

## **MANAGEMENT REPORT**

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# FINANCIAL HIGHLIGHTS AND KEY RATIOS

Five-year key figures, DKK 1000	2009	2008	2007	2006	2005
Revenue	423,483	289,402	193,231	147,503	129,592
Earnings before interest, tax, depreciation					
and amortisation (EBITDA)	99,813	72,225	57,920	38,747	2,238
Operating profit/(loss) (EBIT)	84,233	64,154	52,093	33,593	(7,080)
Net financials	(8,474)	(2,085)	(4,016)	(4,359)	(1,033)
Profit for the year	51,782	45,865	34,867	28,143	(13,969)
Invested capital*	330,751	292,091	65,310	30,717	30,262
Net working capital (NWC)*	132,161	106,539	36,187	5,872	18,510
Shareholders' equity, exclusive of minorities*	236,040	179,049	149,327	111,079	50,253
Total assets	591,767	503,875	216,847	179,827	112,284
Investments in property, plant and equipment	22,179	8,058	7,372	4,534	8,603
Net interest-bearing debt	30,721	35,922	(89,976)	(70,734)	17,149
Cash earnings*	70,264	53,874	41,477	44,075	(2,598)
Average full-time equivalent employees	377	140	73	64	76
No. of shares, actual ('000)	407,961	403,392	398,823	393,150	262,100
No. of shares, diluted ('000)	436,658	408,823	409,972	408,150	266,032
Financial Ratios					
Profit margin (%)	19.9	22.2	27.0	22.8	(5.5)
EBITDA margin (%)	23.6	25.0	30.0	26.3	1.7
Return on invested capital (%)*	27.0	35.9	108.5	110.2	(18.6)
Return on equity (%)*	24.3	28.0	26.7	34.9	(24.7)
Financial gearing*	0.10	0.14	(0.60)	(0.64)	0.34
Revenue/invested capital*	1.3	1.0	3.0	4.8	4.3

The financial highlights for 2005–2009 have been prepared in accordance with "Recommendations and Financial Ratios 2005". See the description in note 1 to the financial statements, "Accounting policies".

\*The calculation of financial highlights and key ratios for 2008 and 2007 has been adjusted relative to previous annual reports. In respect of financial highlights and ratios related to the balance sheet (invested capital, net working capital, net interest-bearing debt), "Assets held for sale", which are recognised in a separate line item in the balance sheet, have been recognised in the various financial items.

## DEVELOPMENT DURING THE PAST FIVE YEARS



## **GROUP PROFILE**

The Topsil Group, which today consists of the parent company Topsil Semiconductor Materials A/S and the wholly owned subsidiary Cemat Silicon S.A., was founded by Haldor Topsøe in 1958 and has for more than 50 years devoted its efforts to manufacturing and selling high-quality monocrystalline silicon to selected niche markets in the semiconductor industry.

Topsil's silicon wafers are produced using two different methods, the Float Zone (FZ) method and the Czochralski (CZ) method, and are sold to manufacturers of critical high and medium-power components for the electronics industry. The components are used e.g. in energy-saving motor controls for the industrial and transport sectors and for management and distribution of high and medium voltage currents in power supply networks.

At the end of 2009, the Topsil Group had around 370 employees. Group revenue for 2009 amounted to DKK 423.5m and the EBITDA marqin was 23.6%.

Topsil holds a strong position as one of only five leading producers of FZ silicon in the global market. The market for CZ silicon, on the other hand, is characterised by a large number of suppliers. The total value of the global market for silicon products to the semiconductor industry amounted to almost USD 14bn in 2009, of which revenue generated in the Topsil Group's niche markets (Power Electronics, Micro Electronic Mechanical Systems, Optoelectronics & Detectors and RF Electronics) accounted for around 10%. The niche markets are expected to grow substantially in the coming years as a result of the global expansion of energy infrastructural solutions. Independent sources estimate that the four semiconductor markets will grow by an average of 13% annually from 2009 to 2012.

## **OBJECTIVES**

Based on a solid business platform and market position, which was strengthened even further in 2009 and 2010 with the conclusion of new long-term customer and raw material contracts, the Topsil Group will exploit the very favourable market trends in order to achieve its full growth potential by implementing its ambitious growth strategy "Seizing the Opportunity".

The overall theme of the strategy is to use the group's know-how, technology and business platform to optimise its niche

position in relation to its growth scenario. This will be achieved by expanding production capacity, implementing process optimisation, increasing the targeted product offering within specialised applications and meeting customers' future needs, requests and requirements in relation to products, research and development, delivery, growth and quality.

Topsil's aim is to continue its growth by exploiting the market potential and building up a production capacity which can be expanded in line with the growing demand to revenue of DKK 1bn. Growth must be profitable and lift the EBITDA margin to at least 25% by 2012.

#### **OUTLOOK FOR 2010**

The favourable market trends characterising the principal markets and applications of the Topsil Group in 2009 are expected to persist in 2010. Topsil's order book for FZ products for delivery in 2010 is historically high, which confirms the strong increase in demand especially for externally irradiated FZ-NTD products. Despite the stabilisation of the underlying market and signs of a growing order book, 2010 is still expected to be a challenging year for C7

The signing of new raw materials agreements with higher volumes and the new customer agreements effective as of 1 January 2010 significantly strengthens collaboration with the group's largest customers and paves the way for stable price and earnings developments in the coming years. With prospects of substantial growth potential for the years ahead, Topsil wishes to exploit this opportunity by creating closer relations with existing and prospective customers, primarily by offering contract customers more favourable prices and terms of delivery in 2010 than was possible based on the cost levels of prior years.

Thus, revenue growth for 2010 will be more moderate than in previous years, expectedly 5–10%, corresponding to revenue in the order of DKK 440–460 million. Due to lower purchasing prices and ongoing optimisation measures, however, the group is expected to generate an operating profit before depreciation, amortisation and impairment of goodwill (EBITDA) in the region of DKK 100–110 million, the EBITDA margin thus remaining at around 23%. Cemat Silicon S.A., including Cemat70 S.A., is expected to report an EBITDA profit for 2010.

## **MAIN EVENTS IN 2009**

**TOPSIL'S OVERALL REVENUE** amounted to DKK 423.5m in 2009, equal to a 46% increase compared with 2008. Revenue for 2009 included a full year of revenue by Cemat Silicon S.A. whereas only two months' revenue was recognised in 2008. The level of activity was at level with the latest quidance.

**EBITDA** amounted to DKK 99.8m in 2009, compared with DKK 72.2m in 2008, corresponding to an EBITDA margin of 23.6% against 25% in 2008.

**EBIT** for 2009 was DKK 84.2 million against DKK 64.2 million in 2008, equivalent to an EBIT margin of 19.9% against 22.2% the year before.

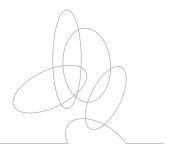
**PRETAX PROFIT** amounted to DKK 75,8m in 2009, which is at level with the most recently announced guidance of a pretax profit in the range of DKK 55-65m and DKK 13.7 higher than in 2008. The profit after tax for the year was DKK 51.8m against DKK 45.9m in 2008.

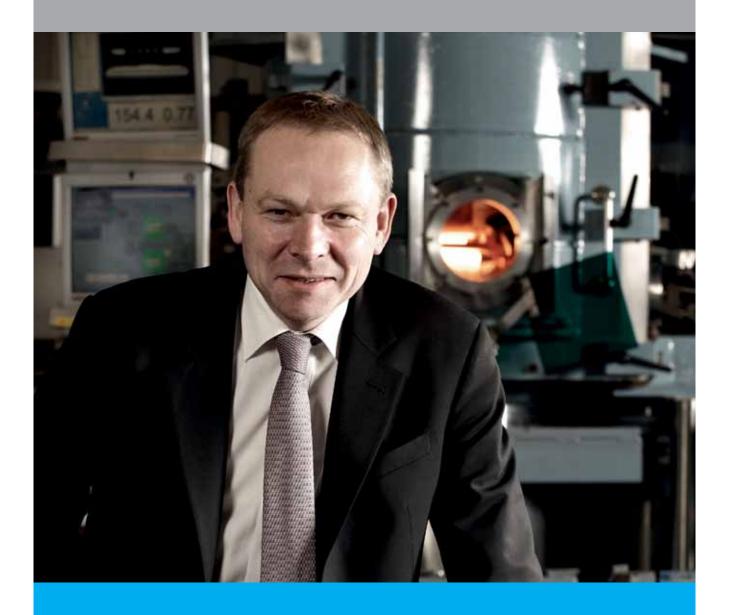
This was the **BEST-EVER PROFIT** reported in group history, and the Board of Directors and Management consider it to be very satisfactory.

**THE STRONG GROWTH** in the FZ silicon market continued in 2009 and during the year, Topsil concluded new long-term customer contracts with its major customers, thus ensuring a substantial part of the coming years' growth.

IN EARLY 2010, TOPSIL CONCLUDED A NEW LONG-TERM CONTRACT for the delivery of polysilicon with one of the two suppliers. Overall, the contract, which runs until the end of 2015, was concluded on more favourable commercial terms than previous agreements.

TOPSIL HAS ADOPTED A NEW GROWTH STRATEGY covering the period from 2010 to 2012. To meet the strongly increasing demand and optimise operations and improve competitiveness, the group plans to build a new plant for Float Zone production in the Frederikssund area. This growth strategy calls for investments of DKK 250–300m. In order to finance this project and to ensure capital resources that match the company's growth potential, Topsil is planning a share issue in the course of 2010 with expected proceeds of DKK 75–100m.







# SMART POWER A SMART STRATEGY

In the Topsil Group, we have concentrated our efforts during the past few years on selling our silicon products to selected markets and niche areas in the semiconductor industry. We have dedicated our resources and strong know-how to the production of silicon for the components which play a significant role in the Power Market. These components ensure energy-saving and energy-efficient solutions for industrial electric motors, transport of people and goods by train and ship and for intelligent management tools for the generation of energy from coal, nuclear power, wind, hydro or solar plants and distribution to the point of use.

In 2009, about 75% of Topsil's production was used in these Smart Power solutions and the continuous optimisation of energy resources in society and for industrial and consumer purposes, comprised by the category, has become pivotal for Topsil's business base and development.

## Smart Power is an industrial revolution

Smart Power is no longer just a buzzword used by people who are professionally involved in this global industrial revolution. The term covers megatrends and markets which in the next 20–30 years will see more public and private investments than anything ever seen before in world history. Because, only by modernising, optimising and rethinking our energy supply and consumption will we be able to tackle the problems of global warming and dependency on non-renewable energy sources.

The developments of electric vehicles, "EVs", or the establishment of the so-called Smart Grids, which are being rolled out on a global scale, are examples of how Smart Power is gaining ground in our everyday lives. A Smart Grid is an update of the existing electricity grid infrastructure that transports power from the point of generation to the point of use. Only, this is a far more intelligent way of distributing power, where new sources of renewable energy are integrated into the grid, and supply and demand are matched dynamically through ongoing connection and disconnection of larger or smaller wind, hydro or solar plants to the power grid. This facilitates a preferential position towards renewable energy to support a dedicated infrastructure to a specific part of a city or a commercial zone.

## Unique opportunity to turn market position into stronger growth

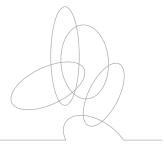
Regardless of whether Smart Power is concretised in industrial efficiency measures, development of EVs or production, conversion and transport of power in local and national grids, it requires the application of semiconductor components, based on the silicon which is Topsil's core product and speciality.

Hence, Topsil's strategic focus from 2006 to deliver silicon to the niche Power Market has proved its worth. Today, we are one of the main players and we hold a leading position in silicon to the Very High Power and the High Power segments which, due to a substantial expansion of energy infrastructure, demand for intelligent energy management solutions and many other Smart Power initiatives, will see substantial growth in the years to come.

As a result of many years of hard work to optimise our production technologies and secure our supplier and customer relations, our focus on the Power Market and the expected future development means that today we are in a much stronger position to pursue a more progressive business strategy and set more ambitious targets than we were just a few years ago.

And that is the main focus of our strategy "Seizing the Opportunity", which defines the framework of our activities from 2010 to 2012. As a result of this strategy, we are going to focus even more on achieving our growth potential, supported by a major production expansion, better optimisation of processes and production, addition of resources to R&D and a strengthening of our relations with suppliers and business partners.

I am confident that this strategy will improve our competitive strength and enable us to support our customers' requirements, growth and ambitions even better. Hence, the future prospects of Topsil and our employees, business partners and shareholders are looking even brighter and more exciting.



## STRATEGY 2010-2012:

# "SEIZING THE OPPORTUNITY"

#### **BACKGROUND**

In 2006, Topsil defined the strategy "Platform for Growth". This was a strategy of differentiation, which on the product side aimed to optimise the use of the limited amounts of polysilicon available to the company by focusing on the production of the highly processed Float Zone (FZ) niche products, FZ-NTD and FZ-HPS, which are critical elements in the treatment and transport of high-voltage currents. Topsil's knowledge of these silicon products (substrates) was unique and Management believed that the company could achieve an economically attractive and market-leading position by focusing its resources on FZ-NTD and FZ-HPS and scaling down its activities within products for lower voltage levels, which were more price-competitive.

