inventories in the statement of income. Write downs of inventories in the statement of income and realized write downs are also affected by elimination of unrealized internal profits on consolidation, of which parts are recognized as a reduction to write downs made in the separate entities, based on estimates of internal profits and how much has been realized in the periods.

(NOK IN MILLION)	2011	2010
Write downs of inventories January 1 (statement of financial position)	-59	-101
Additional write downs during the year (statement of income)	-938	-113
Realization of written down inventories	554	153
Translation difference	-7	1
Write downs of inventories at December 31 (statement of financial position)	-451	-59

#### 14 **CASH AND CASH EQUIVALENTS**

(NOK IN MILLION)	2011	2010
Group account systems (cash pools)	1 411	555
Other bank deposits	185	294
Total cash and cash equivalents	1 596	849

The REC Group uses multi-currency Group account systems to coordinate liquidity use of subsidiaries. Under these agreements, REC ASA is the Group account holder, whereas other REC companies are participants and holds a position only against REC ASA. The banks can offset overdrafts against deposits, so that the net position represents the net balance between the bank and REC ASA. The Group account systems include overdraft facilities of in total NOK 350 million at December 31, 2011 and 2010.

The REC Group has purchased a bank guarantee in the favor of Bærum Municipality covering employees' tax deductions in REC ASA, REC Solar AS, REC Wafer Norway AS and REC ScanCell AS. At December 31, 2011, the guarantee amount was NOK 60 million (NOK 56 million at December 31, 2010).

#### 15 SHARFHOLDER INFORMATION

# The following shareholders had one percent or more of the total outstanding shares in REC ASA at December 31

		2011		2010
NAME OF SHAREHOLDER	NO. OF SHARES	OWNERSHIP	NO. OF SHARES	OWNERSHIP
Orkla ASA	396 236 635	39.74%	396 236 635	39.74%
Folketrygdfondet	28 175 871	2.83%	28 585 526	2.87%
Umoe AS	21 532 090	2.16%	14 000 000	1.40%
Verdipapirfondet DNB Nordic Technology	17 230 104	1.73%	1 274 153	0.13%
Bank of New York Mellon (Nominee)	17 117 998	1.72%	2741 283	0.27%
Skandinaviska Enskilda Banken (Nominee)	14 567 211	1.46%	7 243 720	0.73%
Holberg Norge	13 689 086	1.37%	6329086	0.63%
Skandinaviska Enskilda Banken (Nominee)	13 290 406	1.33%	3018815	0.30%
Hafslund Venture AS	0	0	89 037 031	8.93%
Rasmussengruppen AS	0	0	22 450 902	2.25%

At December 31, 2011, REC ASA had 29,251 shareholders (32,837 at December 31, 2010). The total number of outstanding shares at December 31, 2011 was 997,152,118 (unchanged from December 31, 2010) each with a par value of NOK 1.

At the Annual General Meeting on May 25, 2011, the Board was authorized to resolve to raise one or more convertible loans or loans with warrants to be used for carrying out investments and acquisitions in line with the Company's strategy and/or providing the Company with financial flexibility. The sum of the loans principal amount shall not exceed NOK 9,970,700,000 and the share capital increase shall not exceed NOK 99,700,000 or about ten percent of the existing share capital. The Board is authorized to waive existing shareholders' pre-emptive rights to subscribe for loans and shares. The authorization is valid until the 2012 Annual General Meeting, but in any event not later than 15 months from the authorization was given.

At the Annual General Meeting on May 25, 2011, the Board was authorized to acquire shares in the Company on behalf of the Company up to a maximum of 10 percent of the nominal value of the Company's share capital. The objectives of the authorization are specified to increase return to the shareholders by cancellation of shares, the fulfillment of the Company's obligation under the share purchase program for the employees, and in connection with the Company's share option program. The Board's purchase of shares under this mandate can be exercised between a minimum price of NOK  $1\,\mathrm{per}\,\mathrm{share}$  and a maximum of NOK 250 per share. The shares shall be acquired through ordinary purchase at the stock exchange. The authorization is valid until the next Annual General Meeting in 2012 or until withdrawal by a decision of the General Meeting by simple majority but in any event not longer than 15 months from the authorization was given.

At the Annual General Meeting on May 25, 2011, the Board was authorized to increase the share capital by up to NOK 99,700,000 through one or more increases in the share capital to be used for carrying out investments and acquisitions in line with the Company's strategy, including in the form of mergers and through consideration in kind, and/or for providing the Company with financial flexibility. Shares may be issued for contribution in form of cash or by transfer of other assets (contribution in kind). The Board is authorized to waive existing shareholders' pre-emptive rights to subscribe for shares. The authorization is valid until the 2012 Annual General Meeting, but in any event not later than 15 months from the authorization was given.

At the extraordinary General Meeting on June 5, 2009 the Board was authorized to raise one or more convertible loans in order to ensure financial flexibility, including in connection with capital expenditures and/or mergers and acquisitions. The share capital increase should not exceed NOK 60 million. The Board was authorized to waive the pre-emption rights of existing shareholders. The authorization was used by issuance of a convertible bond of EUR 320 million in October 2009. The bond may through conversion from the bond holders result in an increase of the share capital of NOK 59.3 million provided that no further adjustments of the conversion price takes place, and a maximum amount of NOK 60 million if such adjustments take place. The conversion price is EUR 5.40 per share. Further reference is made to note 17.

#### 16 COMPENSATION TO THE MANAGEMENT AND BOARD, LOANS AND SHAREHOLDINGS

According to the Norwegian Public Limited Companies Act § 6-16a, the Board of Directors shall establish a specific declaration regarding determination of salary and other compensation to leading employees. Also, according to the Norwegian Public Limited Company Act § 5-6 (3), an advisory voting on the Board of Director's guidelines for determining executives' compensation for the upcoming fiscal year shall be held at the General Meeting. If the guidelines include share based payment schemes, such schemes must be approved by the General Meeting.

Salary and other compensation to the Company's Board of Directors and leading employees for 2011 and 2010 are described below. In regards to determination of salary and other compensation for leading employees for the 2012 fiscal year, the Board of Directors will propose guidelines to the Annual General Meeting (AGM) 2012 that include factors mentioned below.

The competencies, performance and dedication of the Company's employees are critical success factors for the short term and long term value creation of REC. Hence, key compensation goals are to support attraction, development and retention of the right talent, reward past achievements, and incentivize future strong performance, world class operations capabilities, and practice of REC's core values. Compensation packages should be put together to support this.

Fixed base salary levels are determined locally and reflect local market average levels for corresponding positions and qualifications in relevant businesses.

Performance bonuses are considered and provided for selected individuals whose achievement of performance objectives can be measured through clearly defined results parameters/KPIs. Results parameters/KPIs include both financial performance targets for REC Group/business segments as well as individual performance targets tied to the individual's area of responsibility.

REC offers supplementary pension and personnel insurance schemes to employees in accordance with local standards for similar companies. Effective January 1, 2010, certain specific changes were made in the pension and personnel insurance arrangements for all Norwegian employees. The new schemes include a contribution plan for retirement benefits. Employees at January 1, 2010 that according to calculations are expected to earn less retirement pension funds in the new contribution plan compared to a paid up policy at the age of 67 in the previous defined benefit pension plan, are entitled to compensation (see note 19). REC offers an additional supplementary pension and

personnel insurance scheme to Norwegian employees with fixed base salary level above 12 G.

In addition to the above mentioned compensation components, REC offers a car allowance/company car, phone coverage and a limited number of other benefits to selected employees (see further below).

In addition to fixed base salary and performance bonus, REC's compensation plan for 2011 and 2010 included REC share options from REC's share option program for executives, key leaders and employees. The share option program was initiated in 2008. The REC Board will propose to the AGM 2012 to continue the share option program for 2012. The proposed 2012 program is similar to the 2011 program, and is structured in such a way that potential individual profits from the aggregate of all REC option programs during any one year are limited to 1-1.5 years fixed base salary (2 years fixed base salary for members of Group Management). The profit cap varies by participant categories and is defined individually.

The number of options allocated for 2011 was established based on the potential maximum profit cap earned over the six year program duration and subject to the following assumptions: 1) The REC share price development outperforms the Oslo Stock Exchange (OSE) by 25 percent, assuming an OSE annual average increase of ten percent. 2) The exercise price for the option was calculated as ten percent above the weighted average trading price on the allocation date May 27, 2011. The total number of options issued for 2011 was further reduced so that the total amount issued was limited to 0.8 percent of the outstanding shares (on a fully diluted basis) at the time of allocation. The number of options to be proposed allocated for the 2012 program will similarly be limited to a certain percentage of the total shares outstanding (on a fully diluted basis) at the time of allocation, based on a suggestion by the Board.

The first three years are considered a lock-up period. Exercising of options can take place in the fourth, fifth and sixth year, with four exercising periods per year. These periods will start after presentation of the quarterly financial results and last 14 days. Options not exercised are forfeited upon termination of the employment.

There will be an annual allocation subject to the Board of Directors' approval for each year. The Board of Directors will ask the AGM for approval of the guidelines for allocations and authorizations for issuing shares to support each year's program.

# $\label{lem:compensation} \textit{Compensation of the Group Management for 2011}$

(AMOUNTS IN NOK (IF NO	TOTHERWISE STATED))
------------------------	---------------------

NAME	BASE SALARY	BONUS EARNED AND MAX%	SHARE BASED PAYMENT	PENSION BENEFITS	OTHER TAXABLE BENEFITS
Ole Enger	5 096 105	1 065 000	197 985	348 739	215 833
President and CEO		100%			
John Andersen Jr.	3 021 616	550 000	49 723	422 911	187 513
EVP and COO		60%			
Erik Sauar (to September 30)	1 567 502	247 500	-892 025	177 261	64 882
SVP and CTO		50%			
Tore Torvund	2 675 049	605 748	208 111	329 631	2 036 716
EVP		60%			
Bjørn Brenna	2 434 817	440 000	-31 993	357 034	197 630
EVP and CFO		50%			
Øyvind Hasaas	1 959 411	330 000	70 334	302 242	43 543
EVP		40%			
Kristine Ryssdal	1 892 518	0	-780 789	288 002	169 843
SVP & CLO		50%			
Total 2011	18 647 018	3 238 248	-1 178 654	2 225 820	2915960

# $Compensation \, of \, the \, Group \, Management \, for \, 2010 \,$

(AMOUNTS	IN NOK (IF I	NOT OTHER	RWISE STATED))

NAME	BASE SALARY	BONUS EARNED AND MAX%	SHARE BASED PAYMENT	PENSION BENEFITS	OTHER TAXABLE BENEFITS	SEVERENCE PAY ETC.
Ole Enger	4 796 077	1 946 700	585 325	379314	212325	0
President and CEO		100%				
John Andersen Jr.	2 593 293	1 074 013	600 183	497 356	180 540	0
EVP and COO		60%				
Erik Sauar	2019145	597 618	510 424	313 188	84 620	0
SVP and CTO		50%				
Tore Torvund	2 786 436	1 134 039	383 731	344 375	1 981 751	0
EVP		60%				
Ingelise Arntsen (to March 1)	1 722 397	0	-534 898	183 129	256 803	1 089 498
EVP		60%				
Bjørn Brenna	2 366 710	812765	638 238	453 101	190 168	0
EVP and CFO		50%				
Svànaug Bergland (to October 15)	1 394 480	272 349	342 425	212 665	174 416	0
SVP		50%				
Øyvind Hasaas (from October 15)	418 919	122917	42 456	132 421	137 085	0
EVP		40%				
Einar Kilde (to September 3)	1 991 019	0	-504 596	242 994	117 025	0
EVP Projects / Wafer		60%				
Matthew Shippey (to November 24)	1 543 573	0	-48 745	0	1 366 236	531 995
EVP Projects		20%				
Kristine Ryssdal	1 836 633	539 823	457 596	299 441	171 616	0
SVP & CLO		50%				
Total 2010	23 468 683	6 500 224	2 472 139	3 057 983	4 872 584	1 621 493

All amounts are exclusive of social security tax. Compensation in foreign currencies has been translated to NOK at average exchange rates for the relevant years, except for bonuses which are calculated at year-end rates. All amounts include payments and benefits from REC ASA and subsidiaries to the Group Management. There were no payments and benefits from REC companies for services outside the function as Group Management, except for Øyvind Hasaas that for 2010 and 2011 received parts of his compensation from REC ASA and parts from REC Site Services Pte. Ltd.

Changes to the Group Management in 2011 and in the beginning of 2012: Erik Sauar resigned as CTO effective September 30, 2011 and has since then not been a member of the Group Management. He will, however, continue as a part time strategic advisor and technology reviewer in many of the most important technology projects in REC. At the end of the year, CLO Kristine Ryssdal resigned effective February 29, 2012. She will leave REC ASA, and she will be a part of Group Management until February 29, 2012. Mr. Florian Krumbacher has been appointed SVP & CLO and member of Group Management effective March 1, 2012. Mr. Alessandro Perrotta has been employed as EVP Wafers, Cells & Modules and will be a member of Group Management from March 1, 2012. Mr. John Andersen jr. has resigned from his position as EVP Wafer, Cells & Modules with effect from March 1, 2012, but will continue to be a part of Group Management as EVP & Group COO.

Changes to the Group Management in 2010: Ingelise Arntsen resigned on March 1, 2010, Einar Kilde on September 3 and Matthew Shippey on November 24. Øyvind Hasaas was appointed EVP Human Resource & Organizational Development and became a member of the Group Management from October 15. Svanaug Bergland was from the same date not a part of the Group Management.

The guidelines for 2011 for determination of salary and other compensations for leading employees has been as outlined above. The only changes in the compensation agreements for leading employees during 2011 are adjustments of the amounts, as shown in the tables above, and the changes in the composition of the Group Management.

The amounts in the tables are for months being part of Group Management for persons that have taken a position during the relevant year and those that have left the Group Management but still are employed by the company. For 2011 this is relevant for Erik Sauar. For persons that left the Group Management and the company, the amounts include all earned taxable remuneration and earned bonus during the year. For 2010 this is relevant for Ingelise Arntsen, Einar Kilde and Matthew Shippey.

Base salary in the tables above represents the amounts, including holiday pay that has been paid in the year (and for those that have stepped out of the Group Management and also terminated employment in the same year it also includes holiday pay earned and paid in the year). Fixed base salary is normally adjusted at January 1.

The bonuses are annual performance bonuses that are not to exceed the stated percentage of fixed base salary. The amounts in the tables above represent the bonuses earned during the fiscal year, and are normally paid and reported as taxable income for the employee in the subsequent year. The bonus amounts should be understood as the total of the bonus and vacation pay on the bonus, if appropriate. The purpose of the bonus scheme is to attract and retain the right talent and to award and incentivize outstanding, value-creating performance.

In 2008, a REC share option program was established. The share option program is further described above and in note 23, and the number of options for the Group Management is shown in a table below. The estimated fair values of the options are expensed over the estimated vesting periods, and the amounts shown in the preceding tables are the amounts expensed in the relevant year. The amounts expensed for 2011 have been reduced due the extension of the expected vesting periods from three to six years, except for the 2011 program. Negative amounts for share based payment in the tables represent forfeitures of options upon termination of employment, except for Bjørn Brenna in 2011.

The amounts in the tables for pension benefits include for defined benefit obligations the relevant year's earning of benefits including interest on the balance, and change in accumulated benefit obligation for the year for Mr. Enger's individual plan, and the expense (premiums) for the year for defined contribution plans. See note 19 for further description of the plans.

Other taxable benefits include benefits like company car / coverage of automobile expenses / vehicle allowance, telephone and Internet service, newspapers, health club memberships, reimbursement of home-office related expenses and certain other benefits. The benefits vary, and the amounts in the table are the amounts that are reported as taxable income in the relevant year, based on rules and regulations in the relevant tax laws. Bonus payments are not included because earned bonus is reported separately. In 2006 and 2007 a long term incentive plan was reported in full for these years, and subsequent payments (last time in 2010) of the earned amounts are consequently not included. Ingelise Arntsen has in addition received commuting housing allowance and coverage of expenses for commuting in 2010, and Øyvind Hasaas has received commuting housing allowance in 2010 and 2011, which are not taxable benefits and not included in the tables.

The severance payments etc for EVP Ingelise Arntsen in 2010 were according to the termination agreement. Ms. Arntsen was entitled to a severance payment equal to six months of her salary. In addition she received remuneration according to her employment contract in the normal notice period of six months.

Mr. Shippey was offered a severance of two months extended salary and compensation and continuation of schooling allowance for his daughters in Singapore for an additional period of five months.

The following other members of the Group Management have arrangements that at December 31, 2011 and 2010 entitle them to special benefits if the employment is terminated, beyond the normal notice period of six months.

Mr. Enger's employment contract is automatically terminated at the time he reaches 65 years of age, unless a prolongation is agreed. Mr. Enger is born on March 14, 1948. In the event that Mr. Enger's contract is terminated by REC, he is entitled to a severance payment equal to one month of his salary.

In the event that Mr. Andersen's contract is terminated by REC, he is entitled to a severance payment equal to six months of salary.

Mr. Brenna is entitled to a severance payment equal to 12 months of his salary if his contract is terminated. In the event of dismissal, Mr. Brenna would be entitled to the first six months of the compensation, but any amounts in excess of this that he receives from another employer would be deducted from the balance.

Ms. Bergland was entitled to two years' salary in the event of her early termination. In the event of dismissal, Ms. Bergland would be entitled to the first twelve months of the compensation, but any amounts in excess of this that she receives from another employer would be deducted from the balance. Ms. Bergland left REC ASA at the end of 2011. As she at December 31, 2010 and 2011 no longer was part of Group Management, no amounts of severance pay etc. is shown in the tables for 2010 or 2011.

In the event that Mr. Sauar's contract is terminated by REC, he is entitled to a severance payment equal to six months of his salary.

In the event that Mr. Torvund's contract is terminated by REC, he is entitled to a severance payment equal to six months of his salary.

In the event that Ms. Ryssdal's contract is terminated by REC, she is entitled to a severance payment equal to six months of her salary. Any amount in excess of this that she receives from another employer would be deducted from the balance.

In the event that Mr. Hasaas's contract is terminated by REC, he is entitled to a severance payment equal to six months of his salary. Any amount in excess of this that he receives from another employer would be deducted from the balance.

In addition to the above Mr. Brenna, Mr. Torvund and Mr. Hasaas have signed stay-on agreements that entitle them to  $12\,\mathrm{months}$  base salary if they stay with the company until December 31, 2013. They will also be entitled to  $12\,\mathrm{months}$  base salary if REC terminates their employment without cause or due to reasons relating to the company before this date.

Silje Johnsen (employee representative in the Board of Directors) has signed a stay-on agreement that entitles her to 12 months base salary if she stays with the company until December 31,2013. She will also be entitled to 12 months base salary if REC terminates her employment without cause or due to reasons relating to the company before this date.

Tommy Kristensen (employee representative in the Board of Directors) has signed a stay-on agreement that entitles him to NOK 160.000 if he stays with the company until April 1,2012. He will also be entitled to NOK 160,000 if REC terminates his employment without cause or due to reasons relating to the company before this date.

No other members of the Board of Directors have service contracts with the REC Group that provide for benefits upon termination of employment.

# Compensation of the Board of Directors paid in 2011

(AMOUNTS IN NOK)

NAME	BOARD COMPENSATION	COMPENSATION FOR COMMITTEES
Bjørn Wiggen/Dag Opedal 1)2)	425 000	50 000
Tore Schiøtz	250 000	50 000
Odd Christopher Hansen	250 000	50 000
Hilde Myrberg <sup>1)</sup>	250 000	50 000
Svein Tore Holsether/Roar Engeland 1)2)	250 000	50 000
Bernt Reitan	250 000	50 000
Susanne Munch Thore (Member to May 25, 2011) <sup>1)</sup>	250 000	50 000
Helene Vibbleus Bergquist	250 000	50 000
Total period May 19, 2010 – May 25, 2011	2 175 000	400 000

1) Compensation paid to the companies in which they are employed.

<sup>2)</sup> Dag Opedal was Chairman to March 9, 2011, and was replaced by Bjørn Wiggen.

<sup>2)</sup> Roar Engeland was member to March 9, 2011, and was replaced by Svein Tore Holsether.

# Compensation of the Board of Directors paid in 2010

AMOUNTS IN NOI	۲١

NAME	BOARD COMPENSATION	COMPENSATION FOR COMMITTEES
Dag Opedal <sup>1)</sup>	425 000	50 000
Tore Schiøtz	250 000	50 000
Odd Christopher Hansen	250 000	50 000
Hilde Myrberg <sup>1)</sup>	250 000	50 000
Roar Engeland <sup>1)</sup>	250 000	50 000
Grace Reksten Skaugen	250 000	50 000
Susanne Munch Thore 1)	250 000	50 000
Total period May 19, 2009 – May 19, 2010	1 925 000	350 000

<sup>1)</sup> Compensation paid to the companies in which they are employed.