Topsil almost tripled its revenue from 2006 to 2009 and during that period, the share of revenue generated by the sale of FZ-NTD products grew from around 30% to almost 90%. Annual production and sales volumes increased only slightly due to limitations on raw material resources, while sales prices and Topsil's earnings were positively impacted by the sale of more highly processed goods and a better utilisation of the raw materials.

With its "Platform for Growth" strategy, Management also identified four strategic main challenges, which were to be taken up from 2007 to 2009:

- Topsil needed to secure access to the raw material, polysilicon, for Float Zone (FZ) production in sufficient volumes and on acceptable terms in order to ensure that customer demand and requirements for reliability of supply would be met, despite a global shortage of polysilicon.
- 2. It was necessary to ensure efficient and competitive production with a high level of raw material utilisation, a higher level of automation and a high and uniform quality of production output.
- 3. Sufficient **access to wafering** was to be secured on attractive terms to meet the difficulties related to securing the necessary capacity and skills at the sub-suppliers.
- 4. Topsil needed to be capable of addressing competition from various FZ substituting products in the Power Market.

These four strategic main challenges had already been addressed at the end of 2008.

Topsil had secured long-term raw material contracts with the two only suppliers of polysilicon for FZ production and since 2007, the company had dedicated its efforts to implementing efficiency-enhancing and cost-minimising production initiatives. These initiatives resulted in a better product lead, more consistent production and higher yields on the raw materials and the results were generated by increased investments in an upgrade of the preparation processes, including the developments of grinding and etching processes, new cleanroom and ventilation systems and the introduction of Lean and Six Sigma tools.

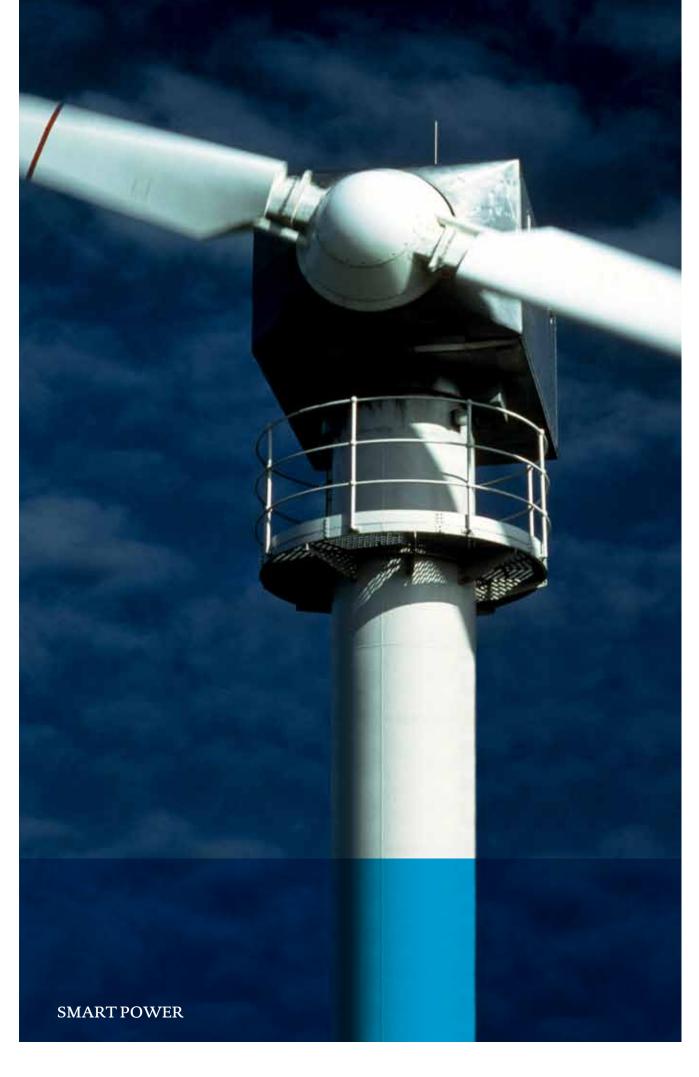
Due to the shortage of FZ raw materials, several silicon producers have tried to develop alternative and cheaper products to replace FZ products in the high and medium power segments. Hence, in order to protect its existing platform and expand its market position, Topsil acquired Polish Cemat Silicon S.A. in the autumn of 2008. With this acquisition, Topsil expanded its technological platform and gained access to own wafering, which had previously been outsourced to external partners. Cemat Silicon S.A. produces traditional CZ silicon for the low voltage market, which is the largest silicon segment, and also markets the more specialised CZ-EPI product, which to some extent is used as a substitute for FZ silicon for medium voltage. With the acquisition of Cemat Silicon S.A., Topsil improved its strategic position due to the expanded product range it is now able to offer.

## VERY ATTRACTIVE MARKET CONDITIONS FOR CONTINUED EXPANSION

The Topsil Group supplies four semiconductor markets, which with an aggregate value of USD 1.3bn in 2009 accounted for around 10% of the total value of the global silicon market. The largest of these markets, the Power Market, represents a value of about USD 1bn and the Topsil Group generates more than 90% of its FZ based FZ-NTD and FZ-HPS, but also CZ and CZ-EPI revenue in this market. The Topsil Group estimates that its share of the global Power Market is around 7% and in terms of its core product, FZ-NTD, the market share is estimated to be more than 45%.

In a report from 2009 on the expected development in enduser applications, Yole Developpement, the semiconductor industry's recognised research company, mapped the expected market growth in the silicon market. The report confirms the very favourable market outlook which formed the basis of Topsil's "Platform for Growth" strategy.

Yole Developpement concludes that the semiconductor markets, in which the Topsil Group operates, will continue to



show very high growth rates going forward. The four markets in which Topsil sells silicon, are expected to grow by an annual average rate of 13% during the period until 2012 and in certain markets at even higher rates after that. The Power Market alone is expected to grow by 11% per year. Growth will be the highest in the high and medium voltage levels of the Power Market from 1kV to 3.3kV. Yole Developpement expects compound annual growth rates of more than 15% for this segment. Today, Topsil delivers silicon solutions to this segment based on FZ-NTD, FZ-HPS, FZ-PFZ and CZ-EPI substrates. The market for voltage levels higher than 3.3kV, where Topsil is a market leader with its FZ-NTD product, is also expected to see good grow rates of 9% per year.

Growth is driven by substantially greater demand for volumes to expand Smart Power solutions for infrastructure expansion and transport of power, intelligent industrial solutions and electric and hybrid vehicles.

The Yole Developpement market report concludes that the production of silicon continues to offer a strong potential for growth in activities and earnings, especially within the FZ-NTD, FZ-PFZ and CZ-EPI substrates, which are Topsil's core competencies.

## CREATING AN EVEN STRONGER BASIS FOR PROFITABLE GROWTH

In 2009, we continued to expand our growth base and improve the group's competitive position in the niche strategy. Further cost and raw material efficiency-enhancing measures were introduced, primarily in CZ production but also at the production facilities at Frederikssund and parts of the wafering of FZ silicon was relocated from external partners to own facilities in Poland.

Finally, we took important steps in the autumn of 2009 and early 2010 to further improve the basis of "Platform for Growth" with the conclusion of a new raw materials contract and negotiation of five new long-term sales contracts with our largest customers

The new raw materials contract for polysilicon to FZ products was signed in Q1 2010. The agreement was made with one of the two existing suppliers and runs until the end of 2015. The previous agreement with that supplier covered the period 2007–2012.

The new polysilicon contract is a strategic milestone for Topsil. Firstly, because the volumes covered by the agreement have been made more flexible. Secondly, because the price terms of the new contract are substantially more competitive and secure than in the previous contract. And thirdly, because the agreement covers supplies of a new raw material that Topsil expects to use in products to the medium voltage area as well as collaboration on supplies of polysilicon for larger diameters than the ones produced today.

With the new supplier agreement and the existing agreement from 2008 with the other supplier, which runs until 2017, Topsil's competitive position has never been stronger. With these

agreements, Topsil will be able to continue to expand capacity and support its customers' short-term and long-term growth plans to a higher degree than previously. These supplier agreements will enable Topsil to deliver the widest FZ range and at the same time guarantee prices and price development during the period. This is a significant improvement of the Topsil Group's competitive strength.

The five new long-term customer contracts mark another important strategic milestone. The five new contracts cover supplies of FZ silicon until 2015. Together with one existing agreement, which runs until 2012, the agreements cover supplies of FZ products for up to six years, equal to around 40% of estimated consolidated revenue in 2010. This contracted amount is more than three times larger than in previous agreements.

Topsil expects the fixed minimum quantities specified under the agreements to be supplemented to a significant degree by additional sales to the six customers.

## TOPSIL GROUP TO EXPLOIT FAVOURABLE OPPORTUNITIES

Based on the strong business platform that the Topsil Group has established over the past four years and on the prospects of a very favourable growth scenario for the company's main markets over the coming three to six years, Topsil's Management prepared a new strategy at the end of 2009.

The "Seizing the Opportunity" strategy covers the period from 2010 to 2012 and aims at turning the favourable market position and strong competitiveness into further growth in activities and earnings.

The overall theme of the strategy is to use the group's know-how, technology and market position to optimise its niche position. This will be achieved by expanding production capacity, implementing process optimisation and efficiency improvements, increasing the targeted product offering within specialised applications and meeting customers' future needs, requests and requirements for products, research and development, delivery, growth and quality.

## DEVELOPMENT OF NEW PRODUCTS AND PROTECTION OF EXISTING POSITION – A "NICHE PLUS" STRATEGY.

The Topsil Group's current core product range to the Power Market consists of the FZ-NTD, FZ-HPS, CZ and CZ-EPI products. By far the largest part of the company's earnings is generated through FZ-NTD products for the two highest voltage levels in the Power Market, Very High Power (voltage above 3.3kV) and High Power (voltage level 2kV-3.3kV). Topsil's current global market shares in these segments are 66% and 25%, respectively. The remaining market shares within FZ-NTD are mainly located in Japan – a market characterised by Japanese producers. Topsil aims to retain its existing market shares within FZ-NTD and FZ-HPS and increase activities in line with market growth.

As mentioned, we foresee the strongest growth in the Power Market to be in the medium power segment within Smart Power



solutions to the industrial sector and industrial engines, various types of electric and hybrid vehicles as well as smart Power grid applications (transport and distribution of power and energy production).

For this reason, the Topsil Group will concentrate its efforts on this medium power segment over the coming three-year period. The group already has know-how and core competencies in the CZ-EPI and FZ-PFZ substrates, which will see the strongest increase in demand, and we intend to exploit these skills and our good customer relations to create the basis for an expansion of our market position in the medium power segment.

With this starting point, our growth strategy for the period 2010 to 2012 will focus on:

- Expanding the business base with existing and new customers through an expansion of production capacity
- Expanding our position within FZ-based products and repositioning our CZ offering
- Increasing focus on product development, not least with the development of a 200mm (8") FZ product

The targeted effort in the medium power market, which is a more price-sensitive segment than the high-power area, involves investments by the Topsil Group to expand production capacity by building a new plant that will house the FZ production and the group headquarters. At the same time, we will make targeted efforts to reduce production costs and increase our research and development work with a view to achieving products with larger diameters and specific properties that can generate competitive advantages for our customers.

Also, the Topsil Group intends to implement a major restructuring of CZ silicon sales by focusing on the more highly processed CZ-EPI substrate, which in several ways matches the FZ-PFZ product in the medium power area, and only produce a limited amount of special-order CZ products with small diameters.

Hence, the group's product range will be expanded and going forward, the Topsil Group will address the medium power area in addition to the two highest power levels. However, Topsil will maintain its position in the Power Market and the niche and differentiation strategy that made the Topsil Group a global market leader within its core competencies. Therefore, the "Seizing the Opportunity" strategy for the period 2010 to 2012 is defined as a "Niche Plus" strategy.

## STRATEGIC GOALS FOCUSING ON CUSTOMER SATISFACTION AND COST EFFICIENCY

In addition to the expanded product strategy, the Topsil Group will turn its focus to **four core areas** during the period from 2010 to 2012 to help ensure future revenue and earnings growth:

- Achieving the highest possible customer satisfaction
- Generating synergies in Cemat Silicon S.A. and repositioning the CZ programme in the Power Market
- Improving Topsil's cost position
- Strengthening Topsil's financial position

#### Achieving the highest possible customer satisfaction

Continued revenue and earnings growth will only be achievable if the Topsil Group is able to meet customers' needs, requirements and demands. In recent years, Topsil has won an increasing number of multinational customers in the semiconductor industry and revenue from these customers has increased by 20–40% annually over the past three years. This has to some extent put pressure on Topsil's production and delivery capacity, partly due to limitations in the group's supply chain, which depends on external wafering in Asia and external irradiation in reactors around the world, partly due to the difficulty of creating an optimum flow without bottlenecks at the existing FZ production facility.

For this reason, the Topsil Group wishes to implement a number of organisational and process related changes in its supply chain management, research and development and quality with a view to obtaining significant improvements. We are working on improving a series of processes in our supply chain related to managing inventories and product flows. Also, the level of activities within the development of new products, especially a new 200mm FZ product, has been intensified together with our efforts in quality assurance.