# Compensation of employee elected Board members paid in 2011

(AMOUNTS I	NI NIUK)

NAME	BOARD COMPENSATION	COMPENSATION FOR COMMITTEES
Tommy Kristensen	250 000	0
Rolf B. Nilsen	250 000	50 000
Anders Langerød (Member up to May 25, 2011)	250 000	0
Unni Iren Kristiansen (Member up to May 25, 2011) 1)	226 712	50 000
Silje Johnsen (Member from May 25, 2011) 1)	23 288	0
Total period May 19, 2010 – May 25, 2011	1 000 000	100 000

<sup>1)</sup> Silje Johnsen was deputy for Unni Iren Kristiansen.

# Compensation of employee elected Board members paid in 2010

AMOUNTS IN NOK

NAME	BOARD COMPENSATION	COMPENSATION FOR COMMITTEES
Tommy Kristensen	250 000	0
Anders Langerød	250 000	0
Rolf B. Nilsen	250 000	50 000
Silje Johnsen (March 1 - May 25, 2010)	54 795	0
Unni Iren Kristiansen (excl. March 1 - May 25, 2010)	195 208	39 042
Total period May 19, 2009 – May 19, 2010	1 000 003	89 042

The amounts in the tables represent the amounts that were paid in 2011 and 2010, respectively and that were approved by the AGM as compensation for the periods between the AGMs. Compensation of the Board of Directors for the period May 25, 2011 to May 22, 2012, will be decided by the AGM on May 22, 2012.

Committees are: Audit Committee, Compensation Committee and Corporate Governance Committee.

None of the shareholder elected Board members received compensation from any other REC Group companies. Any compensation received by other companies outside the REC Group is not included.

## Ordinary salary etc. for employee elected Board members 2011

(AMOUNTS IN NOK)				
NAME	SALARY PAID	BONUS EARNED	PENSION BENEFITS	OTHER TAXABLE BENEFITS
Tommy Kristensen	396 466	0	32790	9 763
Rolf B. Nilsen	417 090	3 241	21 753	4 000
Anders Langerød (Member up to May 25, 2011)	194 573	833	6 5 4 0	0
Unni Iren Kristiansen (Member up to May 25, 2011)	229 356	22 997	33 592	5 960
Silje Johnsen (Member from May 25, 2011)	540 576	73 509	44 261	9 1 5 7
Hans Ødegård (Member from May 25, 2011)	259 841	167	13 138	2333
Total 2011	2 037 901	100748	152 075	31 214

## Ordinary salary etc. for employee elected Board members 2010

(AMOUNTS IN NOK)				
NAME	SALARY PAID	BONUS EARNED	PENSION BENEFITS	OTHER TAXABLE BENEFITS
Tommy Kristensen	484 175	0	30 741	4 472
Anders Langerød	403 739	22 631	16 553	9 3 5 7
Rolf B. Nilsen	394 794	36 152	22 072	11 095
Silje Johnsen (March 1 - May 25)	213 548	52 421	20 748	8 261
Unni Iren Kristiansen (excl. March 1 - May 25)	490 648	45 160	45 366	13 448
Total 2010	1 986 904	156 364	135 479	46 633

Amounts for employee elected Board members are calculated for the period of being a part of the Board.

# LOANS AND GUARANTEES FOR GROUP MANAGEMENT, BOARD OF DIRECTORS AND SHAREHOLDERS

This information for the Group Management and Board of Directors relates to those that were members at the relevant points in time.

At December 31, 2011 there were no outstanding loans or guarantees to members of Group Management, Board members or shareholders or their closely related parties, except for purchased bank guarantee by the company for the unfunded defined benefit obligations. This guarantee is for all relevant employees. At December 31, 2010 there were loans outstanding in the employee share purchase program, with NOK 25,666 for each of the following: Ole Enger, John Andersen Jr., Erik Sauar, Bjørn Brenna, Kristine Ryssdal and Øyvind Hasaas.

Except for loans to employees as described in note 24, no Board member or other shareholders than mentioned above, including their closely related parties had any loans or guarantees at the relevant periods in time.

## **SHAREHOLDINGS AND OPTIONS**

The number of shares and options owned by members of the Board of Directors and the REC Group Management, including their closely related parties, are shown in the table below. The table includes those that were members at December 31, 2011 or 2010.

	OPT	IONS	SH	SHARES	
NAME	2011	2010	2011	2010	
Ole Enger	1 149 131	559 146	32 941	32941	
John Andersen Jr.	872 935	395 503	292 798	292 798	
Erik Sauar (shares also through Sauar Invest AS)	NA	334 756	NA	257 467	
Bjørn Brenna (shares also through RBBR Invest AS)	768 554	382 380	85 511	85 511	
Øyvind Hasaas	581 199	251 162	6 065	6 065	
Kristine Ryssdal	0	306 575	3 085	3 085	
Tore Torvund	839 224	444 241	16 486	16 486	
Tore Schiøtz (shares through Granhaug Industrier AS)	0	0	558 017	558 017	
Roar Engeland (Member to March 9, 2011)	NA	0	NA	150 000	
Odd Christopher Hansen	0	0	100 000	50 000	
Bernt Reitan (shares through Bekerei AS)	0	0	30 000	0	
Svein Tore Holsether (Member from March 9, 2011)	0	NA	15 000	NA	
Rolf B. Nilsen	0	0	1 681	1 681	
Unni Iren Kristiansen (Member up to May 25, 2011)	NA	0	NA	4 044	
Silje Johnsen (Member from May 25, 2011)	0	NA	3 569	NA	

## Details of options outstanding at December 31, 2011

	TOTAL NO.	2011	PROGRAM	2010	2010 PROGRAM		10 PROGRAM 2009 PROGRAM		2008	3 PROGRAM
NAME	DEC 31, 2011	NUMBER	STRIKE PRICE	NUMBER	STRIKE PRICE	NUMBER	STRIKE PRICE	NUMBER	STRIKE PRICE	
Ole Enger	1 149 131	563 195	13.57	420 184	20.61	165 752	50.72	0	NA	
John Andersen Jr.	872 935	450 046	13.57	271 763	20.61	123 593	44.00	27 532	130.53	
Bjørn Brenna	768 554	357 791	13.57	258 365	20.61	117 499	44.00	34 899	130.53	
Øyvind Hasaas	581 199	313 067	13.57	173 539	20.61	78 954	44.00	15 639	130.53	
Tore Torvund	839 224	377 915	13.57	355711	20.61	105 598	44.00	0	NA	

Refer to the description above and note 32 for details of the share option program. In 2011, according to the terms and conditions of the programs the compensation committee of REC ASA adjusted the strike price and number of options granted in the 2008 and 2009 programs to compensate for the dilutive effects of the rights issues in 2009 and 2010.

#### 17 **BORROWINGS**

# Financial liabilities, interest bearing

(NOK IN MILLION)	2011	2010
Non-current financial liabilities, interest bearing		
Bank borrowings (REC ASA)	2 035	3 075
Eksportfinans (REC ASA and REC Singapore)	0	1 132
NOK bonds (REC ASA)	1 912	1 267
Up-front loan fees etc. (amortized as part of effective interest)	-16	-64
EUR convertible bond (REC ASA)	1 315	2 1 7 5
Finance lease liabilities (REC Wafer and REC ScanCell)	868	1008
Total non-current financial liabilities, interest bearing	6 113	8 592
Current financial liabilities, interest bearing		
Current portions of finance lease liabilities (REC Wafer and REC ScanCell)	186	162
Eksportfinans (REC ASA and REC Singapore)	0	115
Up-front loan fees etc. (amortized as part of effective interest)	-27	-84
Total current financial liabilities, interest bearing	159	194
Total financial liabilities, interest bearing	6 272	8 786

On May 25, 2010 REC signed a new bank credit and guarantee facilities agreement of NOK 10 billion. Trough syndication REC established a relationship bank group consisting of Citigroup, DNB, Handelsbanken, HSBC, Nordea, and SEB. The bank credit and guarantee facilities are available for general corporate purposes. In addition, two new loan facilities of a total of NOK 1.3 billion were signed with Eksportfinans, of which NOK 0.87 billion was guaranteed by GIEK. NOK 0.4 billion of the total bank facilities were utilized as guarantee for parts of the Eksportfinans loans, leaving almost NOK 9.6 billion as a revolving credit facility at December 31, 2010. In May 2010, the two previous bank credit and guarantee facilities from 2006 and 2008 were terminated and repaid with EUR 758 million. An unutilized NOK 525 million credit facility was also terminated. In addition, a bilateral SGD loan guaranteed by the same bank facilities

was terminated and repaid with SGD 654 million. Additional up-front fees were incurred in relation to the new facilities.

On March 16, 2011 REC cancelled and repaid the NOK 1.3 billion loans from Eksportfinans. On March 31, 2011 REC cancelled NOK 1.4 billion of the NOK 10 billion bank credit and guarantee facilities agreement leaving almost NOK 8.6 billion as a revolving credit facility. At the same time the relationship bank group was extended to include the Singapore bank UOB.

In April 2011, REC ASA issued new senior unsecured bonds in the Norwegian market; NOK 500 million (REC02) and NOK 700 million (RECO3) with five and seven year tenors respectively. As part of the bond offering, REC bought back NOK 600 million of the existing

NOK 1,250 million bond (REC01) for a total of NOK 660 million. The primary purpose of the transactions was to extend the company's debt maturity profile.

In October 2009, REC ASA issued a EUR 320 million convertible bond. The subordinated unsecured convertible bond has an annual coupon of 6.50 percent, payable quarterly in arrears on the specified payment dates. At issue it had a conversion price of EUR 6.49 per share that was adjusted to EUR 5.40 per share due to the dilution effect of the rights issue in May 2010. The convertible bond was issued and will be redeemed at 100 percent of its principal amount and will, unless previously redeemed, converted or purchased and cancelled, mature on June 4, 2014. REC has the right to convert the bond into ordinary shares at any time on or after January 4, 2013, provided that the value of the underlying shares on the Oslo Stock Exchange (translated into EUR) on at least twenty trading days within a period of thirty consecutive trading days has exceeded 150 percent of the principal amount of the outstanding bond.

At December 31, 2011 the bank revolving credit facility contain financial covenants and other restrictions. Neither the senior NOK bonds nor the convertible EUR bond contains financial covenants. However, there is cross default between all the loan agreements above a certain threshold amount. According to REC's finance policy, REC shall at all times maintain financial ratios within the limits defined in the loan agreements of REC ASA and subsidiaries, and take the necessary measures that are available to avoid financial distress. Taking into account the market volatility

and the risk related to future cash flow, REC is according to its finance policy targeting an average maturity on the debt portfolio above 3 years. At December 31, 2011 the average maturity is approximately 2.7 (approximately 2.9 at December 31, 2010, and including finance lease liabilities) and REC will evaluate opportunities to increase debt maturity.

The bank debt and the Norwegian bonds are all senior debt while the convertible bond of EUR 320 million is subordinated. All the loans and credit facilities agreements have negative pledge clauses with certain threshold amounts. The loans and credit facilities, except for the subordinated convertible bond of EUR 320 million and finance leases, are guaranteed by REC ASA and material subsidiaries (see note R to the annual financial statements of REC ASA). Finance lease liabilities are effectively secured as the rights to the leased assets revert to the lessor in the event of default (see note 6).

The calculations of financial covenants have certain adjustments compared to the reported IFRS numbers. Please refer to note 3 for further information on the covenants and other restrictions. At December 31, 2011, REC complied with all financial covenants and other restrictions in the loan agreements.

REC ASA's bank credit and guarantee facility has limits defined in NOK even if the majority of this debt will be drawn and serviced by other currencies (e.g. EUR and USD). The NOK exchange rate affects the amounts available under the multi-currency credit facility with limits determined in NOK as REC mainly will borrow in USD and EUR.

## The following are the contractual maturities of financial liabilities

MATURITY ANALYSIS - CONTRACTUAL PAYMENTS TO BE MADE

AT DECEMBER 31, 2011	6100///	TOTAL						
(NOK IN MILLION)	CARRYING AMOUNT	EXPECTED PAYMENTS	2012	2013	2014	2015	2016	AFTER 2016
Bank borrowings (REC ASA)	2 0 3 5	2134	70	2 0 6 4	0	0	0	0
NOK bonds (REC ASA)	1912	2560	161	161	792	96	571	779
Up-front loan fees*	- 43	0	0	0	0	0	0	0
EUR convertible bond (REC ASA)	1315	2871	161	161	2 548	0	0	0
Finance lease liabilities (REC Wafer and REC ScanCell)	1054	1 252	237	222	193	175	151	274
Total	6 272	8818	629	2 609	3 534	271	722	1 053

<sup>\*</sup> Amortized as part of effective interest.

MATURITY ANALYSIS - CONTRACTUAL PAYMENTS TO BE MADE

AT DECEMBER 31, 2010	CADDVING	TOTAL	0.614	6 1214				AETED
(NOK IN MILLION)	CARRYING AMOUNT	EXPECTED PAYMENTS	0-6 M 2011	6-12 M 2011	2012	2013	2014	AFTER 2014
Bank borrowings (REC ASA)	3 075	3 655	124	124	239	3 168	0	0
Eksportfinans (REC ASA and REC Singapore)	1 247	1 435	100	98	190	1 046	0	0
NOK bond (REC ASA)	1 267	1771	69	69	138	138	1 359	0
Up-front loan fees*	-148	0	0	0	0	0	0	0
EUR convertible bond (REC ASA)	2175	3 055	81	81	163	163	2 5 6 8	0
Finance lease liabilities (REC Wafer and REC ScanCell)	1170	1418	110	109	218	213	184	584
Total	8 786	11 335	483	481	948	4727	4110	584

<sup>\*</sup> Amortized as part of effective interest.

The fixed interest rate NOK bonds REC01 and REC03 are effectively swapped to variable 6 months NIBOR plus margins on the loans that were established at the time of the bond offerings (the margins are 6.9 percent in REC01 and 5.25 percent in REC03). The swapped variable interest rate was 10.08 percent for REC01 and 8.44 percent for REC03 at December 31, 2011. The swapped variable interest rate for REC01 at December 31, 2010 was 9.8 percent. Due to the effective fair value hedge of the fixed interest, the net interest rate reported in the statement of income is the variable rate. In the maturity analysis tables the fixed interest rates of 11 percent for REC01 and 9.75 percent for REC03 are used. Interest on the floating rate NOK bond (RECO2) is determined every three month and based on the NIBOR rate plus a fixed margin of 4.35 percent.

The differences between carrying amount and total expected payments in the tables above represent primarily interest and fair value adjustments. Interest payments are estimated using the interest rates at December 31, 2011 and 2010, respectively. Commitment fees on undrawn amounts under the credit and guarantee facilities are calculated using the commitment fee margins at the respective year-ends, and are included as payment of interest for bank borrowings. All cash flows are undiscounted. Amounts in other currencies than NOK are translated at the exchange rates at December 31, 2011 and 2010, respectively.

Bank borrowings in REC ASA are revolving credit facilities. Under the total credit facilities, REC ASA may draw and repay amounts drawn at intervals of one, three, six or twelve months, at REC ASA's choice. The amounts at December 31, were drawn at one (only 2010) or three month (both 2010 and 2011) intervals. However, the contractual payments in the tables above are based on the contractual repayment dates of the tranches as described above.

#### The nominal interest rates and currency distribution (notional amounts) at December 31, 2011 were as follows

	INTERES	TRATE (%)	CURRENCY	AMOUNTS IN MILLION CURRENCY	BORROWER
Bank overdrafts	2.3	Variable	NOK	0	REC ASA
Bank borrowings	2.8	Variable	EUR	2	REC ASA
Bank borrowings	1.7	Variable	USD	337	REC ASA
NOK bond REC01	11.0	Fixed	NOK	650	REC ASA
NOK bond REC02	7.3	Variable	NOK	500	REC ASA
NOK bond REC03	9.8	Fixed	NOK	700	REC ASA
EUR convertible bond	6.5	Fixed	EUR	320	REC ASA
Finance leases	6.7	Fixed	NOK	193	REC ScanCell
Finance leases	3.4 - 11.1	Fixed	NOK	861	REC Wafer

#### The nominal interest rates and currency distribution (notional amounts) at December 31, 2010 were as follows

	INTERES	T RATE (%)	CURRENCY	AMOUNTS IN MILLION CURRENCY	BORROWER
Bank overdrafts	2.2	Variable	NOK	0	REC ASA
Bank borrowings	5.3	Variable	EUR	75	REC ASA
Bank borrowings	5.2	Variable	USD	425	REC ASA
Eksportfinans	7.0	Variable	EUR	42	REC ASA
Eksportfinans	6.8	Variable	EUR	118	REC Singapore
NOK bond	11.0	Fixed	NOK	1 250	REC ASA
EUR convertible bond	6.5	Fixed	EUR	320	REC ASA
Finance leases	6.7	Fixed	NOK	205	REC ScanCell
Finance leases	3.4 - 11.6	Fixed	NOK	965	REC Wafer

Interest rates on bank borrowings and Eksportfinans loans (up to March 2011) consist of XIBOR (three, six or twelve months) plus a margin. The margin is determined for three months at the time based on the ratio of net debt to EBITDA. In addition REC ASA has to pay commitment fees for undrawn amounts under the bank credit and guarantee facilities and has already paid up-front loan fees etc. The commitment fees also vary based on the ratio of net debt to EBITDA. Consequently, the effective interest rates for most borrowings are higher than the nominal interest rates.

Total undrawn revolving bank credit facilities were NOK 6.5 billion at December 31, 2011, the same at December 31, 2010. This does not include NOK 350 million overdraft facility in the Group account system. Starting at the end of the first quarter 2012, the total amounts available in the revolving bank credit facilities will be reduced by NOK 350 million quarterly. The residual principal amount shall be repaid in the beginning of June 2013.

See note 33 for amendments to the bank credit facility agreement after the reporting period.

# 18 INCOME TAX EXPENSE AND DEFERRED TAX ASSETS AND LIABILITIES

#### Recognized income tax expense

(NOK IN MILLION)	2011	2010
Current income tax expense (-) / benefit (+)	234	166
Deferred tax expense (-) / benefit (+)	-960	-1 095
Total income tax expense (-) / benefit (+) in the statement of income from continuing operations	-726	-930

Current income tax expense includes benefits of NOK 68 million for 2011 and NOK 88 million for 2010 as adjustments of prior periods. Deferred tax expense include expenses of NOK 94 million for 2011 and NOK 78 million for 2010, as adjustments of prior periods. Current income tax benefits relate primarily to reclaiming of previously paid income tax in REC Silicon in both years presented, and a reclassification for 2011. The reclassification in 2011 is to change in deferred tax assets as REC ASA provided group contribution to subsidiaries to utilize tax losses and consequently did not pay the current tax expense and liability recognized in 2010.

The tax on the Group's profit/loss before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits/losses of the consolidated and proportionally consolidated companies as follows

(NOK IN MILLION)	2011	2010
Profit/loss before tax from continuing operations	-9 303	1818
Tax calculated at domestic tax rates applicable to profits /losses in the respective countries	1 868	-670
Effects of changes in tax rates and use of another tax rate for parts of profits /losses	44	6
Tax credits, expenses deductible only for tax, and income not subject to tax	1801	5
Results not taxable (Singapore)	-673	-234
Expenses not deductible for tax purposes	-3	-7
Effects of not recognized deferred tax assets, including reversal of previous years'	-3 711	-40
Results from associated companies	-27	0
Adjustment of prior year's income taxes	-26	10
Total income tax expense (-) / benefit (+) in the statement of income from continuing operations	-726	-930
Effective tax rate	-8%	51%

The tax expense for 2011 is affected by non-recognition of deferred tax assets, marginal tax effects in Singapore and estimated 36 percent effective tax rate on profits of REC Silicon in the USA. Deferred tax assets have to a limited degree been recognized on the impairment charges. Also, as a consequence of recent losses and reduced expectations to future profits in Norway, net deferred tax assets have not been recognized and previously recognized deferred tax assets have been reversed in 2011.

The total income taxes for 2010 were affected by losses that were not tax deductible and recognition of deferred tax liabilities related to the operations in Singapore and 36 percent effective tax rate on profits of REC Silicon in the USA.

The income tax calculation for the REC Group is primarily based on corporate income tax rates of 28 percent in Norway, 36 percent in the USA (36.5 percent in 2010), 17 percent in Singapore, 26.3 percent in Sweden and above 30 percent in a number of other European countries.

The line item in the table above "effects of changes in tax rates and use of another tax rate for parts of profits /losses" in 2011 is evenly split between change in estimated tax rate for REC Silicon in the USA due to allocation of income between the states, and calculation of deferred tax on unrealized internal profits on inventories based on the tax rate used for the entity holding the inventory compared to 28 percent tax rate.

The line item "tax credits, expenses deductible only for tax and income not subject to tax" for 2011 is primarily realized losses on some of REC ASA's loans to Norwegian subsidiaries, giving rise to an estimated tax benefit of NOK 1,799 million. The losses were realized through conversion of loans to shareholder's equity before the Norwegian tax law was changed on October 16, 2011.

A 17 percent tax rate has been applied for profit or loss items related to Singapore in the table in the line item "tax calculated at domestic tax rates applicable to profits/losses in the respective countries". However, only limited income tax has been recognized on the losses and on unrealized internal profits on inventories in the Singapore operations, due to a tax exempt period. This explains the main part of the amounts in the line item "results not taxable (Singapore)". For 2011 it also includes a deferred tax benefit of approximately NOK 70 million, and in 2010 a deferred tax expense (and liability) of approximately NOK 80 million for estimated un-reversed tax liabilities. In 2010 this

was estimated to be un-reversed deferred tax liabilities on fixed assets at the end of the tax-free period. The amount for 2011 is a reversal of the amount from 2010 due to the significant impairment of fixed assets in 2011. In addition, a deferred tax benefit of NOK 63 million was recognized in 2011 as a reversal of the deferred tax liability recognized at year-end 2010 on prepaid royalties from the Singapore operations to REC Wafer in Norway. In 2010 REC recognized deferred tax expenses of NOK 84 million (using 28 percent tax rate) on these royalties.

Net deferred tax assets have not been recognized in Norway in 2011, which is the main effect in the line item "effects of not recognized deferred tax assets, including reversal of previous years". Net deferred tax assets not recognized in 2010 were primarily related to REC ScanModule in Sweden, REC ScanCell in Norway and REC Systems, whilst other deferred tax assets not recognized in 2009 related to the Norwegian operations were realized or recognized in 2010.

The line item "adjustment of prior year's income taxes" for 2011 relates primarily to REC Silicon in the USA.

The income tax for REC Silicon in the USA is based on nominal 35 percent federal tax rate plus estimated blended state taxes. The effective tax rate for REC Silicon in the USA was 36 percent for 2011 and 2010.

#### Income tax assets and liabilities in the statement of financial position

(NOK IN MILLION)	2011	2010
Current tax assets	70	319
Current tax liabilities	29	200
Net current tax assets (+) / liabilities (-)	41	120
	•	•••••••••••••••••••••••••••••••••••••••
Deferred tax assets	5	336
Deferred tax liabilities	2 518	1804
Net deferred tax assets (+) / liabilities (-)	-2 512	-1 468

Current tax assets at December 31, 2011 and 2010 relates primarily to REC Silicon in the USA.

#### Estimation of the amounts of deferred tax assets and liabilities that may be recovered or settled within and after 12 months, based on the statement of financial position classification as current and non-current are as follows

(NOK IN MILLION)	2011	2010
Deferred tax assets		
Deferred tax asset to be recovered after 12 months	695	832
Deferred tax asset to be recovered within 12 months	149	316
Offset deferred tax assets and liabilities	-839	-812
Total	5	336
Deferred tax liabilities		
Deferred tax liability to be settled after 12 months	3 250	2196
Deferred tax liability to be settled within 12 months	106	420
Offset deferred tax assets and liabilities	-839	-812
Total	2 5 1 8	1804
Net deferred tax liabilities	-2 512	-1 468

Tax losses and tax credits carried forward are presented as deferred tax assets to be recovered after 12 months in the table above.

# The following are the major deferred tax liabilities (-) and assets (+) recognized by the Group and movements during 2010

(NOK IN MILLION)	BALANCE JAN 1, 2010	RECOGNIZED IN INCOME	RECOGNIZED IN OCI/EQUITY	TRANSLATION DIFFERENCE	BALANCE DEC 31, 2010
Total non-current assets	-912	-1118	0	16	-2014
Total current assets	132	-150	0	1	-18
Total non-current liabilities	75	-41	-7	-2	25
Total current liabilities	236	-334	8	4	-87
Tax losses and tax credits carry-forward recognized	83	548	0	-5	625
Total	-387	-1 096	1	15	-1 468

# The following are the major deferred tax liabilities (-) and assets (+) recognized by the Group and movements during 2011

(NOK IN MILLION)	BALANCE JAN 1, 2011	RECOGNIZED IN INCOME	RECOGNIZED IN OCI/EQUITY	TRANSLATION DIFFERENCE	BALANCE DEC 31, 2011
Total non-current assets	-2014	-747	0	-95	-2856
Total current assets	-18	58	0	3	43
Total non-current liabilities	25	-282	-12	0	-269
Total current liabilities	-87	91	0	1	5
Tax losses and tax credits carry-forward recognized *	625	-80	0	18	564
Total	-1 468	-960	-12	-73	-2512

<sup>\*</sup> Tax losses and tax credits carry-forward of NOK 552 million recognized at December 31, 2011 includes deferred tax assets for tax credits of NOK 38 million and tax losses of NOK 356 million in REC Silicon in the USA. The remaining NOK 158 million is for tax losses in Norway.

### Total accumulated income taxes recognized to other comprehensive income and equity excluding translation differences on deferred tax (minus is reduction to equity)

(NOK IN MILLION)	2011	2010
Effect of transition to IAS 39 at January 1, 2005	14	14
Effect of actuarial gains and losses	-13	-6
Effect of conversion of convertible bonds	-371	-371
Effect of costs for capital increase	51	51
Effect of translation differences on loans as part of net investment	9	14
Effect of cash flow hedge	0	0
Total deferred tax	-309	-298
Current tax - effect of costs for capital increase	80	80
Total	-230	-218

# The following main deferred tax assets have not been recognized at December $31\,$

(NOK IN MILLION)	2011	2010
Total non-current assets	1514	38
Total current assets	88	5
Total non-current liabilities	63	3
Total current liabilities	88	2
Tax losses carry forward - not recognized	2 043	279
Total	3 796	327

# Distribution of the deferred tax assets that have not been recognized at December 31

(NOK IN MILLION)	2011	2010
REC ASA and its subsidiaries in Norway	3 766	72
REC ScanModule AB in Sweden (sold in 2011)	0	241
Other	30	14
Total	3 796	327

Tax losses carried forward and other deferred tax assets are not recognized due to requirements in IAS 12 for convincing evidence of future profits. There is no expiry date for tax losses in Norway.

At December 31, 2011 and 2010, accumulated undistributed earnings for REC ASA's ownership share in the REC Silicon Group in the USA were approximately USD 768 million and USD 623 million, respectively. A 15 percent withholding tax would apply on any dividends paid from the USA. No deferred tax liability has been recognized for this (see notes 2.16 and 4).

#### 19 RETIREMENT BENEFIT OBLIGATIONS AND EXPENSES

The cost of defined pension benefit plans is expensed over the period that the employee renders services and becomes eligible to receive benefits. Cost for contribution plans are expensed as contributions are paid or payable.

REC has pension plans primarily for its employees in Norway (defined benefit and contribution plans), USA (defined benefit and contribution plans) and Singapore (contribution plan).

The Norwegian plans were changed from 2010, and now include a contribution plan for retirement benefits with annual contributions of five to eight percent of fixed base salary up to 12 G (the G-amount at December 31, 2011 was NOK 79,216 (NOK 75,641 in 2010)). The plans also include pension insurance for some disability, spouse and children pension rights. In addition, employees at January 1, 2010 that according to calculations are expected to earn less retirement pension funds in this contribution plan compared to a paid up policy at 67 years old in the previous defined benefit pension plan are entitled to compensation. This compensation plan is a defined benefit plan. The compensation is earned as a percentage of fixed base salary as service are rendered after January 1, 2010 and is contingent on the individual employee being older than a specified age in case of termination of employment. It varies according to age, years of employment after January 1, 2010 and between employees. No rights to payments were earned at January 1, 2010. The REC Group has an additional defined benefit pension plan for Norwegian employees with salaries over 12 G. The plan provides a contribution of 15 percent of fixed base salary above 12 G per year of employment plus or minus a calculated return based on a defined index, which is to be paid upon retirement or at termination of employment. A few individual pension plans also exist.

The Norwegian entities participate in a defined benefit multiemployer early retirement plan (AFP NHO). For this plan, and a defined benefit multi-employer plan in Sweden in 2010, the administrators are not able to calculate the REC Group's share of assets and liabilities and these plans are consequently accounted for as defined contribution plans. Contributions to these plans of NOK 7 million were included as pension expenses for 2011 (NOK 15 million in 2010). The reduction is due to the close down of REC ScanModule at the end of 2010. The Norwegian AFP NHO plan was changed in 2010 with effect from 2011. The close of the old AFP NHO plan requires all member companies to pay premiums per employee to 2015 regardless of the actual number of early retirees in the company.

REC Silicon has an employer-sponsored retirement plan (401 (k)) for employees in the USA, in which the contributions to the plan are determined each year (contribution plan). The REC Silicon subsidiary ASiMI in the USA had defined benefit plans at the time it was acquired by REC in 2005. Subsequent to the acquisition, the ASiMI defined benefit plans were frozen and no future benefits are accruing to the members of the plans. Previous pension rights remained unchanged and are fully vested.

REC companies in Singapore pay contributions to the Central Provident Fund (CPF), which is a comprehensive social security savings plan. Working Singaporeans and their employers make monthly contributions to the CPF at contribution rates set by the CPF Board.

For defined benefit plans the plan assets and the projected benefit obligations (net present value of pension benefits earned at the measurement date based on expected pension qualifying income at the time of retirement) were measured at December 31, 2011 and 2010. Independent actuaries performed actuarial calculations. The present value of the projected defined benefit obligation, and the related current service cost, were measured using the projected unit credit method. For the Norwegian defined benefit plans, the discount rate has been estimated based on the interest rate on Norwegian government bonds. Average time to payments of earned benefits was calculated at 12 to 23 years at year-end 2011 (below 30 in 2010, reduction in 2011 due to higher expected turnover), and the discount rate was projected through a reference to swap interest rates, as the longest duration for Norwegian government bonds is 10 years. The assumption for salary increase, increase in pension payments and G-regulation are referenced to guidelines from the Norwegian Accounting Standards Board and are tested against historical observations, statements made about the future developments and the relationship between different assumptions. Expected future turnover is affected by historical observations and expectations of the future. The increase in turnover in recent years in Norway has increased the expectations to future turnover. For the defined benefit plan in REC ASiMI in the USA the discount rate is calculated based on the CitiGroup Pension Discount Curve.

Due to the restructuring of a large part of the Norwegian operations, a curtailment gain of NOK 10 million (including social security tax) was recognized in 2011.

## Defined benefit plans

between belief the plants			OE WHICH A	ASIMI PLANS
(NOK IN MILLION)	2011	2010	2011	2010
Gross retirement benefit obligations at January 1	212	174	166	161
Service cost	19	41	0	0
Interest cost on pension obligations	10	10	8	9
Actuarial gains (-) and losses (+)	19	-3	40	3
Benefits paid, paid-up policies and disability obligation	-14	-12	-9	-9
Settlements and curtailments	-9	0	0	0
Translation differences	4	2	4	2
Gross retirement benefit obligations at December 31	241	212	209	166
Fair values of plan assets at January 1	124	130	124	130
Actual return on plan assets	0	0	0	0
Pension premiums	4	1	1	1
Benefits paid, paid-up policies and disability reserve	-11	-9	-9	-9
Settlements and curtailments	0	0	0	0
Translation differences	3	2	3	2
Fair value of plan assets at December 31	120	124	119	124
Funded status at December 31	121	88	91	42
Accrued social security tax	4	6	0	0
Net retirement benefit obligations at December 31	125	94	91	42

## Retirement benefit obligations in the statement of financial position

			OF WHICH A	SIMI PLANS
(NOK IN MILLION)	2011	2010	2011	2010
Net retirement benefit obligations at January 1	94	45	42	31
Net periodic benefit costs	19	49	6	2
Actuarial gains and losses recognized directly in equity through OCI	19	3	42	9
Pension premiums and benefits paid	-8	-3	-1	-1
Social security tax on pension premiums	-1	0	0	0
Translation differences	1	0	1	0
Net retirement benefit obligations at December 31	125	94	91	42

## The amounts recognized in the statement of income are as follows $% \left\{ 1,2,...,n\right\}$

(NOK IN MILLION)	2011	2010
Current service cost	19	41
Interest cost on gross retirement benefit obligations	10	10
Expected return on plan assets (net of administration cost)	-2	-7
Settlements and curtailments	-9	0
Employer's social security tax on defined benefit costs	2	5
Total benefit plans	19	49
Contribution plans including employer's social security tax	98	107
Total pension expenses (see note 24)	118	156

Cumulative actuarial loss recognized to equity through other comprehensive income was NOK 22 million before income taxes at December 31, 2011 and NOK 3 million at December 31, 2010. Of this, a loss of NOK 64 million (NOK 21 million) was related to ASiMI.

#### Actuarial gains (-)/losses (+) on gross retirement benefit obligations (exclusive of social security tax) consist of

(NOK IN MILLION)	2011	2010	2009	2008	2007
(a) experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred)	-6	-7	-10	-3	28
(b) the effects of changes in actuarial assumptions	25	4	-16	-15	-17
Total actuarial gains (-)/losses (+) on gross retirement benefit obligations	19	-3	-26	-18	11

The difference to actuarial gains/losses on net retirement benefit obligations is actuarial gains/losses on plan assets and social security tax (Norway). Experience adjustments in 2011 are primarily higher turnover and lower salary increases than expected in Norway. A change in mortality table for ASiMi plans was the main contributor to the actuarial loss on changes in actuarial assumptions in 2011, partially offset by reduced discount rate and expected increased future turnover in Norway.

## Overview of the funded status at December 31 the last five years, exclusive of social security tax

(NOK IN MILLION)	2011	2010	2009	2 008	2 007
Gross pension obligations	241	212	174	428	321
Fair value of plan assets	120	124	130	283	215
Funded status	121	88	44	145	106

At December 31, 2011 and 2010 the Norwegian defined benefit plans are primarily unfunded. The plan assets relate primarily to one of the three ASiMI plans, and are invested in cash/money market funds. The current investment strategy is to invest in non-volatile liquid assets.

The actuary risk tables in Norway are based on advice in accordance with published statistics and experience. The names of the risk tables are: Mortality K2005, Marriage K2005 and Disability IR02. In 2011, the mortality table for ASiMi plans was changed, and is now based on the IRS 2011 Static Mortality Table.

#### The principal actuarial assumptions used to determine retirement benefit obligations at December 31

	NORWEGIAN PLANS (%)				ASIMI PLANS (%)	
	2011	2010	2009	2011	2010	2009
Discount rate	2.4	3.9-4.0	4.3	4.3	5.4	5.5
Future salary increases	3.8-4.0	3.8-4.0	4.3	NA	NA	NA
Future pensions increases	0.4-3.4	1.9-4.7	2.0	NA	NA	NA
Future increase in social security base amount (G)	3.8	3.8	4.0	NA	NA	NA
Future turnover	•	Stepwise		NA	NA	NA

The assumptions used to determine the benefit cost for the year are those determined at the beginning of the year. The Norwegian defined benefit plans are primarily unfunded, so expected long-term return on plan assets is not relevant. However, the compensation plan and over 12 G plan contain guaranteed annual returns based on reference to different portfolios of assets. The expected long-term return for the ASiMI scheme was two percent for 2011 and five percent for 2010.

The average expected remaining service periods in years for participants in the Norwegian defined benefit plans at December 31, 2011 were about 13 (15 at the end of 2010) in the compensation plan and 7 (13 at the end of 2010) in the over 12 G plan. The reduction is primarily due to increase in expected turnover. The corresponding years for ASiMi plans were about 13.

The total number of employees in the Norwegian defined benefit plans at the end of 2011 were 580 (847 at the end of 2010) for the compensation plan and 53 in the over 12 G plan (58 at the end of 2010). The compensation plan started in 2010 and no new participants will be added. The corresponding number for ASiMI plans was 685.

Pension premiums of NOK 5 million are expected to be paid during 2012 to the plans accounted for as defined benefit plans.

Due to the relatively small amounts of defined benefit obligations for the Norwegian plans, no sensitivity analysis for possible changes in assumptions is provided at December 31, 2011. For the ASiMI benefit plans, a one percentage point increase (decrease) in discount rate is estimated to decrease (increase) the pension obligation by approximately NOK -28 (33) million at December 31, 2011.

#### 20 TRADE PAYABLES, PROVISIONS AND OTHER LIABILITIES

## Non-financial liabilities, interest calculation 1)

(NOK IN MILLION	2011	2010
Non-current prepayments, interest calculation	214	479
Current part of prepayments, interest calculation	349	124
Total prepayments, interest calculation	563	603

<sup>1)</sup> These are prepayments received for future deliveries of polysilicon by REC Silicon and wafers by REC Wafer for a period of more than one year at the time of receipt of the prepayment. Interest is calculated on the prepayments, but is not payable or stated in the agreements. The portion that is estimated to be taken to income according to deliveries during the next 12 months is classified as current.

#### Trade payables and other liabilities

(NOK IN MILLION)	2011	2010
Current		
Trade payables	733	986
Accrued costs for capital expenditures	70	149
Payables for capital expenditures	27	171
VAT and other public taxes and duties payable	199	361
Accrued operating costs	420	423
Accrued finance costs	149	157
Prepaid revenues / prepaid from customers *	16	123
Other non-interest bearing liabilities	128	138
Total	1742	2 508
	······································	

 $<sup>\</sup>ensuremath{^{*}}\xspace See$  also above for prepayments, interest calculations.

# **Provisions**

(NOK IN MILLION)	2011	2010
Current	354	85
Non-current	447	288
Total	801	373

#### Specification of provisions

(NOK IN MILLION)	RESTRUCTURING & EMPLOYEE TERMINATION FEES	JUNCTION BOXES	WARRANTIES	ASSET RETIREMENT OBLIGATIONS	ONEROUS CONTRACTS	OTHER PROVISIONS	TOTAL
At January 1, 2010	0	291	58	134	3	129	615
Transfers between provision categories	0	3	-3	0	0	0	0
Additional provisions	91	34	43	0	4	1	172
Unused amounts reversed	-26	-66	0	-1	0	0	-93
Exchange differences	2	5	3	4	0	-2	12
Increase in provision due to interest	0	0	0	5	0	0	5
Recorded directly to statement of financial position	0	0	-5	53	0	-30	18
Used during the year	-14	-245	-5	0	-2	-91	-357
At December 31, 2010	52	22	90	197	6	6	373
Additional provisions	229	0	47	0	179	0	455
Unused amounts reversed	-6	0	0	0	-1	-1	-8
Exchange differences	0	0	-1	1	1	0	0
Increase in provision due to interest	0	0	0	5	0	0	5
Recorded directly to statement of financial position	0	0	0	122	0	0	122
Used during the year	-101	-16	-3	-6	-14	-5	-146
At December 31, 2011	174	5	133	319	171	0	801

#### The provisions are estimated to be settled in:

(NOK IN MILLION)	TOTAL	2011	2012	2013	2014	2015	AFTER 2015
Provisions at December 31, 2010	373	85	13	4	4	5	262
	•		•	•	•	•••••••••••••••••••••••••••••••••••••••	
(NOK IN MILLION)	TOTAL	2012	2013	2014	2015	2016	AFTER 2016
Provisions at December 31, 2011	801	354	34	20	20	72	300

A provision is a liability of uncertain timing or amount. Current provisions are expected to be paid within one year. Non-current provisions are primarily warranties and asset retirement obligations, and some of the onerous contracts.

Restructuring and employee termination in 2010 related primarily to the close down of the REC ScanModule operations in Glava (Sweden), which was finalized in 2011. At the end of 2011 it was decided to close down the cell production in REC ScanCell AS in Norway. It was also decided to close down parts of the wafer production capacity in REC Wafer Norway AS. These account for the main part of the additional provisions in 2011. The provisions relates primarily to salary and other costs to be paid without future economic benefits for the company, including costs to close down the relevant operations.

Provisions for junction boxes are related to a design weakness that was discovered at the end of 2008 in the junction box in a series of solar modules produced by REC ScanModule.

Warranties are primarily product and power output warranties related to the sale of solar modules (see note 4.2 (D)).

Asset retirement obligations at December 31, 2010 related primarily to the Singapore plant. At the end of the lease period in 2038, the REC Group has an obligation to remove assets and restore the land. Different possible scenarios of how the obligations can be fulfilled have been used to arrive at the estimated costs. As a consequence of the decisions in 2011 to close down production capacity in Norway, the related asset retirement obligations came much closer in time and the present values increased and were recorded directly in the statement of financial position as additions (capital expenditures) to fixed assets. The estimates of the actual costs to be incurred have also to some extent increased from previous estimates. Through the impairment tests, these additional assets have been expensed in the statement of income as impairments in 2011. The asset retirement obligations in Norway relate partially to removal of machinery and equipment and restoration of leased buildings, and to remove machinery, equipment and buildings from leased land. Assumptions have been made of how the obligations under the contracts may be settled and the actual amounts needed for settlement.

Provisions for onerous contracts recognized in 2011 are to a large extent related to the close-downs in Norway, primarily for REC Wafer. It relates to committed purchase contracts of goods and services as well as operating lease contracts, and the main amounts relate to contracts for recycling, mixing and supply of slurry. It also includes NOK 34 million at December 31, 2011 in the Singapore operations related to adjustments of the production.