## Generating synergies from the Cemat Silicon S.A. acquisition

When Topsil acquired Cemat Silicon S.A. in 2008, we expected to be able to generate substantial earnings synergies by changing the product mix, relocating wafering from external partners to Cemat Silicon S.A. and combining a number of administrative and IT functions.

We maintain our expectations to these synergies, although the financial crisis in 2008 and 2009 made it impossible to implement the changes in the product mix and despite delays in the relocation of wafering activities to Cemat Silicon S.A.

Despite delays relative to the original plan, the Topsil Group succeeded in relocating an increasing volume of wafering activities to Cemat Silicon S.A. in Q4 2009, and we expect to achieve full exploitation of the wafering capacity in the Polish subsidiary in the course of 2010, among other things as a result of the new customer agreements.

#### Improving Topsil's cost position

During the past strategy period, Topsil worked on improving the stability and output of the production facilities through Lean and Six Sigma tools. This work will continue in the years ahead.

During the new strategy period, the Topsil Group also aims to intensify its efforts to improve its cost position and hence its competitive power to win positions with existing and new customers in the low and medium power area. The cost position will primarily be strengthened through the achievement of a higher production yield. Improving yields requires substantial engineering resources to handle the changes in production and processes and establish a more uniform, stable production and a higher degree of automation.

The construction of a new facility in the Frederikssund area is part of these improvement measures. The new plant will ensure stronger customer loyalty among existing customers, partly due to lower cost prices, which will positively affect pricing, partly through enhanced optimisation of the production flows, in order to achieve improved quality, higher yields and reduced leadtimes. The establishment of a new cleanroom facility which facilitates a successive expansion of capacity in line with market developments is also a prerequisite for achieving the new and substantial growth potential that will emerge within FZ-PFZ and FZ-NTD in the coming years.

#### Strengthening Topsil's financial position

Under the "Platform for growth" strategy, Topsil made substantial investments through the acquisition of Cemat Silicon S.A., the provision of guarantees in connection with the conclusion of two raw material contracts in 2006 and 2008, the ordering and installation of two FZ machines in 2010, as well as the expansion of the wafering capacity at Cemat Silicon S.A. These investments amounted to DKK 250m during the period and were important elements in establishing the foundation for the strong market position and strategic platform that the Topsil Group holds today.

The "Seizing the Opportunity" strategy for the period 2010-2012 involves continued substantial investments in expanding and improving existing production facilities. All in all, we anticipate new investments of around DKK 250-300m during the strategy period. The largest investment is the expansion of the FZ production capacity through the construction of a new plant in the Frederikssund area (the Greenfield project). The total investment in the Greenfield project is estimated to be around DKK 200m from 2010 to 2012 with the largest cash outflow in 2011. The construction of a new cleanroom facility will enable the Topsil Group to meet all measures required in the growth strategy, hence realising the outlined growth potential.

In addition to the investment in a new FZ production facility, we expect to invest around DKK 30m in other capacity expansions, mainly in wafering equipment to handle a larger diameter than the current equipment. Furthermore, we expect to intensify our research and development efforts with a view to developing new products. This requires investments of about DKK 20m.

To achieve the growth scenario and strategy, we expect that more capital will have to be tied up in inventories and receivables. However, Management will be more focused on ensuring efficient working capital management to enable the group to

maintain and expand its cash flow from operations in the short as well as the long term.

The investment budget will be supported through cash flows from operations, increased borrowing and a new share issue in Topsil Semiconductor Materials A/S during the course of 2010 with expected proceeds of 75–100m.

#### **FINANCIAL TARGETS**

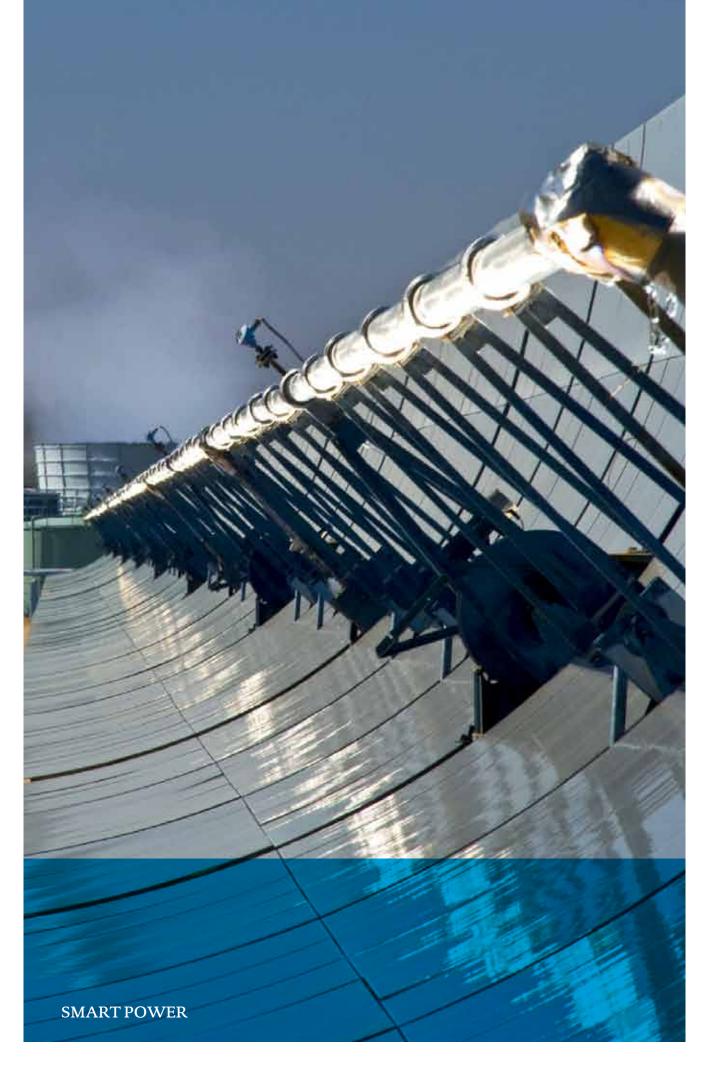
Based on the technological platform, favourable supplier and customer agreements and its progressive growth strategy "Seizing the Opportunity", the Topsil Group aims to expand its competitive position substantially from 2010 to 2012.

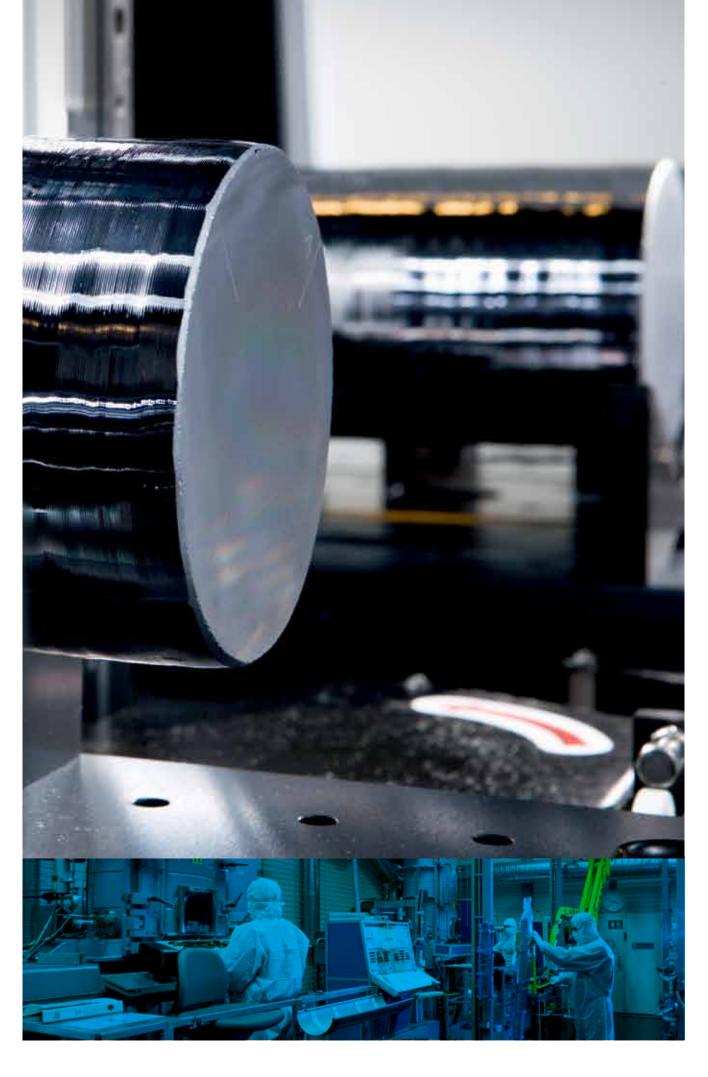
The starting point and the pivot for achieving this strategy and the targets is the construction of the new FZ plant. Together with investments in the existing production and wafering facility in Poland, the group aims to build an overall production capacity which in the longer run can be scaled to revenues of DKK 1bn in line with increasing demand, hence creating the basis for continued growth.

To secure its long-term delivery capacity to the Power Market, Topsil will maintain strong focus on profitability and value creation in the efforts to achieve this favourable growth scenario. For this reason, through continued focus on optimising operations, enhancing efficiency and achieving synergies, we aim to lift our EBITDA margin to at least 25% for the period until 2012.

In compliance with the Topsil Group's activities and risk profile, our long-term goal is to have a capital structure aiming at the optimum application of capital resources and supporting the continued development of the business base by allowing flexibility and attractive investments.







## **ACTIVITIES IN 2009**

#### SILICON MARKET AFFECTED BY RECESSION

The global recession and economic slowdown that marked 2009 did not just affect the global silicon market, but also the four semiconductor markets in which the Topsil Group operates. According to Yole Developpement, the Topsil Group's markets contracted by around 4% in 2009, while the group's main market, the Power Market, fell by around 6% relative to 2008.

However, there were large differences in developments in the various voltage segments of the Power Market. The voltage segments which Topsil sells its FZ silicon to, i.e. mainly the voltage level from 2.0kV and up, continued to report growth rates of 10–12% in 2009. Growth was driven by demand to industrial motors, transport, mainly by train and ship, energy efficiency enhancements and the related infrastructural expansions of the grid, which was not notably affected by the economic crisis and financial instability.

The low-voltage area until 1.2kV, which the group sells its CZ and CZ-EPI based silicon products to, was an entirely different story. In this segment, silicon-based components are used in applications for Power in PC and office equipment, in consumer electronics, such as flat screens and for the automotive market. All these segments were hit hard by the slowdown which caused a sudden plunge in the propensity to consume from Q4 2008 which lasted until the end of Q3 2009. As a result, semiconductor producers and their customers in the electronics industry suddenly and without any warning stopped placing orders and began to reduce stocks instead. Q1 2009 saw the steepest fall in production volumes in the Topsil Group's CZ production corresponding to index 25, compared with the level for the same period of 2008. The situation stabilised later on and there was a gradual improvement in Q3 and Q4 2009 with production volumes reaching index 80.

#### BETTER ACCESS TO POLYSILICON

As a result of a strong increase in polysilicon production capacity and a slow-down in demand in the semiconductor and solar cell markets, the global market for polysilicon was hit by excess capacity for the first time in many years. Demand for polysilicon for solar cell production, which accounts for 70% of global production, and to the electronics market failed to match the capacity expansions due to a very severe slowdown at the end of 2008 that affected the electronics production as

well as the solar cell industry. However, as the main part of all polysilicon for electronics and solar cell production is sold on long-term contracts, raw material producers and prices were not as severely hit by the economic crisis as the silicon, semi-conductor and electronics producers. In return, polysilicon spot market prices plunged.

The reduced demand for polysilicon in the global market had a limited effect on the Topsil Group. In respect of CZ production, where Topsil buys only limited volumes compared with larger CZ silicon producers, Topsil has not concluded multi-year contracts for supplies of CZ polysilicon. Instead, the company sources at market prices from a number of business partners on a current basis. On the other hand, the group has been able to align its purchase of CZ polysilicon with demand and hence, price developments had only a limited effect on the Polish subsidiary's financial results.

Topsil's purchase of polysilicon for FZ production is regulated by long-term contracts with the two only suppliers of FZ polysilicon in the world. The contracts, which were signed in 2006 and 2008, fix settlement prices and volumes for the periods 2007 to 2012 and 2010 to 2017. Developments in the polysilicon market did not result in any major changes in delivery terms in 2009, but in late 2009 and early 2010, Topsil managed to renegotiate and renew the older contract on what Management believes to be more commercially favourable terms for Topsil.

Developments in the polysilicon market affected Topsil in one specific area. In recent years, the resale of and strongly rising prices for remelt, a residual of FZ production, has had a positive impact on group profit. Prices on these residuals follow spot market prices for polysilicon, and remelt prices fell in line with the increase in the supply of polysilicon during the year.

## CAPACITY AND DELIVERY CAPABILITIES AFFECTED BY STRONGLY INCREASING FZ-NTD SALES

The Topsil Group continued working on optimising its internal production, supply chain and wafering processes in 2009. This work proceeded according to plan as production efficiency in terms of yield was improved.

However, the increasing demand for FZ-NTD was a challenge to parts of the production flow. The capacity and delivery capabilities were negatively impacted by a disproportionate increase in leadtimes on the rising volumes of FZ-NTD as a result

of bottlenecks in external reactor irradiation as well as external wafering in Asia.