Other provisions used in 2010 included NOK 90 million losses on guarantees and undertakings related to Sovello.

#### 21 **GOVERNMENT GRANTS**

(NOK IN MILLION)	2011	2010
Recognized in the statement of financial position - grants related to assets	-27	961
Recognized in the statement of income - grants related to income	102	86
Total	75	1 047

Grants are recognized in the statement of income over the period necessary to match them with the costs that they are intended to compensate. Grants related to assets are recognized to the statement of income at the same time as depreciation of the related assets, and are not included in the second line in the table above. Grants related to income are grants that compensate period expenses.

A government grant is not recognized until there is reasonable assurance that the entity will comply with the conditions attached to it, and that the grant will be received. To qualify for the grants recognized, several future conditions need to be fulfilled. This includes some minimum total fixed assets investments, employment of a minimum number of selected employees in specific geographical areas for specified periods, retention period for some employees and restrictions on the disposal of assets and/or companies. In the event of breach of conditions, REC may have to repay the grants.

The negative amount for grants related to assets in 2011 is primarily due to reduction in REC Silicon's basis for calculating Advanced Energy Manufacturing Tax Credit due to a settlement with a capital expenditure vendor that has reduced qualifying capital expenditure. In 2010, REC Silicon recognized an estimated present value of USD 125 million (NOK 756 million at average USD/NOK exchange rate for 2010) as a reduction to capital expenditure in the statement of financial position (shown above as recognized in the statement of financial position -grants related to assets). REC Silicon has recognized a non-current government grant receivable including unwinding of interest of NOK 756 million at December 31, 2011 (NOK 744 million at the end of 2010), calculated at the relevant year-ends' USD/NOK rates for this Advanced Energy Manufacturing Tax Credit.

The vehicle for receiving benefits under this program is a credit claimed on the US-company's annual tax return, subject to the limitations of alternative minimum tax. Unused portions of the credit can be carried forward 20 years (for the main part this period started in 2010) and used to offset income tax during those periods subject to similar limitations. Any unused portions after 20 years are void. The executed agreement between REC Solar Grade Silicon LLC and the Department of Treasury of the United States of America applies only to the taxpayer who signed the agreement, REC Solar Grade Silicon LLC. Any successor in interest must execute a new agreement with the Internal Revenue Service of the United States of America no later than the due date (including extensions) of the successor in interest's Federal income tax return for the taxable year in which the transfer occurs. If the successor in interest does not execute a new agreement, the project ceases to be investment credit property and the recapture rules of § 50 (a) and similar rules with respect to qualified progress expenditures apply.

# 22 OTHER OPERATING EXPENSES

(NOK IN MILLION)	2011	2010
Energy and water	964	984
Total operating, service and maintenance costs	889	873
Lease expenses	263	216
Freight, postage and transportation	179	152
IT and telecommunication costs	143	140
Travel and entertainment costs	81	95
Insurance costs	73	79
Sales, marketing and advertising costs	59	55
Consultancy and auditors fees	559	619
Own work capitalized on fixed assets	-21	-120
Warranty provisions 1)	46	10
Loss on receivables <sup>2)</sup>	36	103
Other operating costs	64	78
Other operating expenses	3 334	3 284

 $<sup>^{1)}</sup>$  Warranty provisions refers to junction box and warranties (see note 20).

<sup>2)</sup> Loss on receivables (see note 12).

#### Auditor's remuneration

(NOK IN MILLION)	2011	2010
Statutory audit	7.2	11.7
Other assurance services - from auditor	0.4	0.2
Tax advisory services - from auditor	2.4	1.0
Other non-audit services - from auditor	0.6	1.1
Total auditor's remuneration	10.6	14.0

Amounts are exclusive of VAT.

Statutory audit fees contain: all procedures and work performed to ensure proper reporting and statutory audit, technical assistance with preparation of the reported figures and statutory financial statement, audit to be able to sign off tax papers (Norwegian specific mandatory work), and audit or agreed upon procedures for period accounts.

Other assurance services contain: all attestation services expected to be performed by the company's auditor due to legal requirements or requirements from third party including performance of agreed upon procedures for period accounts.

Tax advisory services contain: technical assistance with preparation of tax papers, guidance to the client to explain how the tax regulation/ tax law is to be understood, evaluation of chosen tax solutions, assistance when the client will file complaints to the tax authorities, and assistance if the client needs to report to the tax authorities, or needs to follow up any questions.

Other non-audit services contain: extended audit based request from the management or general assembly that will result in any attestation, counseling to ensure that the client is able to report a financial statement; i.e. assistance with technical issues, agreed-upon procedures, and all other eligible auditor services not included in any of the above.

#### 23 OTHER INCOME AND EXPENSES

(NOK IN MILLION)	2011	2010
Restrucuring costs and employee termination benefits 1)	-223	-65
Onerous contracts <sup>2)</sup>	-178	-4
Other income <sup>3)</sup>	945	304
Gain/loss on disposal of subsidiary and non-current assets 4)	47	-1
Other expenses	-4	-2
Total other income and expenses	586	231

<sup>1)</sup> Restructuring costs refer mainly to the close down of the cell production (REC ScanCell) and parts of the wafer production in Norway in 2011, and module production (REC ScanModule) in Sweden in 2010 (see note 20).

<sup>2)</sup> Onerous contracts are contracts where the unavoidable costs exceed expected economic benefits. In 2011 it relates primarily to the close down of production capacity in Norway, primarily for REC Wafer, and some adjustments to the production capacity in Singapore.

<sup>3)</sup> Other income relates to wafer contract cancellation fees.

<sup>4)</sup> Gain on disposal in 2011 relates to the sale of the subsidiary REC ScanModule AB.

# 24 EMPLOYEE BENEFITS

(NOK IN MILLION)	2011	2010
Payroll	1 427	1 576
Payroll Bonus	108	165
Social security tax	133	158
Pension costs incl. social security tax	118	156
Other employee related costs	216	155
Total employee benefit expenses	2 001	2 211

The average number of permanent employees during 2011 measured in man-years was 3,945 (2010: 3,623). The number of permanent employees at December 31, 2011 was 3,587 (2010: 4,210).

Total loans and guarantees to employees amounted to NOK 0.6 million at December 31,2011 (NOK 4.5 million at December 31,2010, of which NOK 4 million related to the employee share purchase program). In 2010, all REC employees were offered a 12-month interest-free loan for the amount of shares each employee purchased in the 2010 employee share purchase program. There was no such program in 2011.

# 25 FINANCIAL INCOME AND EXPENSES

(NOK IN MILLION)	2011	2010
Share of loss of associates	-97	1
Interest income from financial assets not at fair value through profit or loss	50	35
Other income from financial assets and liabilities	1	0
Total income from financial assets not at fair value through profit or loss	51	35
Interest expenses for the convertible EUR bond (fair value through profit or loss)	-162	-169
Interest expenses for the NOK bonds REC01 and REC03 (partially fair value through profit or loss)	-124	-121
Interest expenses for financial liabilities not at fair value through profit or loss	-328	-735
Capitalization of borrowing cost	12	247
Other expenses from financial assets and liabilities	-92	-356
Net financial expenses	-693	-1 134
Net currency gains/losses	-7	544
Net gain/loss derivatives not hedge accounting	15	955
Fair value hedge instruments (change in clean value of interest rate swaps) 1)	45	31
Fair value hedge objects (change in fair value NOK bonds) 1) 2)	-45	-31
Net gain/loss embedded derivatives	92	-80
Total net gains/losses derivatives and fair value hedge (excluding interest)	108	875
Fair value through profit or loss - convertible EUR bond (excluding interest)	841	481
Total fair value through profit or loss	949	1 356
Impairment and gain/loss on financial assets	1	-1
Net financial items	205	801

 $<sup>^{1)}\,</sup>$  The net of these two lines represents the ineffective parts in fair value hedge accounting.

Interest expenses for financial liabilities not at fair value through profit or loss include normal amortization of up-front/waiver fees and costs (NOK 96 million in 2011 and NOK 126 million in 2010) and the relevant period's commitment fees on undrawn credit facilities. Decreased interest bearing liabilities and borrowing costs contributed to decreased interest expenses for financial liabilities not at fair value through profit or loss in 2011 compared to 2010.

Other expenses from financial assets and liabilities for 2011 include NOK 60 million premium paid in the second quarter related to buyback of NOK 600 million of the NOK bond REC01. It also includes NOK 21 million remaining previously paid upfront fees related to the Eksportfinans loans that were cancelled and repaid on March 31, 2011. In 2010, REC expensed the major part (NOK 334 million) of the, at that time, remaining up-front/waiver fees and costs for the

<sup>&</sup>lt;sup>2)</sup> Changes in fair value of NOK bonds due to changes in interest discounting curves for fixed interest rates.

bank facilities that were terminated and repaid in May 2010. This explains the major part of other expenses from financial assets and liabilities for 2010.

Capitalization of borrowing costs in  $2011\,\mathrm{was}$  limited as the expansion projects were completed in 2010. Borrowing costs capitalized and included in the cost of qualifying assets during 2010 relate to qualifying assets under construction in Singapore (using average interest rate of 7.5 percent) and in REC Silicon in the USA (using average interest rate of six percent). During 2010, the assets in Singapore and the USA became ready for their intended use.

In 2011, the net currency loss of NOK 7 million was affected by several opposite effects, both external and internal effects not eliminated on consolidation, none of which were significant due to the relative small changes in currency rates. Net currency gain of NOK 544 million for 2010 was primarily affected by currency gains on USD and EUR debt, partially offset by losses on SGD debt. Currency gains for REC ASA on the majority of its internal loans to REC Silicon in the US (loans were approximately USD 1.3 billion at year-end 2010) that are recognized to profit or loss and not eliminated on consolidation also contributed positively.

See note 11 for description of derivatives. REC is hedging expected future currency cash flows by entering into derivative transactions for sale of EUR/NOK, EUR/USD and USD/NOK and purchase of SGD/NOK and SGD/USD forward (FX Forward). REC does not use hedge accounting for the FX Forward contracts. The relatively small net gains on derivatives not hedge accounting of NOK 15 million in 2011 consisted of opposite effects primarily from currency derivatives, affected positively by the NOK appreciation versus

EUR and depreciation versus SGD, partially offset by the NOK depreciation versus USD. Net gains on derivatives not hedge accounting in 2010 of NOK 955 million primarily related to the appreciation of NOK versus EUR through the year, but USD and SGD currency derivatives also contributed positively.

See note 11 for description of embedded derivatives, which for the REC Group for 2011 and 2010 have been embedded in some of the wafer sales contracts with future sale of wafers in USD; the receipt of USD is accounted for as a derivative for future purchase of USD. Net gain on embedded derivatives for 2011 was primarily due to significant reduction in estimated future cash flows under the relevant contracts, but also due to increase in the USD forward exchange rates. In 2011, the estimated fair values of embedded derivatives at December 31, 2011 were positively affected with approximately NOK 92 million due to the decrease in estimated future cash flows at December 31, 2011 for contracts that existed at December 31, 2010. Net loss on embedded derivatives for 2010 was primarily related to changes in estimated future cash flows in the contracts. In 2010, the estimated fair values of embedded derivatives at December 31, 2010 were negatively affected by approximately NOK 45 million due to the increase in estimated future cash flows at December 31, 2010 for contracts that existed at December 31, 2009.

In October 2009, REC ASA issued a EUR 320 million fixed rate convertible bond (see note 17). Because EUR is not the functional currency of REC ASA, no part of the convertible loan can be reported as equity. The REC Group recognizes the change in the estimated fair value of the total convertible bond, and not just the embedded derivative (option element), through profit or loss.

The estimated fair values are shown in the table below.

(EUR IN MILLION)	AT ISSUE	DEC 31, 2009	DEC 31, 2010	DEC 31, 2011	CHANGE 2010	CHANGE 2011
Nominal value	320	320	320	320	0	0
Value of the total loan	320	339	278	170	-60	-109
Value bond element	249	262	272	170	10	-102
Value option element	71	77	7	0	-71	-7
					-	

(NOK IN MILLION)	AT ISSUE	DEC 31, 2009	DEC 31, 2010	DEC 31, 2011	CHANGE 2010	CHANGE 2011
Nominal value	2 665	2661	2 500	2 481	-161	-19
Value of the total loan	2 6 6 5	2816	2 175	1315	-641	-860
Value bond element	2 073	2176	2124	1315	-52	-809
Value option element	592	641	51	0	-590	-51

During 2010 and 2011 the estimated fair value of the bond loan has decreased, in 2010 primarily due to the reduction in REC ASA's share price and in 2011 primarily due to increase in REC's credit spread (own risk). These decreases are reported as gains in the REC Group's statements of income. Changes in the estimated fair value of the total bond loan (for 2011 a total gain of NOK 860 million (NOK 641 million in 2010)) is recognized to profit or loss, of which the change in nominal value measured in NOK is included in the line item currency gains or losses (for 2011 a gain of NOK 19 million (NOK 161 million in 2010)) and the remaining as fair value adjustment of convertible bond (for 2011 a gain of NOK 841 million (NOK 481 million in 2010)). Estimated fair value excludes accrued interest.

The effect of the estimated increase in REC's credit spread (own credit) of 3,566 basis points in 2011 compared to December 31, 2010 is estimated to have decreased the fair value by just above EUR 114 million. For 2010, the effect of the estimated increase in REC's credit spread of 50 basis points is estimated to have decreased the fair value by just below EUR 4 million.

#### ADDITIONAL INFORMATION TO THE STATEMENT OF CASH FLOWS ON PAID INTEREST AND UP-FRONT AND WAIVER FEES ETC.

Paid interest is estimated to be approximately NOK 500 million for 2011 and NOK 900 million for 2010. It does not include payment of up-front and waiver fees etc. of approximately NOK 12 million in 2011, and NOK 240 million for 2010 (of which approximately NOK 220 million is reported as part of financing activities in the statement of cash flows). These fees were paid to establish new loans or to restructure or renegotiate existing loans. The fees are amortized over the duration of the loans as part of financial expenses. Paid interest mentioned above is not reduced by borrowing cost that is capitalized and reported as part of investing activities in the statement of cash flows.

#### 26 **EARNINGS PER SHARE**

#### **BASIC**

Basic earnings per share is calculated by dividing the profit/loss attributable to equity holders of the company by the weighted average number of ordinary shares in issue during the year, excluding treasury shares. The weighted average numbers of ordinary shares in 2010 are adjusted retrospectively as a result of the bonus element in the rights issue in May 2010. The bonus element factor was calculated by dividing the fair value per share immediately before the rights issue by the theoretical ex-rights fair value per share. The theoretical exrights fair value per share was calculated by adding the aggregate market value of the shares immediately before the exercise of the rights to the proceeds from the exercise of the rights, and dividing by the number of shares outstanding after the exercise of the rights. The bonus element factor for the 2010 rights issue was calculated to 1.19.

	2011	2010
Profit/loss from continuing operations attributable to equity holders of the company (NOK IN MILLION)	-10 030	889
Profit/loss attributable from total operations to equity holders of the company (NOK IN MILLION)	-10 030	989
Weighted average number of ordinary shares in issue (IN MILLION)	997	927
Basic earnings per share from continuing operations (NOK per share)	-10.1	1.0
Basic earnings per share from total operations (NOK per share)	-10.1	1.1

#### **DILUTED**

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares from the convertible bond and employee share options. The convertible bond has a dilutive effect if EPS is reduced when adjusting for all effects on earnings and assuming the bond was converted to shares in full at the beginning of the period. If the effect of adjusting for the bond increases EPS, it is anti-dilutive, and is then not included in diluted EPS. Effects on earnings of the convertible bond are interest expenses, currency and fair value gains or losses and estimated income taxes.

Due to the bonus element factor in the rights issue in May 2010, the exercise price and the total number of shares that could be issued by conversion of the bond were changed. The exercise price was reduced from EUR 6.5 per share to EUR 5.4 and the number of shares increased from 49.3 million to 59.3 million. The calculation shows that the convertible bond is anti-dilutive in 2011 and dilutive in 2010.

Details related to the share option programs are found in note 32. The share options are anti-dilutive for both 2011 and 2010.

	2011	2010
Adjusted profit/loss from continuing operations (NOK IN MILLION)	-10 030	505
Adjusted profit/loss from total operations (NOK IN MILLION)	-10 030	606
Weighted average number of ordinary and potential shares (IN MILLION)	997	986
Diluted earnings per share from continuing operations (NOK per share)	-10.1	0.5
Diluted earnings per share from total operations (NOK per share)	-10.1	0.6

# **DIVIDENDS PER SHARE**

The REC Group and REC ASA reported large losses in 2011 and REC ASA had no distributable equity at December 31, 2011. Consequently, the Board of Directors does not propose any dividend payments for the financial year 2011. The new bank loan agreements established in May 2010 prevented REC ASA from paying dividend for the financial year 2010.

#### 28 RESEARCH AND DEVELOPMENT

(NOK IN MILLION)	2011	2010
Research and development expenses	308	290

The research and development expenses for 2011 include NOK 62 million impairment charges of previously paid and capitalized costs for a technology development agreement with SiGen for mono wafer cutting. The REC Group conducts research and development within several areas and in all segments, as well as in REC ASA. All costs in the relevant departments performing research and development are reported as research and development expenses for this note.

The research and development activities consist of continuous development of current production processes and equipment as well as next generation production technologies designed to reduce silicon cost, enhance quality while reducing wafer thickness, improve cell and module efficiency, and reduce production cost throughout the value chain.

#### 29 COMMITMENTS, GUARANTEES, PLEDGES

The purchase obligation amounts consist of items for which the REC Group is contractually obligated to purchase from a third party at December 31, 2011 and 2010. Only larger contracts are included. Operating lease payments show contractual minimum future payments. Contractual maturities of borrowings, including finance leases, are shown in note 17.

It has been taken into account possibilities for termination of contracts. Consequently, the amounts presented in the tables only constitute the contracted unavoidable minimum portion of the REC Group's expected future costs. It does not reflect the REC Group's expected future cash outflows. Contracts that are estimated to be onerous are not included in the tables below for the amounts that are included in the estimates of provisions for onerous contracts. The minimum amounts in some contracts may be subject to interpretation and the vendors may have another views than REC. Contracts that are disputed or terminated are included only if they have not been recognized as onerous contracts and to the extent of REC's best estimate of its minimum commitment. If REC should not succeed in its interpretations, the minimum commitments may increase.

### Contractual purchase obligations and minimum operating lease payments at December 31, 2011

		•					
	TOTAL FUTURE		DI	STRIBUTION OF F	PAYMENTS		
(NOK IN MILLION)	TOTAL FUTURE PAYMENTS *	2012	2013	2014	2015	2016	AFTER 2016
Purchase of goods and services							
REC Silicon	1877	897	352	105	103	104	315
REC Wafer	937	288	243	241	90	15	60
REC Solar	304	219	41	30	7	1	6
Other	9	9	0	0	0	0	0
Total purchase of goods and services	3 127	1 414	637	376	201	120	380
Minimum operating lease payments	•	•••••••••••••••••••••••••••••••••••••••	•	•	•	•••••••••••••••••••••••••••••••••••••••	
REC Silicon	23	9	5	3	2	2	2
REC Wafer	217	35	33	32	30	28	58
REC Solar	131	121	4	3	2	0	0
Other	8	7	1	0	0	0	0
Total minimum operating lease payments	378	173	43	38	35	30	59
Capex		•	•				
REC Silicon	2	2	0	0	0	0	0
REC Wafer	0	0	0	0	0	0	0
REC Solar	33	32	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total capex	35	34	0	0	0	0	0

<sup>\*</sup> Payments are undiscounted.

# Contractual purchase obligations and minimum operating lease payments at December 31, 2010

	DISTRIBUTION OF PAYMENTS							
(NOK IN MILLION)	TOTAL FUTURE PAYMENTS *	2011	2012	2013	2014	2015	AFTER 2015	
Purchase of goods and services								
REC Silicon	2 212	1019	490	100	100	99	403	
REC Wafer	1517	677	248	241	239	87	26	
REC Solar	254	223	13	13	4	1	1	
Other	16	16	0	0	0	0	0	
Total purchase of goods and services	3 999	1 935	751	353	343	187	431	
Minimum operating lease payments		•	•	•	•			
REC Silicon	14	8	4	1	0	0	0	
REC Wafer	317	47	45	45	44	43	93	
REC Solar	296	131	121	8	8	8	19	
Other	56	22	22	6	3	3	0	
Total minimum operating lease payments	684	208	193	60	55	54	112	
Capex	•••••		•			•••••••••••••••••••••••••••••••••••••••	······································	
REC Silicon	0	0	0	0	0	0	0	
REC Wafer	25	25	0	0	0	0	0	
REC Solar	33	33	0	0	0	0	0	
Other	32	20	12	0	0	0	0	
Total capex	90	78	12	0	0	0	0	

<sup>\*</sup> Payments are undiscounted.

The contractually committed minimum purchase of goods and services for REC Silicon include agreements that provide rights to the output of certain gases of specified facilities. These are constructed to serve the production needs associated with the Moses Lake and the Butte facilities. At December 31, 2011 and 2010 it was concluded that these agreements include operating

leases of the facilities, but it was not possible to reliably separate the payments for commodity output and operating lease elements. The total payments are therefore reported in its entirety as purchase of goods and services in the tables above, with NOK 731 million (USD 122 million) at December 31, 2011 (NOK 787 million (USD 134 million) in 2010).

Certain property tax payments in REC Silicon are included whereby the company operates one of its facilities in an area (Butte) designated by the taxing authorities as a special industrial Tax Increment Financing District (TIFID). The payments associated with these property taxes are expected to be made through the period ending December 31, 2022. The total undiscounted amounts of these payments were USD 16 million (NOK 97 million) at December 31, 2011 (USD 18 million (NOK 103 million) in 2010). The commitment is related to the level of TIFID-bonds outstanding that have been used to finance investments in the industrial financing district. Each year the bonds are serviced and a portion paid down. In December, 2010 the bonds were refinanced at a lower interest rate which reduced the nominal amount of the commitment. REC Silicon invested in the bonds (USD 14 million), which also made REC able to release funds in previously restricted bank accounts.

The contractually committed minimum purchase of goods and services for REC Wafer at December 31, 2011 include approximately NOK 220 million related to capacity contracts for recycling, mixing and supply of slurry at production facilities located at REC Wafer's sites in Norway (NOK 235 million at December 31, 2010). The agreements also include lease elements, reported partially as operating lease (NOK 140 million at December 31, 2011, see the table above and discussion below) and partially as finance lease liabilities (NOK 861 million at December 31, 2011, see note 17). The minimum remaining terms of the contracts at December 31, 2011 are 4-9 years. For these capacity contracts, parts are in addition included as provision for onerous contracts (see note 20) relating to the wafer production capacity that was closed down in 2011.

The contractually committed minimum purchase of goods and services for REC Wafer at December 31, 2011 include approximately NOK 575 million (NOK 970 million at December 31, 2010) for a long-term purchase contract for polysilicon from an REC external party. The contract was entered into in the second half of 2010 at the prevailing prices for long-term contracts at that time. In addition, REC Wafer has made prepayments under the contract, of which NOK 61 million was recognized as an asset at December 31, 2011. The remaining contract period at December 31, 2011 is 3.5 years. The prices in the contract are above market prices at December 31, 2011. The purchase contract has been included in the impairment tests at December 31, 2011 for noncurrent assets, and no provision for onerous contract was recognized at December 31, 2011.

The remaining contractually committed minimum purchase of goods and services for REC Wafer at December 31, 2011 is primarily purchase of input to the wafer cutting process.

The contractually committed minimum purchase of goods and services for REC Solar at December 31, 2011 relates primarily to REC Singapore. REC Solar has entered into a contract with vendor in Singapore that contains lease of machinery and delivery of products and services. REC Solar is not able to separate the payments reliably, and has included the total amounts in the table for committed purchase of goods and services. The contract can be terminated by REC with some minimum payments, and the total minimum contractual amounts included in the table above at December 31, 2011 was NOK 131 million (NOK 127 million at December 31, 2010).

#### **OPERATING LEASES**

The operating leases at December 31, 2011 in the table above primarily relates to service agreements for recycling, mixing and supply of slurry in REC Wafer containing operating leases and operating lease of some other buildings at Herøya and land-lease in Singapore.

It has been evaluated that REC has entered into operating leases for the industrial buildings used in the capacity contracts for recycling, mixing and supply of slurry at Herøya. NOK 140 million is included as minimum operating lease payments at December 31, 2011 for these capacity contracts (NOK 201 million at December 31, 2010). The first operating lease contract is for a period of 10 years, with an option to prolong the lease for an additional five years and a purchase option at the end of the lease period at a price to be negotiated. The second operating lease contract is for a period of 10 years, with an option to prolong the lease for two times five years and a right of first refusal in the case of sale of the building. For these capacity contracts, parts are in addition included as provision for onerous contracts (see note 20) relating to the wafer production capacity that was closed down in 2011. The main parts of the remaining operating leases for REC Wafer are leases of further buildings at Herøya.

REC leases land in Singapore with a remaining term of 26.5 years at December 31, 2011. There is an option to prolong the lease and to extend the number of square meters under the lease. According to the agreement, REC shall make prepayments for the remaining lease, of which a part has been paid and reported as separate line items in the statement of financial position at December 31, 2011 and 2010 and the remaining payments, estimated at NOK 107 million shall be made during 2012.

The operating leases at December 31, 2010 in the table above primarily related to service agreements for recycling, mixing and supply of slurry in REC Wafer containing operating leases and operating lease of some other buildings at Herøya, land-lease in Singapore, lease of buildings for REC ScanCell and the lease of the corporate headquarters.

#### **GUARANTEES, PLEDGES AND UNDERTAKINGS**

Purchased bank guarantees, cosigning of guarantees for Group companies and parent company guarantees, which are not secured by assets of the REC Group, are not included in the information below. Product guaranties and warranties are not included (see note 20).

REC ASA and its subsidiaries have restrictions under the existing credit facility for providing financial support to third parties, including the making of (whether actual or contingent) loans, credit or guarantee, indemnity or other assurance against financial loss to or for the benefit of any person, or otherwise voluntarily assume any liability in respect of any obligation of any other person. The credit facility also contains negative pledge clauses (see note 17).

One bank guarantee has security in bank accounts of THB 12 million (NOK 2 million) at December 31,2011.

In connection with sale of the previous subsidiary REC ScanModule AB in the beginning of 2011, REC Solar AS provided guarantees for any claims resulting from REC ScanModule AB's prior business conduct or relating to the share purchase agreement.

Government grants with remaining value of SEK 3 million at December 31, 2010 were secured by total assets of REC ScanModule AB, but limited to SEK 14 million.

# 30 OTHER INFORMATION FINANCIAL INSTRUMENTS

Refer also to note 3 financial risk management.

#### **FAIR VALUES OF FINANCIAL INSTRUMENTS**

The estimated fair values of the Group's financial instruments are based on market prices and the valuation methodologies described below.

In the statement of financial position, the financial instruments that are recognized (partially or in whole) at fair values are shown in the table below.

		2011		2010	EVILLEDA DOUN
(NOK IN MILLION)	ASSETS	LIABILITIES	ASSETS	LIABILITIES	FV HIERARCHY LEVEL
Convertible bond - fair value whole instrument	0	1 315	0	2 175	2
Norwegian bonds REC01 and REC03 - fair value hedge of market interest rate	0	1 412	0	1 267	2
Derivatives					
Currency and interest rate derivatives from banks	384	165	775	61	2
Embedded derivatives	5	62	4	284	3

Deciding the level in the fair value (FV) hierarchy into which the fair value measurements are categorized according to IFRS 7 involves judgment.

#### Level 2

EUR Convertible bond: REC accounts for the combined instrument at fair value. The convertible bond is not listed on any exchange. However, the convertible bond is traded in the market and a number of banks set prices each trading day. Bloomberg makes a quotation list based on these prices that it publishes each trading day, but the volumes of trades are not shown. The prices per the quotation list from Bloomberg and actual trades are the basis for fair value used by REC during the year. At year-end the value is adjusted to the tax assessment value published by Norges Fondsmeglerforbund. This value is an estimate of fair value.

Norwegian bonds: The fair value adjustment for the NOK 650 million Norwegian bond REC01 and the NOK 700 million Norwegian bond REC03 is an estimate of the fair value of the fixed interest rate excluding the credit margin. The fair value adjustment recognized in the financial statements of the Norwegian bonds is due to fair value hedge from the fixed swap interest rate to the floating NIBOR rate. The Norwegian bonds are traded on the Oslo Stock Exchange, but the liquidity is limited. The market values of the

two bonds are estimated by reference to trades around year-end 2011 and by Norges Fondsmeglerforbund at December 31, 2011 to NOK 622 million for REC01 and NOK 476 million for REC03.

Derivative instruments purchased from banks: The fair value has been estimated by external parties based on contractual cash flows and traded prices for input components. Fair values of foreign currency forward contracts and interest rate swaps are estimated to the present value of the future cash flows in the contracts, calculated by using quoted forward interest and currency rates as of December 31, 2011 and 2010, respectively.

#### Level 3

The fair values of embedded derivatives (EDs) are calculated by using quoted forward interest and currency bid-rates rates as of December 31,2011 and 2010 provided by independent banks, as well as cash flows and credit risk premiums estimated by REC. The forward currency rates are market rates for future delivery of currency calculated as the spot rate adjusted for the difference in interest rates between the currencies to the future point in time. The forward currency bid rate normally takes into consideration normal credit risk of the counterparty to a bank, but does not take into consideration credit risk of REC or of REC's counterparties to the contracts (i.e. the customers). See note 11 Derivatives for

estimated cash flows. At December 31, 2011 and 2010, estimated credit risk margins have been added to the inter bank interest rates to arrive at discount rates. For contracts with estimated negative fair values (losses), estimated credit risk margins for REC are used, estimated between 5.0 percent and 7.3 percent in 2011 and between 5.0 percent and 6.1 percent in 2010.

REC Wafer has entered into wafer sales contracts in USD containing EDs that are separated and fair valued. These wafer sales contracts state future cash flows, with some limited adjustment mechanisms. However, REC Wafer has in 2011 and 2010 experienced that contracts have been terminated, renegotiated or not complied with. If it is probable that a customer will not honor the contract based on individual assessment, REC has made downward adjustments of the estimated future cash flows. Future cash flows at December 31, 2011 have been reduced compared to the cash flows estimated at December 31, 2010 for the contracts that existed at both points in time for the period from 2012 by USD 204 million. During 2010, REC reached agreements with several customers for deliveries in 2011 and to some extent beyond and REC increased the estimated cash flows under the contracts containing EDs at December 31, 2010 compared to 2009 and also entered into a new contract at the end of the year. The total estimated future cash flows in ED contracts at December 31, 2010 that existed at December 31,

2009 was increased by USD 147 million. Cash flows have been estimated to the most likely amount, but are uncertain and the actual outcome could be higher or lower. The cash flows in some contracts that are disputed by the customers have been reduced to the amount of any bank guarantee or zero.

In 2011, the estimated fair values of embedded derivatives at December 31, 2011 were positively affected by approximately NOK 92 million due to the reductions in the estimated future cash flows at December 31, 2011 compared to 2010 for wafer sales contracts that existed at year-end 2010 (see above). Increased estimated credit risk margins had limited effect on the estimated fair values of embedded derivatives.

In 2010, the estimated fair values of embedded derivatives were negatively affected by approximately NOK 45 million due to the increase in estimated future cash flows at December 31, 2010 compared to 2009 for contracts that existed at year-end 2009 (see above). The decrease in estimated credit risk margins from 2009 to 2010 had limited effect on the estimated fair values of embedded.

Changes in estimated future cash flows and other input variables may have a significant effect on the fair value estimation.

#### For fair value measurements in Level 3 of the fair value hierarchy; embedded derivatives (ED)

(NOK IN MILLION)	2011	2010
Fair value January 1	-280	-263
Net loss embedded derivatives incl. as part of financial expenses, note 25 1)	92	-80
Realized cash flows during the year	131	62
Fair value December 31	-57	-280

<sup>1)</sup> Of which NOK 92 million in 2011 net gain included in profit or loss for EDs held at December 31, 2011. Net gain included in profit or loss for ED held at December 31, 2011 is calculated as the estimated fair value of cash flows in ED at December 31, 2011 minus estimated fair value of cash flows for 2012 and beyond in the calculation of fair value of EDs at December 31, 2010. Calculated as for 2011, net loss included in profit or loss for ED held at December 31, 2010 was NOK 93 million.

#### Effect on estimated fair value of reasonable change in assumptions for calculation of fair values of embedded derivatives at December 31

(NOK IN MILLION)	2011	2010
Increase/decrease in discount rate by 1 percentage point	+0/-0	+3/-4
Future cash flows increase from the estimated cash flows to the original contractual amounts	-15	197
- Of which amounts in breached contracts 1)	-191	327
- Of which estimated changes in price and volumes in non-breached contracts	176	-131

<sup>1)</sup> By breached contracts is meant contracts for which legal proceedings have been initiated and/or where bank guarantee has been drawn upon (if any).

#### Interest bearing financial liabilities and finance receivables

As described above, the convertible bond has been recognized at fair value. The Norwegian bonds REC01 and REC03 are listed on the Oslo Stock Exchange, and have been recognized at fair value with respect to changes in market interest rates, but not affected by changes in the REC credit risk. The difference to the quoted price should then represent company credit risk and liquidity risk.

None of the other REC Group's interest bearing liabilities has market quotes. The interest bearing liabilities under the bank credit facilities in 2011 and 2010 and Eksportfinans loans in 2010 have floating interest rates based on XIBOR plus a margin depending on the ratio of net interest bearing debt to EBITDA. This ratio is based on net interest bearing debt to EBITDA is updated quarterly and is regarded as an adjustment for credit risk based on the margins in the market at the time the credit facilities were established. In 2010 and up until mid 2011 the credit margins developed positively but in the second part of 2011 the credit spreads increased significantly for credits below investment grade as REC's implicit credit rating.

Fair value for fixed rate liabilities, bank borrowings, finance lease liabilities and finance receivables are calculated using estimated interest rates at the reporting dates for similar liabilities and assets. Significant difficulties and uncertainties are present for these estimates.

#### Trade and other receivables and payables

Discounting is not considered to have material effect on trade and other receivables and payables, and they are assumed to be equal to the carrying amount.

#### **Equity securities**

The REC Group only has a very limited amount of unlisted shares and fair values are assumed to approximate the carrying amounts. Companies that are consolidated in the REC Group, proportionally consolidated or accounted for by using the equity method, are not included in the table below.

#### Cash and cash equivalents

All cash and cash equivalents have floating interest rates, and fair values are consequently estimated to be equal to the carrying amounts.

#### Estimated fair values of financial instruments at December 31

	2011			2010
(NOK IN MILLION)	CARRYING AMOUNT	ESTIMATED FAIR VALUE	CARRYING AMOUNT	ESTIMATED FAIR VALUE
Cash and bank	1 596	1 596	849	849
Trade receivables and accrued revenues	2 136	2 136	2310	2310
Other non-current and current receivables	1 131	1 131	1 277	1 277
Finance receivables and short-term loans	165	153	215	209
Shares available for sale	6	6	1	1
Derivatives - assets	389	389	779	779
Derivatives - liabilities	-228	-228	-346	-346
Payables and accrued cost	-1 727	-1 727	-2386	-2 386
Provisions and other obligations	-801	-801	-373	-373
Interest bearing liabilities	-6 272	-5 577	-8 786	-8 786
Total	-3 606	-2 922	-6 459	-6 466

The table above does not include tax assets or liabilities, retirement benefit obligations or prepayments. Prepayments are not defined as financial instruments. Prepayments include prepaid costs (see note 12), prepaid capital expenditure (see the consolidated statement of financial position), non-current prepaid costs and prepaid revenues. In addition some prepayments received by REC Silicon and REC Wafer for future deliveries are reported as current and non-current prepayments, interest calculations (see the consolidated statement of financial position and note 20). These liabilities are not scheduled to be repaid in cash.

#### Contractual maturities of financial liabilities

Information on contractual maturities of financial liabilities is found in note 11 for derivatives, note 17 for borrowings and note 20 for provisions. All current liabilities are expected to be paid within one year from the reporting dates.

#### **CREDIT RISK**

The maximum credit risks related to financial instruments are estimated in the table below

		2011		2010
(NOK IN MILION)	CARRYING AMOUNT	MAX. EXPOSURE	CARRYING AMOUNT	MAX. EXPOSURE
Cash and bank	1 596	1 596	849	849
Trade receivables and accrued revenues	2 136	2 136	2310	2310
Other non-current and current receivables	1 131	1 131	1 277	1 277
Finance receivables and short-term loans	165	165	215	215
Embedded derivatives - assets	5	5	4	4
Other derivatives - assets	384	384	775	775
Total	5 417	5 417	5 431	5 431

<sup>\*</sup> See above for a description of what is included in the table.

REC ASA had provided parent company guarantees for subsidiaries amounting to NOK 6 million at December 31, 2011 and 2010. These are related to future supply of goods and services. REC ASA has cosigned bank guarantees as security for fulfillment of subsidiaries' commercial obligations in the ordinary course of business. The total amount of bank guarantees for subsidiaries amounted to NOK 279 million at December 31, 2011 and NOK 287 million at December 31, 2010. These guarantees are not regarded as financial guarantees for the consolidated financial statements for REC or for the purpose of these note disclosures.

The significant price reductions and oversupply in the solar industry have increased the credit risk of REC's counterparties. Worldwide, most industries have experienced more difficult market conditions. REC has also experienced some disputes when it has been necessary to call on, or prepare call on, bank guarantees from customers, which also has increased the credit risk.

REC Group's trade receivables are primarily from wholesale and manufacturing customers in the solar and electronic industry in Europe, USA and Asia.

#### Shared characteristics that identifies each concentration of trade receivables and accrued revenues at December 31, 2011

GEOGRAF	PHICAL	SECTOR		INDUSTRY		SECTOR INDUSTRY	
Europe	38%	Wholesale	39%	Solar Industry	89%		
Europe USA	8%	Manufacturing	51%	Electronic Industry	11%		
China	20%	Other	10%	Other	0%		
Japan	23%						
Japan Other Asia	7%						
Other	4%						
Total	100%	•••••••••••••••••••••••••••••••••••••••	100%	•	100%		

#### Shared characteristics that identifies each concentration of trade receivables and accrued revenues at December 31, 2010

GEOGR	APHICAL	SECTOR INDUSTRY			
Europe	40%	Wholesale	44%	Solar Industry	88%
USA	15%	Manufacturing	46%	Electronic Industry	12%
Asia	45%	Other	10%	Other	0%
Total	100%		100%		100%

REC has during 2010 and 2011 increased the number of customers, and thereby reduced somewhat the risk related to concentration of a limited number of customers. In 2011 and 2010, no single customer exceeded ten percent of revenues or trade receivables, but some of the customers are relatively large. At year-end 2011, the seven largest trade receivables constituted 44 percent of total trade receivables. Also, the REC Group's customers are to a large extent exposed to the same industry. Due to the close down of parts of REC Wafer's production capacity and termination of long-term wafer sales contracts, REC Silicon and REC Wafer are more exposed to spot sales. This may increase the credit risk. Generally a more challenging and competitive market environment may increase credit risk through sales to financially weaker customers, extended payment terms and sales into new and immature markets.

Policies are in place to ensure that sales of products are made to customers with an appropriate credit history in combination with requirements for various payment guarantees or prepayments and to some extent credit insurance. Some of the trade receivables at December 31, 2011 and 2010 were overdue. In 2010 REC increased its provision for loss on trade receivables and realized these losses in 2011, primarily related to two customers. At year-end 2011 the REC Group, based on individual evaluation of the customers and the amounts receivables outstanding, has recognized limited provisions for losses on receivables. The REC Group has experienced that an increasing part of the customers are overdue in settling the amounts owed. Many companies in the solar industry are struggling with their liquidity due to the difficult market conditions. The management evaluates that the credit risk at December 31, 2011 is higher than at December 31, 2010.

#### Analysis of aging of receivables at December 31, 2011

#### AGING OF RECEIVABLES THAT ARE NOT IMPAIRED

#### PAST DUE

(NOK IN MILLION)	TOTAL CARRYING AMOUNT	NOT DUE	< 30 DAYS	>30<90 DAYS	>90<365 DAYS	>365 DAYS	IMPAIRED
Trade receivables and accrued revenues	2 145	1657	254	157	66	2	9
Provision for loss on trade recivables	-9	0	0	0	0	0	-9
Other non-current and current receivables	1 131	1128	0	2	0	0	0
Finance receivables and short-term loans	165	165	0	0	0	0	0
Total	3 432	2951	255	158	66	2	0

#### Analysis of aging of receivables at December 31, 2010

#### AGING OF RECEIVABLES THAT ARE NOT IMPAIRED

#### PAST DUF

(NOK IN MILLION)	TOTAL CARRYING AMOUNT	NOT DUE	< 30 DAYS	>30<90 DAYS	>90<365 DAYS	>365 DAYS	IMPAIRED
Trade receivables and accrued revenues	2412	1 900	234	40	0	0	240
Provision for loss on trade recivables	-102	0	0	0	0	0	-102
Other non-current and current receivables	1 277	1 277	0	0	0	0	0
Finance receivables and short-term loans	215	215	0	0	0	0	0
Total	3 803	3 392	235	40	0	0	138

Approximately 40 percent of trade receivables not due and approximately 30 percent of trade receivables overdue were secured by bank guarantees, letters of credits, prepayments, credit insurance or pledge of assets at December 31, 2011.