The rollout of a new Axapta platform in the parent company and the relocation of the group's finished goods inventory, distribution and dispatch to Cemat Silicon S.A. in Poland in Q2 2009 also contributed to delays in supplies for a short period of time.

Combined with a wish from selected customers to reschedule supplies due to changes in demand patterns, these challenges resulted in the postponement of certain orders from Q3 to Q4 2009, which led to activities in the third quarter falling somewhat short of the budgeted level.

However, the Topsil Group managed to reallocate the postponed orders and volumes, thus sourcing and producing the full volume of FZ polysilicon to the customers in Q4 2009, which hence became the busiest quarter in group history.

## FURTHER INTEGRATION OF CEMAT SILICON S.A. AND TOPSIL

In 2009, the Topsil Group intensified its efforts to restructure and adapt capacity in the subsidiary Cemat Silicon S.A. An important step in this process was a reduction of staff from 260 to 220. Another important step was to prepare the relocation of the wafering of FZ silicon to the company's own facilities in Poland.

The process of relocating the wafering activities to the Polish subsidiary took longer than originally expected due to prolonged approval procedures among the customers. In H2 2009, the project moved forward, however, and in Q4 2009 Cemat Silicon S.A. performed a substantially larger volume of FZ wafering than previously.

Similarly, during 2009 Cemat Silicon S.A. gradually took over the group's processing and distribution after production of the finished silicon ingot. In addition to the etching and heat treatment after irradiation, the company performs the wafering itself or distributes the finished silicon ingot for wafering in Asia. In Q2 and Q3 2009, a finished goods inventory was established at the subsidiary in Poland, which now also handles the final distribution to all customers of the Topsil Group. After it has been fully implemented, the relocation will reduce the leadtime on FZ products from 120 days to 90 days.

The restructuring measures and the relocation of the wafering, finished goods inventory and distribution activities contributed to restoring and stabilising earnings in the Polish subsidiary, despite the strong setback in underlying market conditions for CZ silicon seen in 2009.

## **CEMAT70 S.A. OPTIMISED PRIOR TO DIVESTMENT**

In 2009, the Topsil Group initiated a process to divest its stake of about 53% of the share capital in the property company Cemat 70.5 A

Negotiations with prospective buyers were conducted during the year but a divestment has not yet taken place. Simultaneously with the divestment process, the Topsil Group initiated an optimisation process for Cemat70 S.A. in order to optimise the operation of the letting activities and prepare a major distribution of dividends to the owners in H1 2010. In this connection, Cemat Silicon S.A.'s CEO was appointed chairman of the board of Cemat70 in early 2010.

The sales process regarding Topsil's ownership in Cemat70 S.A. continues. As Cemat70 S.A. generates a minor operating profit and provides several services, including water, gas and electricity, to Cemat Silicon S.A., a sale is not just conditioned by the price but also by the achievement of attractive sale and lease–back terms.



## **FINANCIAL PERFORMANCE IN 2009**

The Polish subsidiary Cemat Silicon S.A. and its partly owned subsidiary Cemat70 S.A. were acquired in late October 2008. Hence, 2009 is the first financial year in which the Polish activities are fully recognised in the income statement as well as the balance sheet.

#### **INCOME STATEMENT**

Topsil's **revenue** for 2009 was DKK 423.5m against DKK 289.4m in 2008, corresponding to revenue growth of 46%. The rate of activity was in line with the most recent forecast.

Revenue for 2009 includes DKK 77.8m generated by the Polish activities, against DKK 27.7m in 2008, when only the period from the end of October until the end of December was recognised in the consolidated financial statements. The CZ-based revenue recovered towards the end of the year but was strongly affected by the inventory reductions among customers throughout the period. The remaining part of growth, equal to 33% was organic and was generated in a combination of larger sales volumes and higher selling prices in the FZ market as a result of the company's efforts during the financial year to optimise the product and customer mix. The level of activities in the FZ market was particularly high towards the end of 2009, among other things as a result of orders being postponed from Q3 to Q4 2009. The changes in inventories during the year are recognised in **change in finished products** and work in progress. The value of finished products and work in progress at 31 December 2009 increased compared with the end of 2008 as a result of a minor increase in inventories of raw materials due to a higher level of activities and higher raw material prices. The positive effect of this change is recognised by DKK 17.5m in the income statement.

Costs of raw materials and consumables grew to DKK 216.4m in 2009 from 138.2m in 2008. The increase can be attributed to larger volumes produced, higher raw material prices and the recognition of Cemat Silicon S.A. on a full-year basis. Total direct production costs increased by 57%, or DKK 78.2m, relative to 2008, DKK 58.9m of which related to costs in the subsidiaries Cemat Silicon S.A. and Cemat 70 S.A.

Other external expenses amounted to DKK 51.3m in 2009 against DKK 42.0m in 2008. DKK 6.9m of the increase of 9.3m related to other external expenses incurred in Cemat Silicon S.A. and its subsidiary. The increase of DKK 2.4m in the parent company was due to a continued high focus on stabilising and increasing volumes, which among other things resulted in higher costs for repairs and maintenance.

**Staff costs** increased to DKK 73.5m in 2009 from DKK 51.1m last year. The development reflected an increase in 2009 in the average number of employees in the group to 377 against 140 in 2008, because the employees of Cemat Silicon S.A. are

now included for the entire period. The number of employees in the group at 31 December 2009 was 370.

Earnings before interest, tax, depreciation and amortisation (EBITDA) amounted to 99.8m in 2009, corresponding to an EBITDA margin of 23.6%. In 2008, the Topsil Group generated EBITDA of 72.2m and an EBITDA margin of 25%.

**Depreciation, amortisation and impairment** amounted to a total of 15.6m in 2009, against DKK 8.1m in 2008. The increase mainly related to the recognition of the Polish activities.

Hence, the group generated **earnings before interest and tax (EBIT)** of DKK 84.2m in 2009 against DKK 64.2m in 2008 and a profit margin of 19.9%. The improved result was due to a positive impact from the optimised sales and product mix within FZ and a substantial improvement of results in the Polish activities, which in Q4 2009 generated an EBIT of 1.5m on the back of stabilising markets and as a result of the restructuring measures implemented. As a result of the strong setback in the CZ market seen during most of 2009, the Polish activities generated an operating loss of DKK 17m, which was the main reason for the fall in the consolidated EBIT margin from 22.2% in 2008.

**Financial items** were a net expense of DKK 8.5m in 2009 against a net expense of DKK 2.1m in 2008. The net expense was the result of a minor increase in financial income and higher financial expenses mostly due to the full-year effect of interest expenses on the acquisition loan and operating credits in Cemat Silicon S.A. Moreover, net financial items were adversely impacted by an unrealised capital gain on US dollars of DKK 0.8m as a result of the falling DKK/USD rate during the year.

Accordingly, **profit before tax** for 2009 was DKK 75.8m. This profit was at level with the most recent guidance of an unchanged profit before tax due to improvements in the Polish activities in Q4 and a positive trend in profitability in FZ sales. The profit before tax for the year was DKK 13.7m higher than in 2008.

Tax on the profit for the year was DKK 24m, corresponding to an effective tax rate for the year of 31.6% against 26.2% in 2008. The increase in the effective tax rate was mainly due to non-deductible costs in the Polish activities and non-capitalised tax losses in Poland.

The profit for the year was DKK 51.8m in 2009, against DKK 45.9m in 2008, equal to an increase of DKK 5.9m. Management is very satisfied with the performance, particularly in the light of the difficult market conditions for CZ silicon sales in 2009.

## **BALANCE SHEET**

Total assets amounted to DKK 591.8m at 31 December 2009 – an increase of DKK 87.9m compared to 2008.

In the balance sheet, the assets and liabilities in Cemat 70 S.A.

are recognised under "Assets held for sale" and "Liability relating to assets held for sale". The distribution on the individual items is specified in a separate note.

#### **ASSETS**

**Intangible assets** fell from DKK 47 million in 2008 to DKK 31.5 million in 2009. The fall was due to a reclassification of the right of use of sites in Poland worth DKK 15.5m to "Assets held for sale"

**Property, plant and equipment** fell from 151m in 2008 to DKK 94.1m at 31 December 2009. The fall of DKK 56.9m can be ascribed to a reclassification of DKK (66.2)m to "Assets held for sale", additions of assets in the parent company and Cemat Silicon S.A. as well as depreciation changes for the year.

**Financial assets** increased from DKK 66.7m in 2008 to DKK 80.1m at 31 December 2009, mainly reflecting a prepayment to a supplier of raw materials.

**Inventories** for the year amounted to DKK 108 million compared with DKK 85.3 million in 2008. The increase was a result of higher value and larger volumes of inventories in the parent company due to higher raw material prices and an increasing level of activities as well as an increasing level of activities in Cemat Silicon S.A. towards the end of 2009.

**Receivables** grew from DKK 85.8m in 2008 to 118.9m at 31 December 2009. This was attributable to major receivables in the parent company due to revenue growth in Q4 2009 compared with the year-earlier level.

## **CASH AND CASH EQUIVALENTS**

During the financial year, the group had generated a cash inflow from operating activities. At 31 December 2009, the parent company had drawn operating credits of DKK 4m while the group's free cash flow was DKK 59.4m. DKK 61.9 m of the group's free cash flow belongs to Cemat70 S.A. and for this reason, this part of the cash is reclassified to "Assets held for sale". However, a major distribution of dividends from Cemat70 S.A. of around DKK 30m is expected to be made during the first half of 2010 before a divestment is effectuated.

## **EQUITY AND LIABILITIES**

The group's **equity** at 31 December 2009 stood at DKK 300.6m, DKK 64.6m of which was attributable to minority interests and DKK 236m to shareholders of Topsil Semiconductor Materials A/S. The developments in equity and liabilities before minority interests was mainly due to the positive performance in the profit for the year. Changes in minority interests were mainly caused by a compulsory redemption of the remaining minority shareholders of Cemat Silicon S.A. by the parent company at the end of 2009, after which the parent company is the sole shareholder of Cemat Silicon S.A.

The group's **non-current liabilities** at 31 December 2009 amounted to DKK 120.9m. The reduction related mainly to non-current debt to credit institutions of DKK 10.8m. Also, DKK

10.9m was reclassified from deferred tax liabilities to "Assets held for sale"

**Current liabilities** amounted to DKK 157.3m at 31 December 2009 against DKK 108.6m in 2008. The increase was mainly the result of increased debt to suppliers of goods and services, increased debt to credit institutions and provisions.

**Invested capital** at 31 December 2009 was DKK 330.8m against DKK 292.1m at 1 January 2009, mainly attributable to an increase in inventories and receivables.

This resulted in a return on capital employed of 27% in 2009, compared with 36% in 2008.

#### **CASH FLOWS AND INTEREST-BEARING DEBT**

Cash flows from operations improved in 2009, amounting to DKK 37.2m against 5.8m in 2008. Working capital improved to minus DKK 42.9m in 2009 from minus DKK 49.3m, primarily due to an increase in trade receivables in the last quarter of 2009 and increasing inventories. The net working capital was 31% of group revenue in 2009, against 37% in 2008.

Cash flows from investing activities were an outflow of DKK 24.7m against an outflow of 85.6m in 2008. The drop was primarily due to acquisition of the Cemat Group, however counteracted by investments in operational assets in 2009 which can be attributed to capacity expansions and improvements of the production environment in comparison to 2008. Also, a new ERP system was implemented in the parent company and the outstanding minority interest in Cemat Silicon S.A. was acquired.

Cash flows from financing activities were an outflow of DKK 15.7m against an inflow of 119.2m in 2008, mainly relating to instalments on loans.

Cash flows for the year thus came to an outflow of DKK 9.2m against an inflow of DKK 39.4m in 2008.

**Net interest-bearing debt** amounted to DKK 30.7m at 31 December 2009 against DKK 35.9m in 2008, mainly reflecting the company's higher drawing on operating credits. The group's financial gearing in terms of net interest-bearing debt relative to the net capital was 0.1 in 2009 against 0.14 in 2008.

**Net interest-bearing debt** amounted to DKK 152.9m at 31 December 2009 against DKK 155.9m in 2008. The difference of DKK 104.3m relative to net interest-bearing debt represented interest-bearing assets, including cash and cash equivalents of DKK 61.9m recognised under "Assets held for sale". DKK 105.3m (69%) of the interest-bearing debt of DKK 152.9m was noncurrent, i.e. debt falling due later than one year from 31 December 2009, and primarily consisted of facilities in DKK and JPY.

#### **FINANCING**

Interest-bearing debt amounted to DKK 152.9m at 31 December 2009, DKK 105.3m of which was non-current debt falling due after 31 December 2010. The remaining DKK 47.6m will fall due in 2010. The group has not defaulted on any loan agreements.

## SPECIAL RISKS

#### **BUSINESS RISKS**

Topsil is the third largest supplier of FZ silicon in the world. The group is a small player in a market with very large competitors, which may entail a business risk.

Sales to the group's three largest customers account for approximately 60% of revenue, and the customers each account for more than 10% of consolidated revenue.

In the long term, a number of substantial risk factors exist. The current large raw materials producers may cease production of raw material for FZ production, which may force the semiconductor and the electronics industries to find substituting silicon products. Over time, the FZ market may shrink or disappear altogether.

New technology may lead to a surplus of raw materials, or the current investments in new capacity may lead to renewed surplus production of raw materials. If this happens, the semiconductor industry will again squeeze silicon producers, and prices may return to a level creating a more competitive market and putting profitability under pressure. However, this seems less likely at present as investments in reactor plants and the construction of reactor plants only relate to new raw material output already sold under long-term agreements.

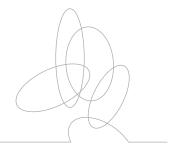
Topsil has now signed agreements with the two primary raw materials suppliers and is therefore not as vulnerable to risks associated with raw materials as previously.

The group is still dependent on access to irradiation capacity. Topsil is well positioned in relation to the irradiation suppliers.

#### FINANCIAL RISKS

As a result of the group's activities, the equity and financial results are impacted by several financial risks, mainly relating to changes in exchange rates and interest rate levels. For additional information, see note 37.

The group's capital resources are regularly reviewed and consist of binding loan commitments, operating credits and cash reserves in the parent company and the subsidiaries. Management believes the existing capital resources and the expected future cash flows will be sufficient to maintain operations and at the same time sustain part of the measures planned to expand production. To ensure full implementation of the production expansion, a capital increase has been planned for 2010.



# **EVENTS AFTER THE BALANCE SHEET DATE**

On March 11 2010, Topsil signed a new long-term raw materials agreement for polysilicon for Float Zone (FZ) products with one of the group's two existing suppliers. The new agreement will expire in 2015 and replaces the existing agreement with the supplier for the period from 2007 through 2012.

Concurrently, five new long-term customer agreements with the group's largest customers of FZ silicon were signed. Three of the agreements were concluded with customers who had not previously signed long-term agreements, whereas the two other agreements were renewals of existing agreements.

The five new agreements cover deliveries of increasing FZ volumes up to and including 2015. Together with an existing and unchanged customer agreement, which runs until 2012, Topsil's long-term customer agreements cover deliveries of FZ products for up to six years which corresponds to approximately 40% of the group's budgeted revenue for 2010.

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## **OUTLOOK FOR 2010**

The positive trends seen in 2009 in the high-voltage area of the Power Market are expected to continue in 2010. Demand will increase and Yole Developpement estimates market growth for the entire Power Market of around 10% in 2010.

At DKK 215m at the end of 2009, Topsil's order book for FZ products for delivery in 2010 is the highest ever, which confirms the strong increase in demand especially for externally irradiated FZ-NTD products. The order book, supplemented by the group's framework agreements and an increasing number of requests, covers a significant part of expected FZ deliveries in 2010.

Despite the stabilisation of the underlying market and signs of an increase in orders, CZ is expected to continue to be a challenged market. Order books are still substantially below the level of 2007 and 2008, but Topsil expects to be able to increase CZ sales by up to 25% in 2010 compared with 2009.

The signing of new raw materials agreements with higher volumes and the new customer agreements effective as of 1 January 2010 significantly strengthens collaboration with the group's largest customers and paves the way for a more stable price and earnings structure, which in particular will show in 2010.

During the period 2006 to 2009, Topsil saw increasing production costs as a result of strongly increasing raw material prices and increasing wafering costs and for this reason, Topsil's FZ selling prices went up substantially.

However, the conclusion of new raw material contracts and new customer contracts facilitates a more stable price and earnings development in the years ahead. With prospects of substantial growth potential for many years ahead, Topsil wishes to exploit this opportunity by creating closer relations with existing and potential new customers primarily by offering contract customers more favourable price and delivery terms in 2010 than was possible based on the cost levels of previous years.

Despite the expectation of a strong increase in produced volumes in 2010, growth in revenue will be lower than in previous years. In return, Management expects, on the basis of the strategic measures, to create a significantly stronger platform for generating even higher revenue and earnings growth from 2011 than was possible due the previous contracts with raw material suppliers and customers.

Overall, consolidated revenue for 2010 is expected to grow moderately by some 5-10%, to approximately DKK 440-460m.

The optimisation efforts, which have been going on for several years, will continue in 2010 at the facilities at Frederikssund and in Warsaw. In respect of the FZ sales and production, focus will be on ensuring the highest possible customer satisfaction by implementing measures to reduce leadtimes and optimise production flow and quality at the existing facility.

In the CZ production, the first step will be taken to a permanent rescheduling of the product offering towards more processed and demanding CZ-EPI solutions. Also, the Polish subsidiary will take over a substantially larger part of the wafering activities from the parent company, utilising the entire capacity in the year head.

Despite expected lower selling prices for a part of the FZ-NTD production in 2010 compared with previous years, on the back of lower purchase prices and current optimisation efforts, the group as a whole is expected to generate EBITDA of around DKK 100–110m, hence maintaining an EBITDA margin of around 23%. It is expected that Cemat Silicon S.A. will report positive EBITDA for 2010.

As indicated, the Topsil Group plans a strong increase in investments in the years ahead to align production capacity with the expected growth.

Hence, consolidated investments in 2010 are expected to be around DKK 60m, mainly in projects relating to capacity expansion, among other things the installation and taking into use of two new FZ pullers.

The above forecasts are based on an exchange rate of DKK 510/USD 100 and a Zloty rate of DKK 185/PLN 100.

## FROM SAND TO POLYSILICON

STEP



OHARTZ SAND



REDUCTION



DESTILLATION



**SIEMENS PROCESS** 



POLYSILICON

## THE FLOAT ZONE PROCESS - FROM POLYSILICON INGOTS TO WAFER

STEP 7



**POLYSILICOI** 



FZ PROCES



IRRADIATION (NTD)



WAFERING



FINISHED WAF

THE CZOCHRALSKI PROCESS - FROM CRUSHED POLYSILICON TO WAFER

STEP



POLYSILICON



CZ PROCESS



WAFERING



EPITAXY PROCESS



FINISHED WAFER

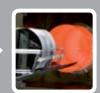
STEP FROM TOPSIL TO CUSTOMER

3

AND

4

FINISHED WAFER



DIFFUSIO



COMPONENT



ELECTRONIC CONTROL



**END-USE** 

**STEP 1** is undertaken by Topsil's sub-suppliers.

**STEP 2** shows the production processes of Topsil and Cemat respectively.

**STEP 3** shows the manufacturing of components by Topsil's customers, and

**STEP 4** the end-use of the components by the customers of Topsil's customers e.g. wind turbine manufacturers.

## **BUSINESS PLATFORM**

## **STEP 1 TO 4** FROM SAND TO POWER

## FROM SAND TO POWER

The Topsil Group produces silicon for electronic components and semiconductors which are essential elements in all electrical appliances and systems used in households, offices, for industrial purposes and for distribution and transport of power. Mounting of components on circuit boards or integration into an energy supply chain is preceded by a long and complicated manufacturing process consisting of four phases:

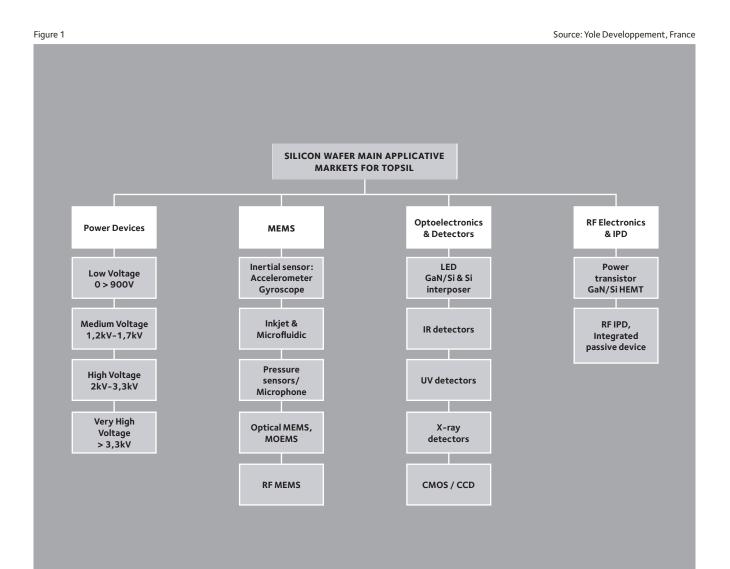
During the **first phase**, ultra-pure silicon is produced from naturally occurring quartz sand, which is repeatedly refined in large facilities until transformed into pure polycrystalline silicon (polysilicon).

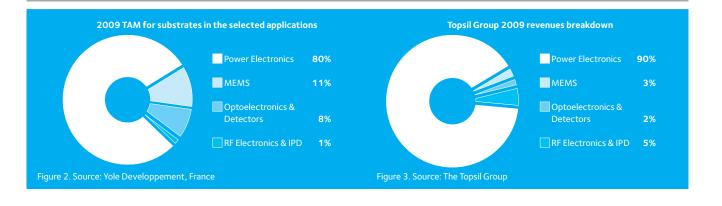
During the **second phase**, polysilicon ingots are transformed into monocrystalline silicon ingots through chemical growth processes. During this process, a number of electrical properties are

added to the silicon, which are crucial for its ability to conduct current, before it is sliced into wafers of various thicknesses, depending on the intended application. The wafers' electrical properties and measurements are determined according to individual component specifications. Topsil operates in this phase of the production process.

During the **third step**, the electronic components are manufactured based on silicon wafers. The wafers undergo a number of processing phases in which electrical conduction patterns are created and final component properties are achieved.

During the **fourth phase**, the components are fitted in controls or systems forming part of the finished applications, such as computers, flat screens, cars, solar cell panels, wind turbines, high-speed trains and distribution networks.





#### **GROWTH DRIVEN BY GLOBAL MEGATRENDS**

Topsil's products and services are cornerstones of a world of an ever growing need for the establishment of structures in society that are both economically sound and environmentally friendly. The company's business platform is focused on the development, production and sale of silicon — a critical component of "Smart Power" solutions for integration of existing and new energy sources in a supply chain, the establishment of infrastructure for the transmission of energy, intelligent energy management tools and energy-efficient solutions in industry as well as the transport of people and goods.

As energy consumption increases and reliability of supply becomes key to individual ways of life, collective behaviour and industrial development, the continued development of our society depends heavily on our ability to ensure intelligent handling and distribution of energy with high efficiency and exploitation in order to avoid unpredicted outcomes and unnecessary losses.

These essential processes are heavily based on semiconductor-based control electronics designed to handle large currents. The semiconductor consists of processed silicon wafers with added functionalities in the form of diodes, bipolar bridges and contact areas ensuring optimum current and voltage management by means of external digital or analogue signals.

The production of silicon wafers with special, uniform electrical profiles and the highest possible purity based on both Float Zone (FZ) and Czochralski (CZ) processes is Topsil's core competency.

## Topsil addresses selected and stable semiconductor markets

According to Yole Developpement, the global market for silicon products for the semiconductor industry was worth USD 14bn in 2009.

Most of the global production of silicon-based semiconductors is sold to the manufacturers of computers, PC-related equipment, mobile equipment and mobile phones, as well as consumer electronics such as flat screens, DVD and MP3 players and white goods. Low-voltage components based on CZ wafers are used in these products, often in large formats as the volume of semiconductors per CZ wafer is an essential factor of the production economy. Demand in this part of the market, which according to the semiconductor industry organisation, SEMI, has

grown by around 8% per year since 2000, is cyclical and closely related to trends in consumer spending.

The Topsil Group serves a different and significantly smaller part of the overall silicon market. The company's products and services are concentrated on the four semiconductor markets Power Electronics, MEMS (Micro Electronic Mechanical Systems), Optoelectronics & Detectors and RF Electronics.

According to Yole Developpement, these markets represent a total value of USD 1.3bn, or around 10% of the total market.

Components in these categories usually handle high and medium voltages, which places heavy demands on the purity and electric uniformity of the silicon. For this reason, these components are usually based on FZ or CZ-EPI wafers.

Topsil's markets are relatively stable. According to SEMI, the compound annual growth rate was 3-5% from 2000, but has been substantially higher since 2007, when increasing demand for energy transport and management lifted annual growth rates to above 10%.

## Strong market position due to dedicated efforts

Of the four semiconductor markets addressed by Topsil, the Power Electronics market (the "Power Market") is by far the largest, representing around 80% of the value. This is where the group focuses its resources.

Deliveries to the Power Market accounted for around 90% of Topsil's overall revenue in 2009. The entire CZ and CZ-EPI production was sold in this market together with most of the FZ-NTD, FZ-HPS and FZ-PFZ production.

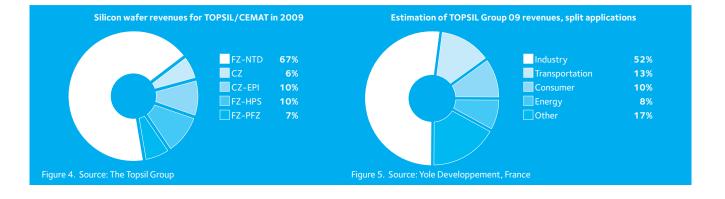
The remaining 10% of revenue was distributed on FZ-based wafers for the MEMS, Optoelectronics & Detectors and RF Electronics markets.