Approximately 21 percent of trade receivables not due, 17 percent of trade receivables overdue and 90 percent of trade receivables regarded as impaired were secured by bank guarantees or prepayments at December 31, 2010. REC Wafer had at December 31, 2010 requested the bank to draw on a bank guarantee for the largest receivable regarded as impaired. This customer had disputed REC's right to draw on the bank guarantee and REC had at December 31, 2010 not received payment under the guarantee. In 2011, REC Wafer settled the dispute with this customer. See note 12 and 31 for more information.

In some cases REC is involved in legal proceedings with its customers. Any legal proceedings in relation to the contracts and bank guarantees encounter procedural risk and may take time to resolve.

NOK 1.016 million of other non-current and current receivables at December 31,2011 (NOK 1,185 million at December 31,2010) are receivables for VAT and other taxes (not income taxes, as these are not included here as financial assets) and government grants. These are regarded to have a low credit risk.

Finance receivables and short-term loans at December 31, 2011 and 2010 are primarily unsecured loans to a vendor of REC Wafer (NOK 90 million in 2011 and NOK 112 million in 2010). REC has significant committed future purchase, financial and operating lease contracts with this vendor. The loans and receivables should be regarded as a part of the total contractual agreements, and the credit risk should be evaluated in this context. It also includes municipality bonds in Moses Lake, Washington (NOK 75 million in

2011 and NOK 80 million in 2010) that are serviced by property tax payments by REC Silicon and in 2010 a receivable on a customer in the REC Systems business in Europe (NOK 23 million), secured by shares in the company that owns the relevant PV system.

Derivative counterparties and cash transactions are limited to high-credit-quality financial institutions (see note 3). Positive values in embedded derivatives relate to contractually committed future sales of wafers. Parts of these long term contracts are secured by bank guarantees from high-credit-quality banks and/or prepayments. REC had insignificant positive fair values in embedded derivatives at December 31, 2011 and 2010.

#### **SENSITIVITIES**

# Convertible EUR bond – sensitivity to changes in REC ASA share price

At December 31, 2011 it is estimated that a ten percent increase (decrease) in REC ASA's share price will not change the estimated fair value of the convertible bond.

At December 31, 2010 it is estimated that a ten percent increase (decrease) in REC ASA's share price will change the estimated fair value of the convertible bond with an effect to profit or loss by NOK -26 (19) million.

The currency and interest rate sensitivities related to the convertible bond are included in the calculations below.

#### Interest rate sensitivity

Interest bearing assets and liabilities are accounted for at amortized cost, except for derivatives, the EUR convertible bond and the fair value component with regards to changes in discount interest rates in the Norwegian bonds REC01 and REC03.

A change in interest rates will affect the interest payments on variable interest rate liabilities and cash and cash equivalents. The net effect of a one percentage point increase (decrease) in interest rates is estimated to affect profit or loss for the year by NOK -23 (23) million calculated on outstanding amounts at December 31, 2011. The same calculation at December 31, 2010 was NOK -46 (46) million. These calculations are not adjusted for capitalization of borrowing costs.

A one percentage point increase (decrease) in market interest rates is estimated to change the net estimated fair values of the bonds and derivatives with an effect to profit or loss by NOK 48 (-48) million at December 31, 2011. The same calculation at December 31, 2010 was NOK 72 (-72) million.

#### Exchange rate sensitivity

The REC Group has estimated the effect on financial assets and financial liabilities of a 10 percent change in currencies other than the entities' functional currencies at December 31, 2011 and 2010. The REC Group has no single functional currency, and the effects are calculated for each entity in its functional currency, converted to NOK using the exchange rates at December 31, 2011 and 2010, respectively. The calculations include intercompany receivables and payables. It excludes net investments in subsidiaries, joint ventures and associates but includes a receivable that is regarded as a part of net investments in a foreign entity.

"Of which to equity" is an estimate of the effect that could affect equity through other comprehensive income. It excludes translation differences on net investments in foreign currencies, except receivables regarded as a part of the net investments (a loan to REC Silicon in the USA of approximately USD 130 million).

The calculation should not be viewed as an estimate of what the effects could be for the financial year for changes in currency rates.

This is, among other things, due to the fact that the amounts of financial instruments in foreign currencies may change during the year at the same time as changes in currency rates may occur unevenly throughout the year. If there is a change in the amounts of derivatives that are designated and qualify for hedge accounting compared to December 31, more or less effects would be recognized to equity through other comprehensive income versus profit or loss.

The tables below show an estimate of the effects of a 10 percent change in foreign currencies compared to functional currencies for each entity and totaled to arrive at the estimated effects for the REC Group.

Subsequent to December 31, 2011 all entities in the integrated plant in Singapore will have EUR as functional currency, and EUR is consequently used in the calculation of exchange rate sensitivity at December 31, 2011 for these. In the calculation at December 31, 2010 it was a mix between EUR and SGD. The exchange rate sensitivity at December 31, 2011 for financial assets in USD relates primarily to REC ASA's total loans to REC Silicon in the USA. The main part of the remaining sensitivity on financial assets relates to group internal receivables. Sensitivity on financial liabilities relates primarily to interest bearing liabilities (see note 17) and Group internal payables. For information on derivatives (see note 11).

The exchange rate sensitivity at December 31, 2010 for financial assets in USD relates primarily to REC ASA's total loans to REC Silicon in the USA. The main part of the remaining sensitivity on financial assets relates to the Group account system, with the largest amounts being group internal receivables (see note 14). Sensitivity on financial liabilities relates primarily to interest bearing liabilities (see note 17) and group internal payables (mainly in the Group account system). For information on derivatives (see note 11).

#### Exchange rate sensitivity on financial instruments at December 31, 2011

	CHAN	CURRENCIES			
(NOK IN MILLION)	EUR	USD	SGD	OTHER	TOTAL
Financial assets and liabilities					
Financial assets	41	659	160	2	862
Financial liabilities	-294	-190	-264	2	-745
Net excluding derivatives	-253	470	-104	4	116
Derivatives		•••••••••••••••••••••••••••••••••••••••	•	•••••••••••••••••••••••••••••••••••••••	
Other derivatives	-535	-309	263	0	-581
Embedded derivatives	0	127	0	0	127
Net derivatives	-535	-182	263	0	-454
Total	-788	288	159	4	-338
Of which to equity		•		•	
USD receivables as part of net investment	0	79	0	0	79
Rest is to profit or loss	-788	209	159	4	-417

# Exchange rate sensitivity on financial instruments at December 31, 2011 $\,$

	CI	CHANGE - 10% COMPARED TO FUNCTIONAL CURRENCIES				
(NOK IN MILLION)	EUR	USD	SGD	OTHER	TOTAL	
Financial assets and liabilities						
Financial assets	-41	-659	-160	-2	-862	
Financial liabilities	294	190	264	-2	745	
Net excluding derivatives	253	-470	104	-4	-116	
Derivatives	••••••	•••••			•••••••••••••••••••••••••••••••••••••••	
Other derivatives	535	309	-263	0	581	
Embedded derivatives	0	-127	0	0	-127	
Net derivatives	535	182	-263	0	454	
Total	788	-288	-159	-4	338	
Of which to equity	•				•••••••••••••••••••••••••••••••••••••••	
USD receivables as part of net investment	0	-79	0	0	-79	
Rest is to profit or loss	788	-209	-159	-4	417	

# Exchange rate sensitivity on financial instruments at December 31, 2010 $\,$

	CHANGE + 10% COMPARED TO FUNCTIONAL CURRENCIES					
(NOK IN MILLION)	EUR	USD	SGD	OTHER	TOTAL	
Financial assets and liabilities						
Financial assets	100	922	7	18	1 047	
Financial liabilities	-342	-281	-64	-16	-703	
Net excluding derivatives	-242	641	-57	2	343	
Derivatives	•		•••••••••••••••••••••••••••••••••••••••	······································	•••••••••••••••••••••••••••••••••••••••	
Other derivatives	-807	-246	138	9	-906	
Embedded derivatives	0	412	0	0	412	
Net derivatives	-807	167	138	9	-494	
Total	-1 049	808	81	11	-150	
Of which to equity	•	•	•••••	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••	
USD receivables as part of net investment	0	77	0	0	77	
Rest is to profit or loss	-1 049	730	81	11	-228	

# Exchange rate sensitivity on financial instruments at December 31, 2010

	CHANGE -10% COMPARED TO FUNCTIONAL CURRENCIES				
(NOK IN MILLION)	EUR	USD	SGD	OTHER	TOTAL
Financial assets and liabilities					
Financial assets	-100	-922	-7	-18	-1 047
Financial liabilities	342	281	64	16	703
Net excluding derivatives	242	-641	57	-2	-343
Derivatives					
Other derivatives	807	246	-138	-9	906
Embedded derivatives	0	-412	0	0	-412
Net derivatives	807	-167	-138	-9	494
Total	1 049	-808	-81	-11	150
Of which to equity	•		•	•	
USD receivables as part of net investment	0	-77	0	0	-77
Rest is to profit or loss	1 049	-730	-81	-11	228

REC Wafer has in 2011 settled its legal disputes with Moser Baer Photo Voltaic Limited (Moser Baer) and China Sunergy (Nanjing) PV-Tech Co. Ltd. related to long-term contracts for supply of wafers. REC Silicon in the US settled its legal dispute with Shaw Group Inc. and Shaw Process Fabricators Inc. in 2011. The total net effect of these settlements is not material on the statement of income for 2011.

REC is involved in some legal proceedings and disputes related to various contracts.

Some disputes relate to claims submitted by REC for damages, reimbursement of costs, compensation for breach of contract, etc. REC has not recognized any contingent assets related to these disputes.

Some disputes concern claims against REC submitted by vendors and other parties, the largest one being a claim for damages in the amount of approximately NOK 165 million from a supplier against REC Wafer after REC Wafer terminated the long-term supply agreement for material breach. REC contests these claims and has not recognized any liability for these claims. As a consequence of the close-downs of the cell and parts of the wafer production in Norway, further disputes can be expected relating to existing purchase contracts. Contract discussions have started with some of the suppliers, the largest being related to the recycling, mixing and supply of slurry for REC Wafer (see notes 6, 20 and 29). Provisions have been made for REC's current best estimate of the present values of the potential obligations (see note 20). This also relates to other contracts and asset retirement obligations. The timing and amount of any outcome is uncertain.

REC has received claims for annual property taxes in Singapore and in Washington State (USA). REC is contesting the size of the claims and believes the original claims are significantly overestimated. In 2011, the claim in Singapore was nearly halved, but REC is still contesting its size. Per December 31, 2011 REC has expensed all amounts in dispute both in Singapore and in the USA.

# 32 SHARE-BASED COMPENSATION

REC ASA has from 2008 had share option programs for management and key personnel in REC ASA and subsidiaries. In addition, REC ASA has had employee share purchase programs from 2008 to 2010.

#### **SHARE OPTION PROGRAM**

Each program is a six year program with a lock up period in the first three years. Each of the programs has a profit cap of one to two years fixed base salary. The number of share option awarded is limited to a maximum profit gain in each calendar year of the exercising period relative to annual fixed base salary effective at January 1 in the year of exercise. The profit gain is calculated as the difference between the exercise price and the market price at the time of exercise.

	NO. OF EMPLOYEES GRANTED	NO. OF OPTIONS	EXPECTED	RISK FREE INTEREST	AVERAGE EXPECTED LIFE	AVERAGE ESTIMATED VESTING		WEIGHTED AVER NTRACTUAL LIF		
PROGRAM	OPTIONS	GRANTED	VOLATILITY	RATES	TIME (YEAR)	PERIOD (YEAR)	2008	2009	2010	2011
2008	71	638 464	59%	4.9% - 5.3%	3.5	6.2	5.6	4.6	3.6	2.6
2009	85	3 250 094	77%	3.4% - 3.9%	3.3	6.0		5.6	4.6	3.6
2010	68	7 245 411	81%	2.4%	3.3	6.0			5.6	4.6
2011	59	8 600 083	79%	2.55%	3.3	3.1				5.6

Fair value was estimated based on the Black-Scholes option price model. Expected volatility is based on historical volatility and no dividends are expected in the periods. Expected lifetime has been set at the time of allocation based on expectations that employees will exercise the options early due to the structure of the programs, including the annual profit cap, and the high volatility of the REC share price. This also determined the expected vesting period. In 2011, due to the continued low share price compared to the exercise prices the expected vesting periods were changed from approximately three years to approximately six years for the 2008, 2009 and 2010 programs. This has reduced the accumulated expense recognized for these programs.

		PER OPTION (NOK)	PEF	R SHARE (NOK)
	NO. OF OPTIONS	AVERAGE ESTIMATED FAIR VALUE AT GRANT DATE	AVERAGE EXERCISE PRICE	MARKET PRICE AT GRANT DATE
Outstanding at January 1, 2010	3 671 450	10.89	71.02	NA
Granted July 21, 2010	2 109 628	2.92	20.61	18.74
Granted August 6, 2010	5 135 783	2.91	20.61	18.68
Forfeited in 2010 of 2008 program	-164 052	31.85	178.59	NA
Forfeited in 2010 of 2009 program	-714 134	7.46	52.48	NA
Forfeited in 2010 of 2010 program	-288 618	2.91	20.61	NA
Exercised in 2010	0	NA	NA	NA
Expired in 2010	0	NA	NA	NA
Outstanding at December 31, 2010	9 750 057	5.10	34.60	NA
Exercisable at December 31, 2010	0	NA	NA	NA
Outstanding at January 1, 2011 adjusted*	10 352 910	4.80	32.48	NA
Granted May 27, 2011	2815039	2.21	13.57	12.34
Granted May 30, 2011	5 785 044	2.31	13.57	12.34
Forfeited in 2011 of 2008 program	-164615	22.04	130.53	NA
Forfeited in 2011 of 2009 program	-794 825	6.28	44.00	NA
Forfeited in 2011 of 2010 program	-1 886 222	2.91	20.61	NA
Forfeited in 2011 of 2011 program	-1 254 654	2.26	13.57	NA
Exercised in 2011	0	NA	NA	NA
Expired in 2011	0	NA	NA	NA
Outstanding at December 31, 2011	14852677	3.52	22.93	NA
Exercisable at December 31, 2011	337 248	22.53	130.53	NA

<sup>\*</sup> The strike prices and number of options granted in the 2008 and 2009 program were adjusted in 2011 to compensated for the dilutive effects of the rights issues

Calculation of social security tax is based on intrinsic value at end of period.

The amount recognized in the statement of income for share options was an income of NOK 4.1 million in 2011 and an expense of NOK 9.3 million in 2010. At year-end 2011, total estimated fair value recognized to equity was NOK 16.4 million. Remaining estimated fair value to be expensed was NOK 36 million at December 31, 2011 and NOK 29.2 million at December 31, 2010.

In 2011, according to the terms and conditions of the programs the compensation committee of REC ASA has adjusted the exercise price and number of options granted to compensate for the dilutive effects of the rights issues in 2009 and 2010. The adjustment factors are the bonus elements (dilutive effects), as discussed in note 26 Earnings per share, as follows:

ADJUSTED EXERCISE PRICE	ADJUSTED NUMBER OF OPTIONS
Old exercise price * 1/Bonus factor	Old number * Bonus factor

For the 2008 share option program, the adjustments are made for the bonus factor for the rights issues in 2009 and 2010. For the 2009 share option program, the adjustments are made for the bonus factor for the rights issue in 2010.

#### At December 31, 2010

BEFORE ADJUSTED		BONU	JS FACTOR	ADJUSTME	ADJUSTMENT FACTOR		ADJUSTED	
PROGRAM	EXERCISE PRICE	NO. OPTIONS	2009	2010	EXERCISE PRICE	NO. OPTIONS	EXERCISE PRICE	NO. OPTIONS
2008	178.59	366 805	1.15	1.19	0.73	1.37	130.53	501 862
2009	52.48	2 426 459	1.00	1.19	0.84	1.19	44.00	2894255
2010	20.61	6 956 793	1.00	1.00	1.00	1.00	20.61	6 956 793
Total		9 750 057						10352910

## At December 31, 2011

BEFORE ADJUSTED		BONUS	BONUS FACTOR ADJUSTMENT FACTOR		ADJUSTED			
PROGRAM	EXERCISE PRICE	NO. OPTIONS	2009	2010	EXERCISE PRICE	NO. OPTIONS	EXERCISE PRICE	NO. OPTIONS
2008	178.59	246 490	1.15	1.19	0.73	1.37	130.53	337 248
2009	52.48	1760101	1.00	1.19	0.84	1.19	44.00	2 099 430
2010	20.61	5 070 571	1.00	1.00	1.00	1.00	20.61	5 070 571
2011	13.57	7 345 429	1.00	1.00	1.00	1.00	13.57	7 345 429
Total		14 422 591	······································		•	•••••••••••••••••••••••••••••••••••••••	•••	14852677

These adjustments are to make the option holders equally well of as prior to the dilution in the rights issues. The total fair values are thus unchanged.

#### **EMPLOYEE SHARE PURCHASE PROGRAM**

For 2011, the REC Group had no employee share purchase program. In 2010 the REC Group had an employee share purchase program. The program offered all employees in REC ASA and its subsidiaries to purchase shares up to a maximum market value of NOK 35,000 per employee with a discount of 15 - 20 percent. For 2010, the number of shares allocated was 351,347 at a weighted average share price of NOK 17 on November 15, 2010. Five percent of the employees participated in the program for 2010.

#### 33 **EVENTS AFTER THE REPORTING PERIOD**

With prospects of continued negative operating results, REC decided on March 20, 2012 to permanently close down the 300 MW monocrystalline wafer plant in Glomfjord. About 200 employees are affected. The fixed assets of the cash-generating unit REC Wafer Mono were written down to zero in 2011 based on estimated value in use (see note 7). REC expects to recognize restructuring costs, onerous contracts and other obligations, as well as potential write down of inventories and other assets in relation to the close down in the first quarter of 2012. Such amounts have not been quantified as of this date.

REC has on March 20, 2012 signed an amendment to the bank loan agreement to improve the covenant path and exclude costs from EBITDA in the covenant calculation related to the close down of production capacity in Norway (limited to NOK 1.6 billion for a period including the fourth quarter 2011 to, and including, the second quarter 2013). The facility amount has been reduced from NOK 8.6 billion to NOK 4 billion, which REC regards as sufficient. The entire amount of NOK 4 billion is available until the maturity of the facility in May 2013. REC has further agreed on certain restrictions, including a maximum annual capital expenditure aligned with REC's current business plans. See notes 3 and 17 for further information on the credit facility.