The largest player within silicon for the Power Market is German Siltronic and the two Japanese producers, Shin Etsu and Sumco. These three players account for a total of 65% of the market. According to Yole Developpement, Topsil's share of the Power Market was around 7% in 2009. Hence, the company is the fourth largest producer on the market in terms of FZ and CZ and the third largest in terms of FZ alone. The Topsil Group has thus strengthened its market position in recent years.

Since 2006, Topsil has dedicated its efforts to developing and selling the highly-processed FZ-NTD range and is now the world's largest supplier of this range.

## SILICON PRODUCTS MAY BE DIVIDED INTO THE FOLLOWING MAIN AREAS:

FZ-NTD: Neutron-irradiated Float Zone silicon wafer used in high and medium-power components. These products are essential for Neutron building infrastructure, power generation and power distribution and in connection with wind farms, electric trains, hybrid Transmutation vehicles and energy-saving motor controls for the industrial and transport sectors. Doping Gas-doped Float Zone silicon wafer, primarily used in medium-power components for industrial plants and consumer PF Z: electronics where the requirements for electrical properties are not as strict as for FZ-NTD. The components are used in energy-saving motor controls, solar cell panel controls, white goods, etc. This market is one of the growth areas of Float Gas-doped Float Zone selected low-power components in the future. Float Zone silicon wafer used for high-efficiency solar cells and as reference material in the development of new solar cell PV -FZ® designs. FZ-HPS:  $Float Zone \ silicon \ wafer, mainly \ used \ in \ special \ components \ such as \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors, for \ example \ in \ med \ technique \ detectors \ and \ sensors \ detectors \ detect$ High and security scanners. Purity Silicon Czochralski silicon wafer coated with a thin layer of EPI (Epitaxi). These products are used in low and medium-power components for energy-saving solutions, e.g. in power supplies for computers and in motor controls. CZ EPI Czochralski silicon wafer used as a basic material in electronics components for digital signal processing, for example in microchips. CZ prime



The FZ-NTD efforts were mainly targeted towards the industrial, transport and energy segments in Europe and China, whereas the company did not address the very competitive Japanese market. Topsil estimates that 60–70% of consolidated revenue is generated by substrates in segments with limited cyclicality.

#### Semiconductor markets with strong growth prospects

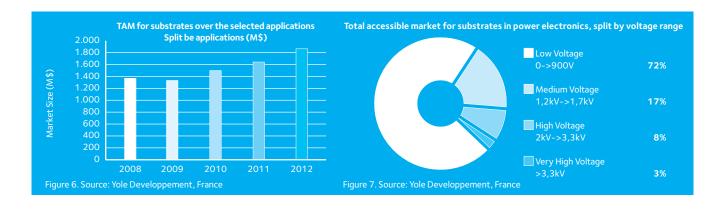
As a result of the global megatrends, the past years' strong market growth in Topsil's semiconductor markets is set to continue in the years ahead. Yole Developpement estimates that annual growth rates for the segments will be between 8% and 20% until 2012, mainly driven by increasing investments in supply chains, infrastructure and industrial processes.

All four semiconductor markets are expected to grow by an average of 13% per year from 2009 to 2012 and the Power Market alone is estimated to grow by 11% on average during the same period.

The Power Market may be divided into four voltage levels. For the highest voltage area for 3.3kV and higher (Very High Power) in which only FZ-NTD-based semiconductors are used, Yole Developpement estimates growth in market values of an average 9% per year until 2012. In the area between 2kV-3.3kV (High Power), semiconductors are most often based on FZ-NTD

or in rare cases FZ-PFZ, and growth in this area is expected to be above 15% per year until 2012. The medium-voltage level is defined as the area between 1.2kV and 1.7kV and components in this area are primarily based on FZ-PFZ and CZ semiconductors, including CZ-EPI. This area is also expected to grow by an average 15% per year until 2012. In the low-voltage level between 0-900V, where applications are mainly based on CZ substrates, the annual growth is estimated to be around 10% for the same period.

Hence, the highest growth rates are expected for Topsil's core products, FZ-NTD, FZ-PFZ and CZ-EPI in the voltage level 1.2kV-3.3kV. Growth will be driven by Smart Power solutions for the transport, energy and industrial sectors, including industrial motors, the proliferation of electric and hybrid vehicles, grid applications for transport and distribution for electricity as well as energy production, and an expected migration from CZ-EPI to FZ-PFZ in the low and medium-voltage segments. Hence, the International Energy Association estimates that the energy requirement will grow from 15,400 B kWh in 2000 to 25,000 B kWh in 2015. As energy production takes place on the basis of more and more different energy forms produced further and further away from where it is used, the demand for Power management applications based on the silicon substrates that are Topsil's core competencies will increase.



## STEP 1 RAW MATERIALS, POLYSILICON

#### FROM SAND TO POLYSILICON













**QUARTZ SAND** 

REDUCTION

DESTILLATION SIEMENS PROCESS

**POLYSILICON** 

#### FROM SAND TO POLYSILICON

Polysilicon is used as a raw material in the production of monocrystalline silicon, both in FZ and CZ production, and the requirements for polysilicon are very strict, since the purity of the silicon determines the electrical properties of end-products (ratio between contamination and silicon). Silicon that is defined as technically pure typically contains 1% foreign substance, whereas the typical contamination level of silicon for solar cells is 0.0001%. Materials for CZ and FZ crystal growth typically contain 0.0000001% foreign substance.

To achieve the silicon purity required by the electronics industry, raw silicon is subjected to a number of purification processes. The first stage consists of the production of technically pure silicon from quartz sand in a reduction oven.

The technically pure silicon is subsequently dissolved in acid, and a silicon gas is formed, which is subsequently refined by distillation, thereby increasing the level of purity. Following the refining process, the silicon is solidified in a so-called Siemens process, in which the silicon is separated from the silicon gas at approximately 1,000 degrees Celsius, resulting in ultra-pure polysilicon ingots. The polysilicon ingots vary in size and may be up to 2 meters long with a diameter of up to 150mm.

Polysilicon ingots are used as a raw material in both the FZ and the CZ production methods. The CZ process uses crushed silicon ingots, and the FZ process uses whole polysilicon ingots, which have been further processed and mechanically and chemically purified before use.

## The market for polysilicon

The production of polysilicon takes place in large chemical facilities and requires investments of hundreds of million DKK. The global production of polysilicon is therefore dominated by six large producers. Only two of these have developed a technology that offers polysilicon to the FZ process.

As a result of strongly increasing demand for polysilicon, the producers have increased capacity substantially over the past few years. However, recent years' global economic crisis has led to a severe slowdown in the solar cell market and in the demand for semiconductors to i.a. consumer electronics, which resulted in a situation of excess capacity in the polysilicon market in 2009 for the first time in many years. This resulted in a steep fall in spot prices of polysilicon and a stop to expansion of production capacity among polysilicon producers, which in the longer term may lead to a new situation of a supply shortage.

As in the next few years, it will still be strategically very important for silicon producers to secure stable raw material supplies at predictable prices, the present market situation has not significantly changed the dominant practice in the semiconductor and solar cell industries of concluding long-term polysilicon contracts based on requirements for substantial prepayments, fixed prices and specified volumes for periods of 5–10 years. This applies particularly to high-quality polysilicon for the FZ process which despite a slowdown in the market in 2009 continues to be a scarce resource. Access to polysilicon for CZ production is significantly easier than for the FZ production and the decline in the



consumer electronics industry in 2008 and 2009 contributed to further improvements of the terms regulating the purchase of these products.

## Topsil secures access to polysilicon on market terms

For Topsil, having access to polysilicon in the right volumes is essential for securing constant and continued supplies of monocrystalline silicon for the group's customers and for executing the company's growth strategy.

Topsil secures raw materials for the production of CZ and CZ-EPI through annual contracts with three established raw material producers. The contracts and the agreed quantities and prices are fixed on market terms for one year at a time.

The group's access to polysilicon for the production of FZ silicon is secured through long-term contracts with the two global market suppliers and involves the provision of substantial mutual financial guarantees by the parties. In mid-2006, Topsil concluded a long-term agreement with one of the suppliers, securing deliveries of a fixed volume of silane-based polysilicon until 2012. The raw material agreement was a combination agreement in which 50% of the polysilicon volumes were delivered at fixed indexed prices, while the other 50% was a variable volume delivered at market prices.

In December 2008, Topsil signed a long-term agreement with the other global supplier of polysilicon for FZ production. This agreement covers deliveries of a fixed volume of trichlorsilane-based raw material at fixed prices and runs from 2010 to 2017. However, Topsil already received regular supplies in 2009

in order to adjust production to increased volumes. At the same time, Topsil will be able to develop FZ products based on diameters of up to 200mm, as opposed to the previous range which mainly consisted of 100–150mm products.

In early 2010, Topsil concluded a new long-term agreement for silane-based polysilicon. This agreement covers the period from 2010 to 2015 and replaces the previous agreement with the same supplier which expires in 2012. The new contract was concluded on more favourable commercial terms for Topsil as it fixes annual minimum and maximum volumes and the possibility of increasing volumes year after year instead of a uniform maximum for the entire period. Also, the new contract gives Topsil a higher degree of security in respect of price development during the period at generally more competitive prices than before. Finally, the new agreement introduces a new raw material product for use in the medium power area and collaboration on the development of a polysilicon raw material for FZ products with a diameter larger than that supplied today.

Based on these polysilicon supplier agreements, Topsil has strengthened its competitive position by a considerable margin. With these contracts, Topsil will be able to continue to expand production and through long-term contracts with key customers and in trading with other partners, the company is able to guarantee its support to its customers' growth plans.

## STEP 2 FLOAT ZONE



## Float Zone production

#### THE FLOAT ZONE AND CZOCHRALSKI TECHNOLOGIES

Polysilicon can be transformed into monocrystalline silicon through FZ or CZ processes. Of these two technologies, the FZ technology is the most precise and the purest production method, and the method in which Topsil has previously specialised. Components produced with FZ silicon wafers are used for special purposes for which the purity of the silicon in the wafers is essential to the function of the components, for example in high and medium-power components.

The CZ method, in which the group's Polish subsidiary Cemat Silicon S.A. specialises, is a less expensive method for producing monocrystalline silicon, and silicon wafers produced by this method are used in various types of low and medium-power components.

The most significant difference between FZ and CZ silicon is the level of purity, which is up to 100 times higher in FZ than in CZ wafers. The reason for the extensive use of CZ wafers in the semiconductor industry is that for many applications the critical factor is not the purity of the crystal or the electrical uniformity of the wafer, but the surface area of the wafer to allow as many units as possible to be produced from a single wafer. CZ silicon is easier to produce with large diameters, e.g. 200 and 300 mm, whereas the diameters of FZ wafers are only available in 150 and 200 mm.

Although several CZ producers have attempted to produce products to replace FZ silicon, no one has been able to achieve a purity of CZ silicon as good as that achieved in FZ silicon.

## The Float Zone production technology

The FZ process is a crystal growth technique in which polysilicon ingots are heated to the melting point of 1,400 degrees Celsius and subsequently solidified into a monocrystal.

The necessary process stages for producing FZ silicon involves initial preparation of the polysilicon ingot, followed by surface purification to ensure removal of dirt from transport and other contamination

The polysilicon ingot is subsequently mounted in an FZ processing machine together with a seed crystal. The FZ processing machine is a closed chamber with mechanical movement of the polysilicon ingot and the seed crystal.

In the FZ process, polysilicon is melted through induction heating. Once the silicon has melted, a seed crystal is introduced into the smelter, and the crystal is grown by adjusting heat conditions. The processing time for growing a crystal is 10–12 hours.

The crystal, now a monocrystalline ingot, is cooled down, and samples for quality testing are taken.

An important element in the production of FZ silicon is controlling electrical conductivity of the monocrystals. Conductivity is controlled by adding phosphorus to the crystal, either directly in the FZ process during crystal growth, resulting in FZ-PFZ products, or through neutron irradiation of the crystal in a nuclear reactor, which is more costly, but results in more precise doping. The latter products are the so-called FZ-NTD products. Topsil invented the irradiation technique together with Risø National Laboratory in 1976 and the neutron irradiation is now performed by around ten external partners on the basis of long-term contracts.

The development of new electrical FZ wafer properties and research into the development of new processes and products based on the FZ technology are essential for identifying future component needs. Topsil is conducting such research at Frederikssund, assisted by knowledge centres and universities all over the world.

## STEP 2 CZOCHRALSKI



## Czochralski production

#### The Czochralski production technology

The CZ crystal growth technique consists of crushed polysilicon that is melted in a quartz crucible at 1,400 degrees Celsius. A seed crystal is subsequently dipped into the molten silicon and is slowly pulled upwards causing the CZ crystal to solidify. CZ crystals may be grown with large diameters of up to 450 mm.

A disadvantage of CZ crystal growth is the dissolution of the crucible during the heating process and the resulting contamination of the silicon. The CZ process produces a silicon product of a lower quality than the FZ technology, and it is more energy-intensive and considerably more time-consuming. The cost of crucibles adds to production cost, as a new crucible is required for each crystal growth. Despite this, the spot price of CZ wafers is lower than that of FZ wafers due to the high production volumes, e.g. for microchips.

A special variant of CZ silicon is the CZ-EPI – a technology involving the application of a crystalline layer of silicon on a polished CZ wafer which improves the conducting properties of the wafer. This technology is used for the production of silicon wafers for the low and medium power markets.

As part of the implementation of the "Seizing the Opportunity" strategy, Topsil plans to reschedule the production and sale of CZ silicon. The company has decided to limit the amount of CZ silicon for small diameters for special orders and instead focus on the more highly-processed CZ-EPI product. The CZ-EPI product properties match the FZ-based FZ-PFZ product in several ways and can therefore be used for medium power components. The idea behind this strategy is to avoid markets with strong price competition and instead focus the CZ efforts on special products offering higher earnings.

## Production and processing of silicon wafers

The final stage of silicon production for the semiconductor industry is the production of wafers. After all CZ crystals and FZ crystals have been approved, wafers are produced using different

slicing or grinding techniques. The wafer production processes are identical for CZ and FZ materials.

#### **Research and Development**

The silicon industry is a knowledge-intensive industry. The technically complex production processes and the heavy demands on efficiency and product quality call for continual product development and product optimisation efforts. Production is therefore dependent on specially-trained staff, and the technical functions are dependent on highly-skilled engineers.

The development of Topsil's FZ processes takes place in Denmark, while the development of the group's CZ processes takes place in Poland. Topsil has its own expertise in design, development and manufacturing of machines for the production of FZ silicon, and the group has developed its own production processes and FZ machines, which basically means that the group's production and process know-how is protected.

One of the development projects carried out in 2009 was the development of a method to use CZ material as raw material in FZ production. Topsil now has an alternative raw material for FZ production, if raw materials for FZ should become scarce again. However, the group believes it has better opportunities to differentiate itself from the competition in the current market by continuing to apply the traditional raw material for FZ production.

The ability to develop new products and optimise processes and machine technology and product flows is crucial to Topsil's continued ability to be competitive and meet customer demand in future. An important element in the "Seizing the Opportunity" strategy is to intensify research and development to increase crystal diameters and the precision of the electrical crystal parameters. This applies to FZ as well as CZ production, but the company's efforts in 2010 and 2011 will be specifically dedicated to the development of a 200mm (8") FZ product with specific capabilities for the medium power area. Topsil expects to invest around DKK 20m in intensified research and development during the period from 2010 to 2012.

## **STEP 3 AND 4** FROM TOPSIL TO CUSTOMER

#### FROM TOPSIL TO CUSTOMER

Topsil has specialised in producing and selling high-quality silicon for the production of critical high, medium and low-power components for the segments in the electronics industry which place high demands on the components' electrical properties and performance.

Topsil's silicon products are sold to four semiconductor markets and used mainly in the energy, transport, industrial, medical and telecommunications sectors and to a minor extent in the space and aviation industries and in consumer goods. The electrical properties of each individual product have been developed according to the specifications required to optimise the components.

## Industry

The bipolar component technologies, which are applied for high-power components for energy transport and energy distribution, are also applied in intelligent and energy-efficient industrial controls, e.g. in pumps, compressors, air conditioning systems, servo motors, robots, CNC machines and several other applications.

As an alternative to the mechanical adjustment of the speed of a motor, the speed of an electric motor can be changed by regulating power in the motor through a frequency converter which is faster, more precise and less electricity consuming. Frequency converters are typically based on FZ silicon.

Wind turbines represent another industrial area in which silicon-based components are a key element in the control of the turbine and in relation to adjusting energy to the power grid.

The industrial applications are based mainly on FZ-NTD and FZ-PFZ silicon wafers.

#### Transport

Bipolar solutions are also increasingly applied for transport purposes, which place heavy demands on safety and efficiency. There is an increasing demand for high-power products for locomotives, trains, metro-trains, subways and tramways, where they are applied for energy-efficient DC/AC conversion between transmission line and motor and AC/AC conversion centrally in the engine block to achieve higher acceleration and increased comfort. AC/AC converters are also used in electric buses, agricultural machinery, fork-lift trucks and traffic lights.

Another application area within transport is in vessels, in which the screw was previously driven by large diesel engines through mechanically coupled gears and shafts. In future, electronic highpower controls may replace mechanical gears, leading to reduced fuel consumption and increased comfort, as vessel vibration is reduced. Some cruise vessels have already been fitted with these controls, as comfort is given high priority.

## Power generation and infrastructure

Power electronics represents the largest application area for Topsil products. FZ-NTD silicon is used in components such as diodes, transistors and thyristors. The components control and adjust power from the energy source through the distribution system to the electrical appliance or system at the point of use.

In addition to their application in traditional coal and nuclear-based energy production, thyristor components are also applied e.g. for managing hydro or wind-power, which may involve great variations in power generation, creating a need for being able to switch transmission lines to the network on or off as appropriate. The focus of the energy sector on wind and hydro-power plants is a significant factor behind sector growth and is one of the reasons for growth in demand for FZ-based bipolar high-power components applied in active switches, DC/AC converters and in voltage step-up AC/DC converters. The latter converters are used in transmission systems typically applied for long-distance energy transport.

#### **Automotive industry**

The automotive industry represents one of the largest consumers of Power components, e.g. for dashboard display, electric window control, temperature sensors, electronic petrol injection and tyre pressure and rain sensors.

Electric and hybrid vehicles are an example of one of the new areas requiring high-power control electronics. In EVs, batterycharged power replaces petrol as fuel. The charged power must

# 3+4<u>4</u>



be easily converted into propulsion through the vehicle's electric motor and this process uses components based on FZ-PFZ silicon.

### Medical equipment and security systems

In addition to power electronics, silicon is now also used in detectors and sensors. These components based on FZ-HPS are used in medical equipment, such as CT and MR scanners, used for medical diagnosing of serious illnesses, and in security scanners used for scanning passengers at airports.

## **CUSTOMERS**

Topsil's FZ and CZ products are sold directly to customers and to a lesser extent through distributors in selected markets. The overall sales responsibility lies with the VP, Sales, Logistics & Marketing and the sales efforts are coordinated between the sales departments at Frederikssund and in Warsaw.

Topsil's customer relations are based on long-term and close collaboration. This applies not least to the FZ silicon segment, as Topsil's unique know-how and product characteristics have made the company the world's leading supplier of silicon to the "very high Power" segment.

Demand for FZ-based high and medium voltage components has grown strongly over the past three years as a result of increasing investments in the underlying markets. However, as the supply of FZ silicon was affected by the limited production of polysilicon during the same period, it was very important to the manufacturers of electrical components to hedge the consumption of silicon through long-term contracts with silicon producers.

For this reason, Topsil has made extensive efforts since 2006 to conclude long-term contracts with strategic customers within high power components, which has contributed to securing long-

term stable basic revenue. The basic revenue secured through long-term contracts with three customers has subsequently been expanded to include substantial additional volumes to the contract customers in line with strongly increasing demand for high-power components. This has contributed to strengthening Topsil's position as a preferred supplier.

Based on the prospects of a continued favourable growth scenario for Topsil's four semiconductor segments and on easier access to polysilicon from its suppliers, Topsil initiated a dialogue in 2009 with its largest and most important customers for the conclusion of new long-term contracts.

In early 2010, these efforts resulted in five new long-term customer contracts; two contracts which will run from 2010 to 2015 in place of previous contracts, and three entirely new customer contracts covering the same period. The list also includes a previous contract, which expires at the end of 2012. Four of these customers are domiciled in Europe but operate on a global scale, while two of the new customers are Chinese semiconductor producers within Smart Power solutions in transport and energy with a local focus.

The six long-term contracts with the group's six largest customers guarantee minimum revenue for the period up to and including 2015 which is around 3-4 times higher than previously, corresponding to around 40% of the group's expected revenue for 2010. Hence, Topsil has a very strong business platform going forward. Overall business volumes with the six customers are expected to exceed the fixed volumes substantially during the contract period. Topsil's FZ products are sold to around 30 customers, of which the three largest account for around 60% of total FZ volumes. Revenue from CZ based products is distributed mainly on 20-25 customers and the five largest of these account for about 90% of total CZ-related revenue.

## FROM TOPSIL TO CUSTOMER



## CORE COMPONENT IN WIND TURBINES

High-quality electronics are a prerequisite for managing and adjusting energy. Electric energy is primarily produced in generators driven e.g. by steam turbines, diesel engines or wind. In wind turbines, a number of powerful discrete electronic components based on the Float Zone technology ensure the control of movable parts, rotation stop and start and the adjustment of energy to the power grid.

Wind turbines are usually programmed to allow the turbine to run idle without connection to the power grid when wind speeds are low. When the wind is sufficiently powerful to drive the rotor and the generator at the right speed, it is crucial that the generator is connected at the right time through gradual connection and disconnection to the power grid, partly to prevent unwanted power fluctuations occurring at the point of use, partly to reduce any wearing of the turbine's mechanical parts, including the gearbox. Such connection and disconnection is performed by means of thyristors made of Float Zone silicon; a kind of electric on/off switch.

Furthermore, wind turbines use alternators, the rotors of which are fitted with electromagnets which are powered with

direct current from the power grid. The power transmission system delivers alternating current, which must be rectified into direct current before being directed into the coils surrounding the electromagnets in the rotor. Most wind turbines operate at almost constant rotational speed and are directly connected to the power grid through a synchronous motor. However, some wind turbines have their own separate power networks, in which the alternate current frequency of the turbine generator may be varied so as to achieve the required frequency. However, the public power grid cannot handle alternate current with variable frequencies. For this reason, a series of electronic components are required in such wind turbines. Initially, the components convert the alternate current with variable frequencies into direct current, and from direct current into alternate current with a frequency matching that of the public power grid. Thyristors, power transistors and inverters based on Float Zone silicon are required for this

A wind turbine is fitted with up to 50 power components based on FZ-NTD and FZ-PFZ silicon.



Photo 1 shows an offshore wind park. Photo 2 shows the generator placed in the nacelle. When the wind is sufficiently strong, the generator is connected with thyristors based on Float Zone silicon. Photo 3 shows an offshore transformer system collecting energy from the individual wind turbines and converting power to the next transformer station located onshore.



# FROM TOPSIL TO CUSTOMER



# IMPORTANT ELEMENTS IN THE TRANSPORT OF PEOPLE AND GOODS

A significant change of technology is currently taking place in the area of transport of people and goods towards more efficient and environmentally compatible means of transport, whether by car, lorry, train or ship.

The advantages of using electricity to power trains include less pollution, higher performance and less energy and maintenance costs. In addition, electric trains also generate energy, which is redirected to the overhead cables once the motors are applied to decelerate the trains, thereby reducing the overall energy consumption.

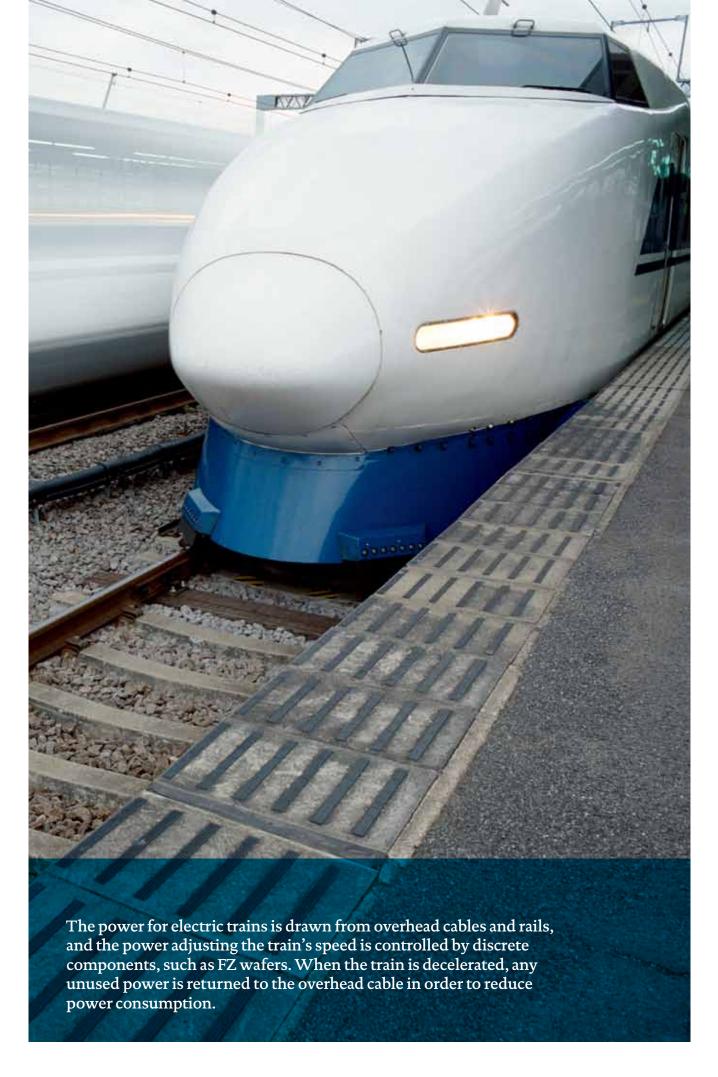
Today's highly advanced electric trains receive power from overhead cables or rails. These cables convey thousands of volts due to the use of high-voltage current that may be transmitted long-distance without any significant loss of power. Power is intercepted from the overhead cables or rails by col-

lectors and conducted by cables to the high-voltage systems mounted underneath the train. The train's high-voltage system transforms voltages to lower voltage levels that power the locomotive's AC motors. The power systems are fitted with high-voltage components of which Float Zone silicon wafers form an essential part. The reason is that the chemical purity levels of Float Zone-based components are significantly higher than other types of silicon-based components, resulting in significantly improved control of electrical properties. In addition, Float Zone silicon is able to handle current of up to 10,000 volts, as opposed to the Czochralski silicon, which is only able to handle up to 500 volts.