# BALANCE SHEET (NGAAP) RENEWABLE ENERGY CORPORATION ASA

AT DECEMBER 31 (NOK IN MILLION)	NOTES	2011	2010
ASSETS			
Non-current assets			
Intangible assets	В	17	82
Property and equipment	С	9	20
Shares in subsidiaries	D	3 222	5 906
Non-current interest bearing receivables from subsidiaries	E	6 126	8 227
Non-current interest bearing receivables external	F	91	111
Derivatives, external	G	74	192
Total non-current assets		9 538	14 538
Current assets			
Group account systems, subsidiaries	Н	2 900	13 570
Trade receivables from subsidiaries		12	42
Trade receivables from others		2	2
VAT and other public taxes and duties receivable		2	3
Other receivables from subsidiaries		371	212
Other receivables		73	75
Derivatives, internal	G	0	15
Derivatives, external	G	310	582
Total current receivables		3 670	14 501
Cash and cash equivalents	Н	1 412	555
Total current assets		5 082	15 056
Total assets		14 620	29 594

# BALANCE SHEET (NGAAP) RENEWABLE ENERGY CORPORATION ASA

AT DECEMBER 31 (NOK IN MILLION)	NOTES	2011	2010
EQUITY & LIABILITIES			
Shareholders equity			
Share capital	1	997	997
Share premium reserve	I	5 584	16 073
Contributed capital	I	0	283
Total paid in capital		6 581	17 354
Other equity	I	0	2 437
Total shareholders equity		6 581	19 790
Non-current liabilities			
Interest bearing liabilities	J	6 385	7 035
Retirement benefit obligations	K	9	17
Deferred tax liabilities	L	0	277
Derivatives, internal	G	0	39
Derivatives, external	G	86	41
Total non-current liabilities		6 480	7 410
Current liabilities			
Trade payables to subsidiaries		4	4
Group account systems, subsidiaries	Н	1 271	1 342
Trade payables to others		15	11
VAT and other public taxes and duties payable		7	7
Current provisions	M	6	2
Group contributions		0	641
Other current liabilities		177	172
Derivatives, internal	G	0	193
Derivatives, external	G	79	20
Total current liabilities		1 559	2 393
Total liabilities	······	8 039	9 803
Total equity and liabilities		14 620	29 594

Sandvika, March 20, 2012

Bjørn M. Wiggen Chairman of the Board

Hilde Myrberg Member of the Board

Heléne Villolen Degguist Member of the Board

> Wars (Alegard Hans Ødegård Member of the Board

Tore Schiøtz Member of the Board

Hrul Berdal Mimi K. Berdal Member of the Board

Odd Christopher Hansen Member of the Board

Rolf B. Nilsen Member of the Board

Svein Tore Holsether Member of the Board

Member of the Board

Member of the Board

Silje Johnsen Member of the Board

President and CEO

# INCOME STATEMENT (NGAAP) RENEWABLE ENERGY CORPORATION ASA

YEAR ENDED DECEMBER 31 (NOK IN MILLION)	NOTES	2011	2010
Lease revenues and other revenues external		3	1
Revenues from subsidiaries		83	98
Total revenues		86	99
Employee benefit expenses	К	-103	-129
Other operating expenses	N	-140	-127
Depreciation, amortization and impairment	B,C	-81	-13
Operating loss (EBIT)		-238	-170
Interest income, internal		1 745	1784
Interest income, external		14	24
Interest expenses, internal		-17	-11
Interest expenses, external	0	-509	-901
Other financial expenses	0	-70	-287
Currency gains/losses	G	-41	1 002
Net gains/losses on internal derivatives	G	-60	-308
Net gains/losses on external derivatives	G	16	941
Write downs and losses on financial assets	Р	-14 339	-72
Profit/loss before taxes		-13 498	2 001
Income tax expense/benefit	L	281	-425
Profit/loss for the year		-13 217	1 576
Profit/loss for the year is distributed as follows			
Share premium reserve	1	-10 490	0
Contributed capital	1	-283	0
Other equity	1	-2 444	1 576
Total distributed		-13 217	1 576
Group contribution to subsidiary, net after tax		0	462

# STATEMENT OF CASH FLOWS (NGAAP) RENEWABLE ENERGY CORPORATION ASA

YEAR ENDED DECEMBER 31 (NOK IN MILLION)	2011	2010
Cash flows from operating activities		
Profit/loss before tax	-13 498	2001
Taxes paid/received	0	75
Depreciation, amortization	81	13
Impairment and losses financial assets	14 339	65
Changes in receivables	135	1
Changes in payables	-18	-19
Changes in provisions	4	-90
Changes in VAT and other public taxes and duties	0	2
Received group contribution	0	467
Changes in derivatives	323	-136
Currency effects not cash flow or not related to operating activities 1)	36	-987
Other items <sup>2)</sup>	111	491
Net cash flow from operating activities	1 514	1 884
Cash flows from investing activities		
Cash proceeds for shares	0	2
Cash payments for shares	-9 058	-943
Payment of group contribution	-643	0
Proceeds finance receivables	2 332	1 036
Payments finance receivables	-434	-481
Proceeds from sale of property, plant and equipment and intangible assets	1	0
Net change in internal part of Group account system <sup>1) 3)</sup>	7 905	-2653
Payments for property, plant and equipment and intangible assets	-5	-2
Net cash flow from investing activities	98	-3 041
Cash flows from financing activities		
Payments of borrowings and up-front/waiver loan fees	-4 207	-19 025
Proceeds from borrowings	3 452	15 379
ssuance of shares	0	3 888
Net cash flow from financing activities	-756	241
Net increase/decrease in cash and cash equivalents	857	-915
Cash and cash equivalents at the beginning of the period	555	1 470
Cash and cash equivalents at the end of the period	1 412	555

<sup>1)</sup> The profit/loss before tax includes significant currency gains in 2010. Currency gains and losses are primarily related to interest bearing liabilities, loans to susidiaries and the Group account system. The net currency gains and losses in the Group account system relates to Group internal receivables and payables and REC ASA's external bank accounts. It is impracticable to separate these effects in the Group account system. However, the internal receivables and payables in the Group account system are significantly higher than the external bank accounts. REC ASA has consequently included the net currency effects in the net change in the internal part of the Group account system, as a part of investing activities in the statement of cash flows.

<sup>&</sup>lt;sup>2)</sup> Other items consist primarily of the expensing of up-front loan fees.

<sup>3)</sup> See note 14 to the consolidated financial statements for a description of REC's Group account systems (cash pools). The Group account systems contain receivables and payables on subsidiaries (internal part) and REC ASA's external bank accounts. In the balance sheet, these are presented separately at December 31, 2011 and 2010.

# INDEX OF THE NOTES TO THE FINANCIAL STATEMENTS RENEWABLE ENERGY CORPORATION ASA

NOT	E	PAGE
Α	Summary of significant accounting principles and general	141
В	Cash and cash equivalents	141
C	Property, plant and equipment	142
D	Intangible assets	142
Ε	Employee benefits	142
F	Other operating expenses	143
G	Interest bearing liabilities	143
Н	Shares in subsidiaries	143
1	Jointly controlled entity and other investments	144
J	Income taxes	145
Κ	Equity	145
L	Currency gains/losses and derivatives	148
Μ	Research and development	149
Ν	Guarantees	150
0	Losses on financial assets and other financial expenses	150
Р	Write downs and losses on financial assets	151
Q	Research and development	151
R	Guarantees	152

# NOTES TO THE FINANCIAL STATEMENTS RENEWABLE ENERGY CORPORATION ASA

# A SUMMARY OF SIGNIFICANT ACCOUNTING PRINCIPLES AND GENERAL

Renewable Energy Corporation ASA (REC ASA) is a holding company and consists of parts of the Group Management, corporate functions, corporate research and development, a corporate project management organization and the REC Group's inhouse bank. Revenues comprise sales of Group services to REC subsidiaries, primarily on a cost-plus basis. The activities have been scaled down in 2011, especially at the end of the year, in light of the reduced activities in Norway for the REC Group. Due to significant losses and write downs of assets in its subsidiaries, REC ASA had to contribute capital during the year to subsidiaries and recognized significant write downs and losses on shares in, and loans to subsidiaries.

The financial statements of REC ASA have been prepared in compliance with the Norwegian Accounting Act and Norwegian generally accepted accounting principles (NGAAP) in effect at December 31, 2011. The functional and reporting currency of REC ASA is Norwegian Krone (NOK). The consolidated financial statements of the REC Group have been prepared in accordance with IFRS. However, except as stated, REC ASA's accounting principles are similar to the accounting principles for the REC Group, as described in the notes to the consolidated financial statements. Where the notes for the parent company are substantially different from the notes for the Group, these are shown below. Otherwise, refer to the notes to the consolidated financial statements for the Group.

Group contributions and dividends that are subject to approval by the Annual General Meeting are according to IFRS recognized in the consolidated financial statements at the time of approval. For REC ASA's financial statements according to NGAAP, these are recognized in the fiscal year they relate to. For REC ASA this is relevant for Group contributions recognized in 2010, approved by the Annual General Meeting of REC ASA and paid to subsidiaries in 2011. Group contributions to subsidiaries are recognized as investment in shares in subsidiaries, net of tax. In REC ASA's financial statements, subsidiaries, jointly controlled entities and associates are carried at the lower of cost and estimated recoverable amount. In the consolidated financial statements, these are consolidated, proportionately consolidated and accounted for using the equity method, respectively. In the consolidated financial statements, the convertible EUR bond issued in 2009 has been measured at fair value. In REC ASA's financial statements it is measured at amortized cost.

In REC ASA's financial statements, payments expected to be made during the next 12 months on non-current financial assets or liabilities are not reclassified to current financial assets or liabilities. In the consolidated financial statements, these are reclassified.

The financial statements of REC ASA have been approved for issue by the Board of Directors on March 20, 2012 and are subject to approval by the Annual General Meeting on May 22, 2012.

# **B** INTANGIBLE ASSETS

(NOK IN MILLION)	INTERNALLY GENERATED INTANGIBLES	ASSETS UNDER CONSTRUCTION	OTHER INTANGIBLE ASSETS	2011 TOTAL	2010 TOTAL
Cost at January 1	20	62	10	93	91
Additions	3	0	0	3	2
Disposals	0	0	0	0	0
Reclassification	0	0	0	0	0
Cost at December 31	22	62	11	96	93
Accumulated amortization at December 31	11	0	6	17	10
Accumulated impairment at December 31	0	62	0	62	0
Carrying value at December 31	11	0	5	17	82
Amortization for the year	4	0	3	7	6
Impairment for the year	0	62	0	62	0
Estimated useful life, years	3	N/A	3-10		
Amortization method	Straight line	N/A	Straight line	•	

In 2011 REC ASA recognized impairment loss on a technology development agreement with SiGen for mono wafer cutting. Remaining intangible assets are to a large extent related to IT systems.

# C PROPERTY, PLANT AND EQUIPMENT

(NOK IN MILLION)	LEASEHOLD IMPROVEMENTS	OFFICE- AND OTHER EQUIPMENT	MACHINERY AND EQUIPMENT	2011 TOTAL	2010 TOTAL
Cost at January 1	14	16	7	37	36
Additions	0	0	2	2	1
Disposals	0	0	7	7	0
Cost at December 31	14	16	2	33	37
Accumulated depreciation at December 31	11	13	0	24	18
Carrying value at December 31	4	4	2	9	20
Depreciation for the year	7	3	1	11	7
Impairment for the year	0	0	2	2	0
Estimated useful life, years	Up to 10	Up to 5	Up to 3		
Depreciation method	Straight line	Straight line	Straight line		

The silan lab (machinery and equipment) was transferred to a subsidiary in the USA in 2011, and the part of the leasehold improvements related to this lab has been fully depreciated in 2011.

# D SHARES IN SUBSIDIARIES

CARRYING VALUE DECEMBER 31 (NOK IN MILLION)

COMPANY	OWNERSHIP/VOTING RIGHT	BUSINESS OFFICE	2011	2010
REC Silicon AS	100%	Bærum	225	225
REC Wafer Norway AS	100%	Meløy	0	1 275
REC Solar AS	100%	Bærum	0	1 409
REC Technology Ventures AS	100%	Bærum	4	4
REC Site Services Pte Ltd	100%	Singapore	2 992	2 9 9 2
Total			3 222	5 906

In 2011 loans in the Group account systems were converted to equity in REC Wafer Norway AS (NOK 6,500 million), REC Solar AS (NOK 2,000 million) and REC ScanCell AS (NOK 550 million). The shares in REC ScanCell AS were subsequently sold to REC Solar AS for NOK 1. Parts of the conversions of the loans (NOK 6,424 million) were recognized as realized losses on loans. In addition the remaining values of the shares were written-down to zero by in total NOK 5,310 million, and provisions for losses on loans were recognized with NOK 2,604 million (see note P).

Except for REC Site Services Pte Ltd, the subsidiaries own shares in other subsidiaries as described in their respective financial statements.

# E NON-CURRENT INTEREST BEARING RECEIVABLES FROM SUBSIDIARIES

The receivables are USD loans to the subsidiaries in USA (REC Silicon), with USD 1,022 million at December 31, 2011 and USD 1,405 million at December 31, 2010.

# F NON-CURRENT INTEREST BEARING RECEIVABLES

Non-current interest bearing receivables is primarily a loan to a vendor of REC Wafer Norway AS, NOK 90 million and NOK 110 million at December 31,2011 and 2010 respectively.

# G CURRENCY GAINS/LOSSES AND DERIVATIVES

#### **CURRENCY GAINS AND LOSSES**

Net currency losses in 2011 of NOK 41 million related primarily to currency losses on the Group account systems (cash pools), partially offset by currency gains on USD and EUR interest bearing liabilities and loans to subsidiaries. Net currency gains in 2010 of NOK 1,002 million related primarily to currency gains on USD and EUR interest bearing liabilities, partially offset by losses on SGD interest bearing liabilities, and currency gains on loans to subsidiaries and the Group account systems (cash pools).

#### **DERIVATIVES**

#### Distribution of derivatives at December 31

	2011		2010	
(NOK IN MILLION)	ASSETS	LIABILITIES	ASSETS	LIABILITIES
Non-current derivatives, internal	0	0	0	39
Non-current derivatives, external	74	86	192	41
Total non-current derivatives	74	86	192	80
Current derivatives, internal	0	0	15	193
Current derivatives, external	310	79	582	20
Total current derivatives	310	79	598	213
Total derivatives	384	165	790	293

See notes 3 and 11 to the consolidated financial statements for a description of derivatives, the purpose of entering into derivative transactions and accounting for derivatives. Note 25 to the consolidated financial statements discusses the net gains on external derivatives in 2011 and 2010, which also include fair value adjustments of NOK bonds due to fair value hedge.

REC ASA's net losses on internal derivatives in both years were on currency derivatives entered into with subsidiaries, of which parts were back-to-back with external banks. During 2011 all internal derivatives were terminated and settled, and at year-end 2011 REC ASA was the only entity in the REC Group holding derivatives, besides some embedded derivatives in REC Wafer. The overview of derivatives in note 11 to the consolidated financial statement is therefore representative for REC ASA at December 31,2011.

# **H** CASH AND CASH EQUIVALENTS AND GROUP ACCOUNT SYSTEMS

#### Cash and cash equivalents

(NOK IN MILLION)	2011	2010
Bank accounts	1 412	555

For REC ASA, cash and cash equivalents are primarily the net external amounts in the REC Group account systems. See note 14 to the consolidated financial statements for a description of the Group account systems (cash pools) in the REC Group.

The amounts representing receivables on and liabilities to subsidiaries are shown in separate accounts in the balance sheet and below.

#### Group account systems, current receivables on subsidiaries

(NOK IN MILLION)	<b>2011</b> 2010
Group account systems, subsidiaries	<b>5 504</b> 13 570
Less provision for losses on loans to subsidiaries	<b>-2 604</b> 0
Group account system, subsidiaries (net of provision for losses)	<b>2 900</b> 13 570
Specification of provision for losses on loans (through the Group account sy	ystem) to subsidiaries:
(NOK IN MILLION)	2011
(NOK IN MILLION) REC ScanCell AS	2011
· · · · · · · · · · · · · · · · · · ·	2011 4 1 434
REC ScanCell AS	4
REC ScanCell AS REC Wafer Norway AS	4 1 434

Group account systems, current liabilities to subsidiaries

(NOK IN MILLION)	2011	2010
Group account systems, subsidiaries	1 271	1 342

In 2011 and 2010, REC ASA had a guarantee through Nordea Bank of NOK 8 million covering tax deductions for employees.

# EQUITY

(NOK IN MILLION)	SHARE CAPITAL	SHARE PREMIUM RESERVE	CONTRIBUTED CAPITAL	OTHER EQUITY	TOTAL
Equity at January 1, 2010	664	12 481	283	850	14 278
Share option program	0	0	0	9	9
Rights issue	332	3 593	0	0	3 925
Actuarial gains/losses on defined pension scheme, net of tax	0	0	0	2	2
Profit for the year	0	0	0	1 576	1 576
Equity at December 31, 2010	997	16 073	283	2 437	19 790
Share option program	0	0	0	-4	-4
Actuarial gains/losses on defined pension scheme, net of tax	0	0	0	11	11
Loss for the year	0	-10 490	-283	-2 444	-13 217
Equity at December 31, 2011	997	5 584	0	0	6 581

In 2010 REC ASA increased equity through right issue of 332 million shares to a price per share of NOK 12. The gross amount was NOK 4,022 million; net paid-in equity was NOK 3,925 million after deduction of NOK 97 million for costs and tax on costs.

Share capital at December 31,2011 was 997,152,118 shares at par value of NOK 1 (unchanged from December 31,2010). There is one class of shares which all have the same voting rights. See note 15 to the consolidated financial statements for more information.

Distributable equity at December 31, 2011 was NOK 0. At December 31, 2010 it was NOK 2,719 million.

### J INTEREST BEARING LIABILITIES

(NOK IN MILLION)	2011	2010
Bank borrowings	2 035	3 075
Bank borrowings Eksportfinans	0	325
NOK bonds	1 912	1 267
Up-front loan fees etc. (amortized as part of effective interest)	-43	-132
EUR convertible bond	2 481	2500
Total interest bearing liabilities	6 385	7 035

See note 17 to the consolidated financial statements for details of REC ASA's interest bearing liabilities. See note 33 to the consolidated financial statements for amendments to the bank credit facility agreement after the reporting period.

### K EMPLOYEE BENEFITS

### Employee benefit expenses

(NOK IN MILLION)	2011	2010
Payroll	71	76
Bonus	8	17
Share option expense	-3	4
Social security tax	11	15
Pension expense including social security tax	11	16
Other employee related costs	6	2
Employee benefit expenses	103	129

The average number of employees measured in man-years was 57 during 2011 and 67 during 2010. Total loans to employees in REC ASA were NOK 0.5 million at December 31, 2011 (NOK 1.8 million at December 31, 2010 of which NOK 1.3 million related to the employee share purchase program (ESPP)). In 2010, all employees were offered a 12 month's interest free loan for the amount of shares each employee purchased in the 2010 ESPP. All these loans are repaid during 2011. No such plan was initiated in 2011. See note 16 to the consolidated financial statements for compensation, loans and shareholdings for the Group Management and Board of Directors.

#### RETIREMENT BENEFIT OBLIGATIONS AND PENSION EXPENSE

#### Defined benefit plans

(NOK IN MILLION)	2011	2010
Gross retirement benefit obligations at January 1	15	9
Service cost	6	9
Interest cost on pension obligations	1	0
Actuarial gains and losses	-14	-2
Benefits paid, paid-up policies and disability obligation	-1	-2
Gross retirement benefit obligations at December 31	8	15
Fair value of plan assets at December 31	0	0
Funded status at December 31	8	15
Accrued social security tax	1	2
Net retirement benefit obligations at December 31	9	17

#### Retirement benefit obligations in the balance sheet

(NOK IN MILLION)	2011	2010
Net retirement benefit obligations at January 1	17	11
Net benefit expense	8	11
Actuarial gains and losses recognized directly in equity	-16	-2
Pension premiums and benefits paid	-1	-2
Net retirement benefit obligations at December 31	9	17

#### The amounts recognized in the income statement are as follows

(NOK IN MILLION)	2011	2010
Current service cost	6	9
Interest cost on gross retirement benefit obligations	1	0
Employer's social security tax on defined benefit costs	1	1
Total benefit plans	8	11
Contribution plans including employer's social security tax	3	5
Pension expense including social security tax	11	16

The defined benefit plan for base salaries up to  $12\,\mathrm{G}$  (NOK 950,000 at December 31, 2011) was decided to be terminated at the end of 2009 and replaced by other pension and personnel insurance plans. For pension plans, in 2010 and 2011 there have been a compensation plan for salaries up to  $12\,\mathrm{G}$ , a defined benefit plan as compensation for those that were employed at January 1, 2010 and are estimated to earn less pension benefits in the new contribution plan than in the previous benefit plan, a defined benefit plan for salaries over  $12\,\mathrm{G}$  and one individual defined benefit plan. For information on assumptions used and description of the pension plans, see note  $19\,\mathrm{to}$  the consolidated financial statements.

The number of employees in REC ASA's pension plan for salary over 12 G was 22 (31 at the end of 2010) and for the compensation plan 49 at the end of 2011 (58 at the end of 2010). REC ASA's pension plans for all employees fulfill the requirements according to the Norwegian law: "Lov om obligatorisk tjenestepensjon".

#### Accumulated actuarial gains recognized directly to equity as of December 31

(NOK IN MILLION)	2011	2010
Gross before tax	18	3
Less tax	-5	-1
Total recognized directly to equity	13	2

#### **SHARE OPTION PROGRAMS**

See note 32 to the consolidated financial statements for the REC Group for details of the share option programs.

In the income statement, an income of NOK 3.2 million was recognized for 2011 and an expense of NOK 3.7 million for 2010. The income in 2011 is due to the adjustment of vesting period for the share option programs 2008, 2009 and 2010. At December 31, 2011 the accumulated amount recognized to equity was NOK 16.4 million and NOK 20.5 million at December 31, 2010. At December 31, 2011 the accumulated expense recognized in REC ASA was NOK 6.6 million and NOK 9.8 million at December 31, 2010. The difference between the amounts recognized to equity and the expenses are share options offered by REC ASA to employees in subsidiaries, that is recognized as additions to the cost price of shares in subsidiaries. Remaining estimated fair value to be expensed was NOK 14 million at December 31, 2011 and NOK 12.3 million at December 31, 2010.

	PER OPTION (NOK)		PER SHARE (NOK)	
	NO. OF OPTIONS	ESTIMATED FAIR VALUE AT GRANT DATE	AVERAGE EXERCISE PRICE	MARKET PRICE AT GRANT DATE
Outstanding at January 1, 2010	1713309	11.13	71.19	NA
Granted July 21, 2010	1753916	2.92	20.61	18.74
Granted August 6, 2010	1311792	2.91	20.61	18.68
Forfeited in 2010 of 2008 program	-74 446	32.77	178.59	NA
Forfeited in 2010 of 2009 program	-354 821	7.55	52.48	NA
Forfeited in 2010 of 2010 program	-130 222	2.92	20.61	NA
Transferred between units in 2008 program	23 527	27.55	178.59	151.75
Transferred between units in 2009 program	-110 694	7.56	52.48	47.71
Transferred between units in 2010 program	-67 746	2.91	20.61	18.68
Exercised in 2010	0	NA	NA	NA
Expired in 2010	0	NA	NA	NA
Outstanding at December 31, 2010	4 064 615	5.44	36.30	NA
Exercisable at December 31, 2010	0	NA	NA	NA
Outstanding at January 1, 2011 adjusted *	4 329 463	5.11	33.82	NA
Granted May 27, 2011	2 437 124	2.21	13.57	12.34
Granted May 30, 2011	1 679 693	2.31	13.57	12.34
Forfeited in 2011 of 2008 program	-121 426	22.14	130.53	NA
Forfeited in 2011 of 2009 program	-425 223	6.36	44.00	NA
Forfeited in 2011 of 2010 program	-981 401	2.92	20.61	NA
Forfeited in 2011 of 2011 program	-1 085 497	2.26	13.57	NA
Transfer between units in 2008 program	-5 103	21.77	130.53	151.75
Transfer between units in 2009 program	10808	6.18	44.00	47.71
Transfer between units in 2010 program	28 388	2.91	20.61	18.68
Transfer between units in 2011 program	-60 764	2.31	13.57	12.34
Exercised in 2011	0	NA	NA	NA
Expired in 2011	0	NA	NA	NA
Outstanding at December 31, 2011	5 806 061	3.54	22.99	NA
Exercisable at December 31, 2011	139 480	23.24	130.53	NA

<sup>\*</sup> The strike prices and number of options granted in the 2008 and 2009 programs were adjusted in 2011 to compensate for the dilutive effects of the rights issues in 2009 and 2010, see below.

In 2011, according to the terms and conditions of the programs the compensation committee of REC ASA adjusted the strike prices and number of options granted in the 2008 and 2009 programs to compensate for the dilutive effects of the rights issues in 2009 and 2010, see note 32 to the consolidated financial statements for REC Group for more details. These adjustments are to make the option holders equally well of as prior to the dilution in the rights issues. The total fair values are thus unchanged.

#### At December 31, 2010

	BEFORE A	DJUSTED	BONU	S FACTOR	ADJUSTME	NT FACTOR	ADJU	JSTED
PROGRAM	EXERCISE PRICE	NO. OPTIONS	2009	2010	EXERCISE PRICE	NO. OPTIONS	EXERCISE PRICE	NO. OPTIONS
2008	178.59	194 423	1.15	1.19	0.73	1.37	130.53	266 009
2009	52.48	1 002 452	1.00	1.19	0.84	1.19	44.00	1 195 714
2010	20.61	2867740	1.00	1.00	1.00	1.00	20.61	2867740
Total		4 064 615						4 329 463

### At December 31, 2011

	BEFORE A	ADJUSTED	BONUS	5 FACTOR	ADJUSTME	NT FACTOR	ADJU	JSTED
PROGRAM	EXERCISE PRICE	NO. OPTIONS	2009	2010	EXERCISE PRICE	NO. OPTIONS	EXERCISE PRICE	NO. OPTIONS
2008	178.59	101 944	1.15	1.19	0.73	1.37	130.53	139 480
2009	52.48	655 018	1.00	1.19	0.84	1.19	44.00	781 299
2010	20.61	1914726	1.00	1.00	1.00	1.00	20.61	1914726
2011	13.57	2 970 556	1.00	1.00	1.00	1.00	13.57	2 970 556
Total	•	5 642 244	•••		•	•••	•	5 806 061

## L INCOME TAXES

(NOK IN MILLION)	2011	2010
Current income tax benefit (+) / expense (-) for the year	-1	-148
Total deferred tax benefit (+) / expense (-) for the year	282	-277
Total income tax benefit (+) / expense (-) for the year in the income statement	281	-425

# The income tax in the income statement differs from the theoretical amount that would arise using the 28 percent corporate tax rate applicable to profit/loss before taxes

(NOK IN MILLION)	2011	2010
Profit/loss before tax	-13 498	2001
Tax calculated at domestic tax rate of 28 percent	3 780	-560
Income not subject to tax	1	1
Expenses not deductible for tax (permanent differences)	-2 215	-2
Recognition of previosuly not recognized deferred tax assets	0	126
Deferred tax assets not recognized this year	-1 283	0
Adjustment of prior years' income taxes	-1	11
Total income tax benefit (+) / expense (-) for the year in the income statement	281	-425
Effective tax rate	2%	21%

#### Current income tax

Basis for current tax in the balance sheet

Current tax asset (+) / liability (-)

can the meaning tax		
(NOK IN MILLION)	2011	2010
Profit/loss before taxes	-13 498	2001
Impairments and losses on shares and loans - permanent difference	7 914	-36
Other permanent differences	-3	1
Changes in temporary differences	400	-1 437
Basis for current tax in the income statement	-5 187	528
Estimated 28 percent current income tax	1 452	-148
Not recognized current income tax (tax loss carried forward)	-1 452	0
Current income tax benefit (+) / expense (-) in the income statement	0	-148
Basis for current tax in the income statement	-5 187	528
Cost for capital increase, recognized to equity	0	-134
Received repayment of previously paid income taxes	0	247
Group contribution to subsidiaries	0	-641
Tax loss carried forward	5 187	0

0

0

0

### Specification of temporary differences, deferred tax assets and liabilities

(NOK IN MILLION)	2011	2010
Fixed assets	-62	1
Up-front fees	43	132
Hedging NOK bonds	-62	-17
Pension liability	-9	-17
Derivatives	218	497
Net unrealized gains on non-current foreign exchange receivables and liabilities	477	396
Tax loss carried forward	-5 187	0
Total temporary differences and tax loss carried forward	-4 581	991
28 percent deferred tax assets (-) / liabilities (+)	-1 283	277
Deferred tax assets not recognized	1 283	0
Deferred tax assets (-) / liabilities (+) in the balance sheet	0	277
Change in deferred tax assets (-) / liabilities (+) in the balance sheet	-277	277
Of which tax on actuarial gains recognized to equity	4	0
Total deferred tax benefit (-) / expense (+) for the year	-282	277

## M PROVISIONS

(NOK IN MILLION)	EMPLOYEE TERMINATION BENEFITS	ONEROUS CONTRACTS	ASSET RETIREMENT OBLIGATIONS	PROFIT SHARING AND BONUSES	FINANCIAL GUARANTEE*	TOTAL
At January 1, 2010	0	0	1	1	90	92
Additional provision	0	1	0	0	0	1
Used during the year	0	0	0	-1	-90	-91
At December 31, 2010	0	1	1	0	0	2
Additional provision	6	5	0	0	0	11
Unused amout reversed	0	-1	0	0	0	-1
Used during the year	-2	-3	-1	0	0	-6
At December 31, 2011	4	2	0	0	0	6

 $<sup>{}^*\,\</sup>text{In 2010, REC ASA paid NOK 90 million in relation to guarantees and undertakings related to Sovello.}$ 

### N OTHER OPERATING EXPENSES

#### Specification of other operating expenses

(NOK IN MILLION)	2011	2010
Operating lease expenses	13	19
Operating and maintenence costs	6	7
Audit remuneration	2	3
Consultancy fees *	26	36
Travel costs	7	9
Marketing, representation, meeting and conference expenses	1	1
Insurance ***	1	15
IT and telecommunication costs *	24	28
Other office expenses	10	13
Service costs from subsidiaries	40	-5
Onerous contracts	4	1
Employee termination benefits	6	0
Total other operating expenses	140	127

<sup>\*</sup> NOK 25 million in 2010 has been reclassified from consultancy fees to IT and telecommunications costs.

#### Audit remuneration

(NOK IN MILLION)	2011	2010
Statutory audit	2.1	2.4
Other non-audit services	0.4	0.2
Total auditor's remuneration expensed in the year	2.5	2.6

For description of the auditor services, see note 22 to the consolidated financial statements.

#### Future payment obligations

The future aggregate minimum payment obligations are as follows

		2011			2010	
(NOK IN MILLION)	OPERATING LEASE	OTHER	TOTAL	OPERATING LEASE	OTHER	TOTAL
Not later than 1 year	7	9	16	20	37	57
Later than $1$ year but not later than $5$ years	1	0	1	23	12	34
Later than 5 years	0	0	0	0	0	0
Total	8	9	17	43	48	91

### O INTEREST INCOME AND EXPENSES AND OTHER FINANCIAL EXPENSES

REC ASA conducts the main part of financing for the Group. See note 17 to the consolidated financial statements of the REC Group. Interest expenses, external are reduced in 2011 compared to 2010 due to reduction in the outstanding debt amounts and reduced borrowing costs. Interest expenses, external include normal amortization of upfront fees of approximately NOK 95 million in 2011 and approximately NOK 125 million in 2010.

Other financial expenses for 2011 are primarily NOK 60 million expensed premium related to buy back of NOK bonds (REC01) in the second quarter 2011.

Other financial expenses for 2010 are primarily expensing of the, at that time, remaining upfront/waiver fees and costs for the bank facilities that were terminated and repaid in the second quarter 2010.

<sup>\*\*</sup> In 2010 these insurance premiums were expensed in REC ASA, and the parts that related to subsidiaries were invoiced and recognized as revenues. In 2011, the parts related to subsidiaries are not included in the expenses for REC ASA.

### P WRITE DOWNS AND LOSSES ON FINANCIAL ASSETS

(NOK IN MILLION)	2011	2010
Loss on conversion of loans to shares in REC Wafer Norway AS	4 578	0
Loss on conversion of loans to shares in REC Solar AS	1 296	0
Loss on conversion of loans to shares in REC ScanCell AS	550	0
Total loss on conversion of loans to shares in subsidiaries	6 424	0
Impairment loss on shares in REC Wafer Norway AS	3 198	0
Impairment loss on shares in REC Solar AS	2 112	0
Total impairment loss on shares in subsidiaries	5 310	0
Provisions for loss on loans to REC Wafer Norway AS	1 434	0
Provisions for loss on loans to REC Solar AS	1 166	0
Provisions for loss on loans to REC ScanCell AS	4	0
Total provision for loss on loans to subsidiaries*	2 604	0
Impairment loss on shares in Sovello AG	0	64
Impairment loss on loans and other receivables to Sovello AG	0	7
Loss on sale of shares in CSG Solar AG	0	2
Total write downs and losses on financial assets	14 339	72

<sup>\*</sup>See note H.

Sovello AG was a jointly controlled entity of REC ASA. REC ASA's ownership was 33.33 percent. In the first quarter of 2010, the owners of Sovello AG entered into an agreement to sell all the Sovello shares and shareholders loans. The acquirer is a fund under the management of Ventizz Capital Partners. The transaction was closed on April 22, 2010. No consideration was received for the shares and shareholders loans.

REC ASA recognized interest income of NOK 7 million from Sovello in 2010, that was not received.

In 2010, REC ASA paid NOK 90 million in relation to guarantees and undertakings related to Sovello (see note M). NOK 64 million of the payments were in 2010 classified as impairment loss on shares in Sovello AG, with the opposite income as reduction of other financial expenses, with a net zero effect on the profit before tax in 2010.

## Q RESEARCH AND DEVELOPMENT

REC ASA's corporate technology department conducts and coordinates research and development within the REC Group, primarily related to next generation technologies and enhancement of existing technologies. All costs recognized in this department are reported as research and development expenses. Research and development expenses in REC ASA were NOK 133 million in 2011 (NOK 79 million in 2010), of which NOK 20 million was invoiced to subsidiaries in 2011 (NOK 24 million in 2010).

A technology agreement with SiGen, for which the payments have been capitalized in previous years, was impaired in 2011 (see note B). The impairment loss of NOK 62 million is included in the NOK 133 million above.

It is expected that research and development expenses will create future profitability.

### R GUARANTEES

REC ASA had provided parent company guarantees for subsidiaries amounting to NOK 6 million at December 31, 2011 and 2010. These are related to future supply of goods and services and capital expenditure.

REC ASA has cosigned bank guarantees as security for fulfillment of subsidiaries' commercial obligations in line of ordinary business. The total amount of bank guarantees for subsidiaries amounted to NOK 279 million at December 31, 2011 and NOK 287 million at December 31, 2010.

In 2009 REC ASA established a bond of NOK 1.250 million and a convertible bond of EUR 320 million. In 2010 REC ASA entered into a NOK 10,000 million bank credit and guarantee facilities agreement, and REC ASA and the REC Singapore subsidiaries entered into loan agreements with Eksportfinans of in total NOK 1,297 million. At December 31, 2010, REC ASA had drawn NOK 325 million and the REC subsidiaries in Singapore (REC Wafer Pte Ltd, REC Modules Pte Ltd, REC Cells Pte Ltd and REC Site Services Pte Ltd) had drawn in aggregate NOK 922 million loans from Eksportfinans. At December 31, 2010, REC ASA had drawn NOK 3,075 million as loans under on the bank facility and utilized NOK 418 million under the guarantee facility.

In March 2011, REC cancelled and repaid the whole loan of NOK 1,297 million from Eksportfinans and cancelled NOK 1,427 million of the NOK 10,000 million bank credit and guarantee facilities agreement thereby reducing the facility amount to NOK 8,573 million as a revolving credit facility.

In April 2011, REC ASA issued new senior unsecured bonds in the Norwegian market; NOK 500 million and NOK 700 million with five and seven year tenors respectively. As part of the bond offering, REC bought back NOK 600 million of the existing NOK 1,250 million bond for a total of NOK 660 million. The primary purpose of the transactions was to extend the company's debt maturity profile. At December 31, 2011, REC ASA had drawn NOK 2,035 million as loans under on the bank facility.

The loans mature as shown in note 17 to the consolidated financial statements for the REC Group. REC ASA and the following direct or indirect 100 percent owned subsidiaries of REC ASA are jointly and several liable for the above mentioned loans: REC Wafer Pte Ltd, REC Modules Pte Ltd, REC Cells Pte Ltd, REC Wafer Norway AS, REC ScanCell AS, REC Solar AS, REC Silicon AS, REC Silicon Inc, REC Advanced Silicon Materials LLC, REC Solar Grade Silicon LLC. REC Wafer Pte Ltd, REC Modules Pte Ltd and REC Cells Pte Ltd have limited their liability to the value of their net assets. REC ScanCell AS has during 2011 resigned as jointly and several liable for the above mentioned loans.

 $See \ note \ 33 \ to \ the \ consolidated \ financial \ statements \ for \ amendments \ to \ the \ bank \ credit \ facility \ agreement \ after \ the \ reporting \ period.$ 



KPMG AS P.O. Box 7000 Majorstuen Sørkedalsveien 6 N-0306 Oslo

Telephone +47 04063 Fax +47 22 60 96 01 Internet www.kpmg.no Enterprise 935 174 627 MVA

To the Annual Shareholders' Meeting of Renewable Energy Corporation ASA

#### INDEPENDENT AUDITOR'S REPORT

#### Report on the Financial Statements

We have audited the accompanying financial statements of Renewable Energy Corporation ASA, which comprise the financial statements of the parent company Renewable Energy Corporation ASA and the consolidated financial statements of Renewable Energy Corporation ASA and its subsidiaries. The parent company's financial statements comprise the balance sheet as at 31 December 2011, the income statement and cash flow statement for the year then ended, and a summary of significant accounting policies and other explanatory information. The consolidated financial statements comprise the statement of financial position as at 31 December 2011, and the income statement and the statement of other comprehensive income, statement of changes in equity and cash flow statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

The Board of Directors and the Managing Director's Responsibility for the Financial Statements The Board of Directors and the Managing Director are responsible for the preparation and fair presentation of the parent company financial statements in accordance with the Norwegian Accounting Act and generally accepted accounting standards and practices in Norway and for the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the EU, and for such internal control as the Board of Directors and the Managing Director determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Independent auditor's report Renewable Energy Corporation ASA

#### Opinion on the separate financial statements

In our opinion, the parent company's financial statements are prepared in accordance with the law and regulations and give a true and fair view of the financial position of Renewable Energy Corporation ASA as at 31 December 2011, and of its financial performance and its cash flows for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.

#### Opinion on the consolidated financial statements

In our opinion, the consolidated financial statements are prepared in accordance with the law and regulations and give a true and fair view of the financial position of Renewable Energy Corporation ASA and its subsidiaries as at 31 December 2011, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU.

#### Report on Other Legal and Regulatory Requirements

Opinion on the Board of Directors' report and Report on corporate governance

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Board of Directors' report and Report on corporate governance concerning the financial statements, the going concern assumption, and coverage of the loss is consistent with the financial statements and complies with the law and regulations.

Opinion on Accounting Registration and Documentation

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, «Assurance Engagements Other than Audits or Reviews of Historical Financial Information», it is our opinion that the management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the company's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Oslo, 20 March 2012 KPMG AS

Francoll

State Authorised Public Accountant

Renewable Energy Corporation ASA

Kjørboveien 29 PO Box 594 1302 Sandvika Norway Tel: +47 67 57 44 50

www.recgroup.com

#### **SALES OFFICES**

REC Solar AS

Kjørboveien 29 PO Box 594 1302 Sandvika Norway Tel: +47 67 57 44 50

REC Solar Germany GmbH

Leopoldstraße 175 80804 München Germany Tel: +49 89 442 3859 0 REC Solar Italy Srl

Centro Direzionale Milanofiori Strada 4, Palazzo Q5 4° piano 20089 Rozzano (Milano) Italy Tel: +39 028 920 0146

RFC Silicon Inc.

(REC Silicon head office) 1616 S. Pioneer Way Moses Lake, Washington 98837 USA Tel: +1 509 793 9000

REC Solar US LLC

835 Aerovista Place, Suite 230 San Luis Obispo, CA 93401 Tel: +1 877 332 4087

RFC Silicon Inc.

77 Sugar Creek Center Blvd. Sugar Land, Texas 77478 Tel: +1 281 325 3800

REC Solar Spain S.L.U.

Viladecans Business Park Edificio Australia c/Antonio Machado 78-80 08840 Viladecans (Barcelona) Spain Tel: +34 936 476 012

REC Solar France SAS

42 Rue Galliéni 92600 Asnières Sur Seine (Paris) France Tel: +33 1 4617 0598

### **PRODUCTION FACILITIES**

REC Tuas, Singapore 20 Tuas South Avenue 14

Singapore 637312 Singapore Tel: +65 6495 9228

**REC Wafer Norway AS** 

Glomfjord plant, multi Ørnesveien 3 8160 Glomfjord Norway Tel: +47 75 72 32 00

**REC Advanced Silicon Materials** LLC

119140 Rick Jones Way Silver Bow, Montana 59750 USA Tel:+1 406 496 9898

**REC Wafer Norway AS** 

Herøya plant, multi PO Box 1064 3905 Porsgrunn Norway Tel: +47 35 93 70 00 **REC Wafer Norway AS** 

Glomfjord plant, mono Ørnesveien 3 PO Box 100 8160 Glomfjord Norway Tel: +47 75 72 30 00

REC Solar Grade Silicon LLC 3322 Road "N" N.E.

Moses Lake, Washington 98837 USA Tel: +1 509 765 2106

#### OTHER OFFICES

R&D Unit

REC Technology US Inc. 1159 Triton Drive, Foster City, CA 94404 USA Tel: +1 650 212 1244

Silicon sales support

REC Silicon Japan 8th Floor, Pacific Century Place 1-11-1 Chiyoda-ku, Tokyo, 100 - 6208 Japan Tel: + 81 3 6860 8354

R&D Unit

**REC Wafer Norway AS** Technology Center, PO Box 1064 3905 Porsgrunn Norway Tel: +47 35 93 70 00

REC Silicon Inc

#11F-6. No. 17 Cheng-Te Road Section 1, Datong dist., Taipei, Taiwan 10351 Tel: +886 2 2556 3478

Wafer sales support

REC Trading (Shanghai) Co., Ltd. Room 15042, Hangseng Bank Tower, No.1000, Lujiazui Ring Road, Pudong, Shanghai 200120,

Tel: +86 21 6841 1183

**REC Advanced Silicon** Materials LLC 24 F HSBC Tower

1000 Lu Jia Zui Ring Road Pudong, Shanghai China PC 200120 Tel: +86 21 6841 2035

Wafer, cell and module sourcing

REC Trading (Shanghai) Co., Ltd. Room 15042, Hangseng Bank Tower, No.1000, Lujiazui Ring Road, Pudong,Shanghai 200120,

Tel: +86 21 6841 1181









- $1. \ {\sf Employees} \ {\sf focusing} \ {\sf on} \ {\sf health} \ {\sf and} \ {\sf safety} \ {\sf at} \ {\sf REC} \ {\sf Tuas}, \\ {\sf Singapore} \ {\sf facility}.$
- $2. \ Employee working \ with cell technology in the cell plant at the REC Singapore facility.$
- 3. REC AE Series solar modules installed on a community center / kindergarten in Germany.
- $4. \ \mathsf{REC} \ \mathsf{AE} \ \mathsf{Series} \ \mathsf{solar} \ \mathsf{modules} \ \mathsf{installed} \ \mathsf{on} \ \mathsf{the} \ \mathsf{roof} \ \mathsf{top} \ \mathsf{at} \ \mathsf{a} \ \mathsf{fruit} \ \mathsf{orchard} \ \mathsf{in} \ \mathsf{Germany}.$



Renewable Energy Corporation ASA Kjørboveien 29 PO Box 594 1302 Sandvika Norway Tel: +47 67 57 44 50

www.recgroup.com