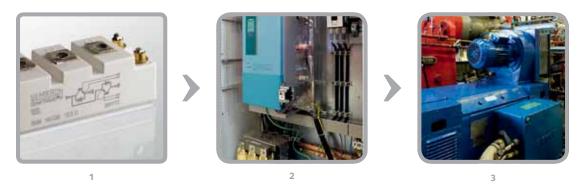
The total costs of electronic equipment in a modern locomotive constitute up to 50% of the total costs of the locomotive, part of which is applied for the hundreds of FZ-NTD, FZ-PFZ components based on Float Zone silicon.



Photo 1 shows a thyristor based on Float Zone silicon encased in white ceramics. Photo 2 shows the thyristor component integrated into the train's motor control unit, which is located in the lower part of the train (photo 3).



# FROM TOPSIL TO CUSTOMER



# SILICON TO INCREASE ENERGY EFFICIENCY

The steam engine was invented early in the industrial age. In principle, the steam engine was an engine that pulled machines with various functions by mechanical chains and belts. The speed of the steam engine was adjusted using gears and brakes and this method of adjustment has survived for many years and is still widely applied in industry, although the steam engine has long since been replaced by electric motors.

The total equation shows that electric motors are more efficient than petrol and steam engines. The energy efficiency rate of steam is typically 3-5%; for petrol this is 10-20% and for an electric motor up to 60%. The rest is heat loss. In power plants, the rate of energy conversion is very high. Power is generated and heat is distributed as district heating. The energy efficiency rate is as high as 90%.

For example, the transport of gas or oil consists of pumping the gas or oil through pipelines by means of powerful electric mo-

tors. These motors operate at a certain speed, and the speed at which gas or oil is transported can be adjusted through mechanical valves.

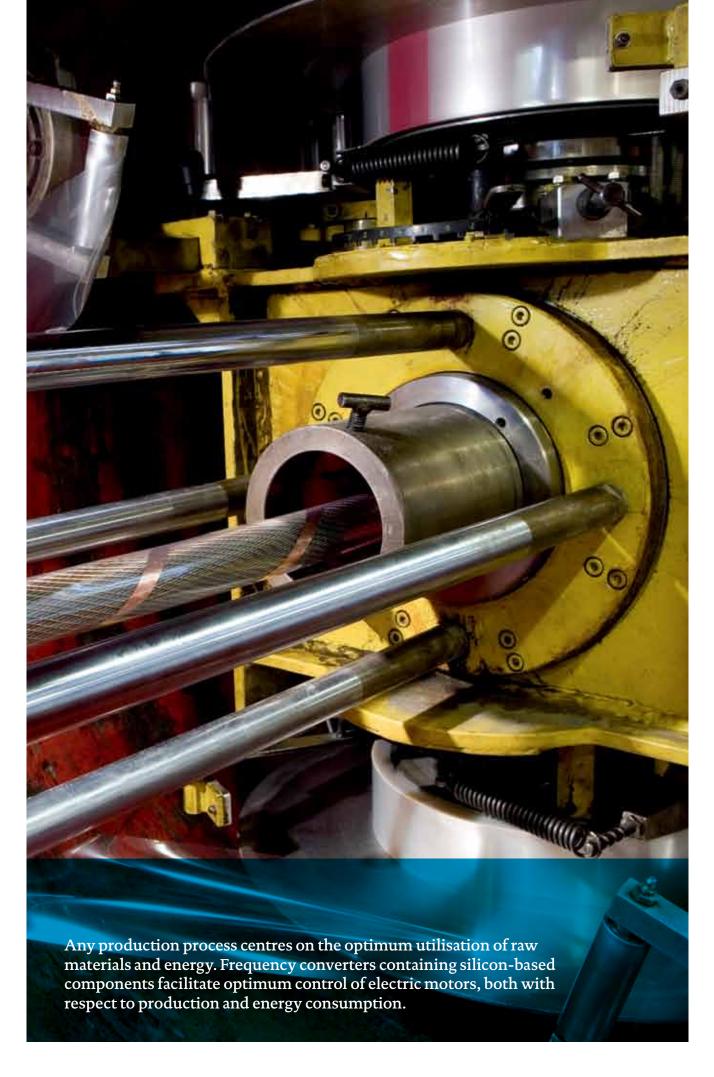
The speed of an electric motor can be controlled by adjusting the power in the motor through a frequency converter. Frequency converters allow for faster and more precise adjustment of speed, and the solution is more efficient due to the lower combined energy consumption, since the motor does not continually operate at full power.

Frequency converters consist of electrical modules in the form of circuit boards mounted with components that have the functions necessary for adjusting the system. These components are typically insulated gate biopolar transistors (IGBT) based on Float Zone.

A frequency converter contains between 20 and 50 components based on Float Zone silicon.



Photo 1 shows an IGBT (Insulated Gate Bipolar Transistor) component, and photo 2 a powerful frequency converter/motor control unit used in a typical production environment; in this case, for the production of power cables. The frequency converter contains a number of components, such as IGBTs and diodes, based on Float Zone products. Photo 3 shows the electric motor adjusted by the frequency converter.



# FROM TOPSIL TO CUSTOMER





# A NECESSITY IN ELECTRIC AND HYBRID VEHICLES OF THE FUTURE

Electric and hybrid vehicles have existed for many years, but concrete commercial projects from some of the world's largest car makers and some smaller specialised car makes did not materialise until a few years ago with the introduction of lithium ion batteries which can store sufficient volumes of energy relative to the weight of the battery to achieve a satisfactory range.

The electric motor of an EV is driven by power stored on batteries which can be recharged when connected to the ordinary grid. A hybrid vehicle, on the other hand, is driven by a combustion engine and one or more electric motors driven by power from batteries which collect and are recharged by kinetic energy when the car is braked. The combustion engine

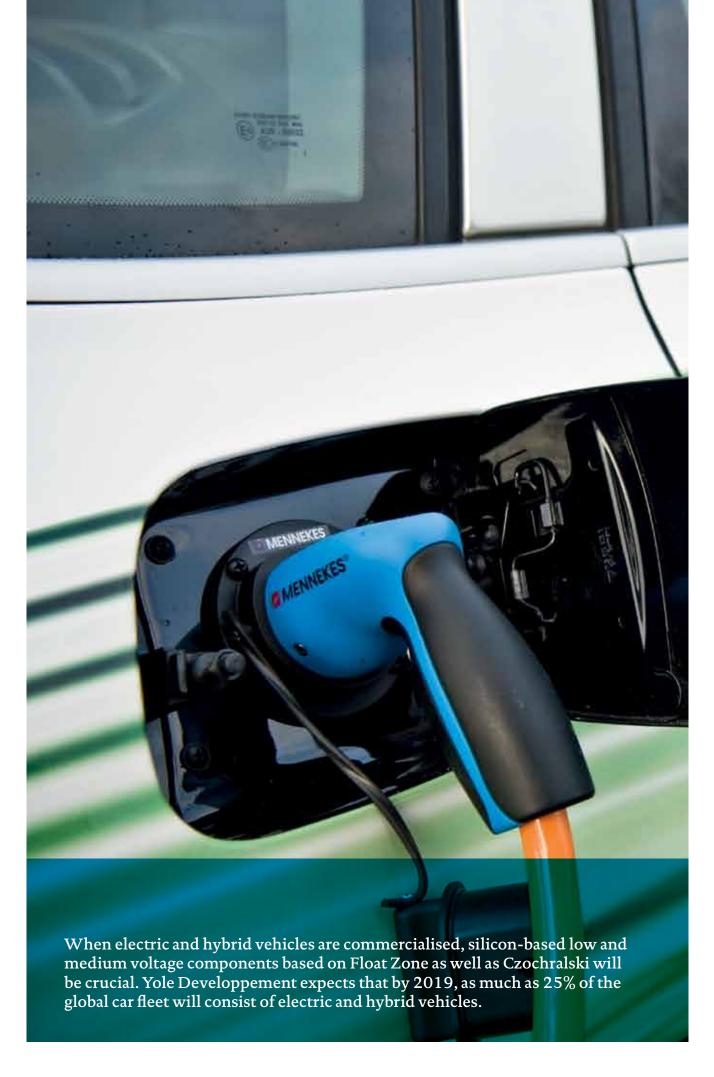
in a hybrid vehicle is still the primary engine, whereas the electric motors are used at low revolution and speed.

Semiconductors based on silicon are and will remain a key element in the construction of electric as well as hybrid vehicles. These are the components making sure that power is adjusted between the battery and the electric motor and as such, they form part of the electronic circuit to adjust the speed of the vehicle. The adjustment of power is performed using semiconductor components such as IGTB and diodes.

Today, EVs contain between 12 and 24 FZ-PFZ and CZ-EPI silicon-based components and this number is expected to increase as the technology becomes more widespread.



Photo 1 shows IGBT-based Float Zone silicon used to adjust power e.g. in a car (photo 2).



# PRODUCTION FACILITIES AND PRODUCTION OPTIMISATION

Topsil's production activities are based at two locations, one in Denmark and one in Poland.

Preparation, crystal growth and quality control are based at the company's facilities at Frederikssund in Denmark. Crystal growth is performed at production lines developed in-house by the group. Employees work in preparation and production in three shifts, and the production facility is therefore in operation around the clock

The group's production of CZ silicon is based at Cemat Silicon S.A.'s facilities in Warsaw, Poland. The production comprises crystal growth, crystal processing, wafering, polishing and EPI growth. Cemat Silicon S.A. has fully established production lines for wafering and polishing of silicon wafers, including sawing, edge grinding, lapping, etching, thermal processes, polishing, purification and measuring, and the company has a number of EPI reactors for EPI growth, the latest reactors having been implemented within recent years.

In 2009, the group's finished goods inventory for both FZ and CZ silicon was gathered at Cemat Silicon S.A.'s facilities which also perform the final processing, including packaging and distribution.

In accordance with the group's growth strategy "Seizing the Opportunity", Management decided to invest around DKK 30m during the strategy period from 2010 to 2012, partly for new wafering equipment to handle larger diameters than today.

# Construction of new FZ plant

In late 2008, Topsil began planning a production expansion involving more induction ovens at the existing plant at Frederikssund. The intention was to expand FZ capacity and secure more efficient production leadtimes. However, the project was suspended in 2009 when it became clear that due to the growth

strategy and future market development, it would be more expedient and financially attractive to construct a whole new production plant with a greater capacity that could be expanded to growing sales.

The new plant will not only ensure stronger customer loyalty among existing customers, partly due to lower cost prices, which will positively affect pricing, partly through enhanced optimisation of the production flows, in order to achieve improved quality, stronger yield and reduced delivery times. The establishment of a new cleanroom facility which facilitates a successive expansion of capacity in line with market developments is also a prerequisite for capitalising on the new and substantial growth potential that will emerge within FZ-PFZ and FZ-NTD in the coming years. Hence, the construction of a new cleanroom facility will enable the Topsil Group to meet all measures required in the growth strategy, hence realising the outlined growth potential.

It is possible for Topsil to acquire a building site at Frederikssund suitable to house the new FZ production facility. The construction of a new plant involves an investment of about DKK 200m during the period 2010 to 2012 with the largest cash outflow in 2011. The new facilities will also house the group's new headquarters and the existing lease will therefore be terminated.

# **Quality control**

Due to the specific and critical application of silicon in components for the semiconductor industry, quality control of the silicon produced is a key element of any order executed by Topsil. Topsil's production facilities at Frederikssund and Warsaw are both certified to the ISO 9001:2000 quality standard and to the ISO 14001:2004 environmental standard.

## Lean and Six Sigma optimisation

Since 2005, Topsil has been committed to ensuring maximum quality, raw material utilisation and production flow, and the group has therefore implemented Lean and Six Sigma tools in all production processes with the aim of optimising productivity and work processes.

These initiatives will be further strengthened by the implementation of the "Seizing the Opportunity" strategy. Specifically, the group will dedicate its efforts in the FZ and CZ production to implement organisational and process-related changes and optimisation measures in the supply chain relating to inventory and product flow management and in the actual production to ensure a more stable process flow and higher utilisation of the raw material. The production model is also being implemented at Cemat Silicon S.A., where it is expected to contribute to significant short-term and long-term efficiency gains and capacity growth.

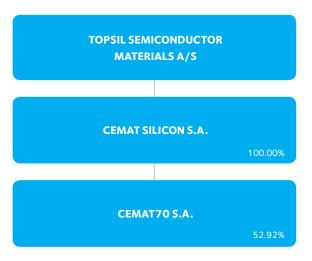
Relocation of wafering and other efficiency enhancements

Based on substantial growth in the underlying markets, Topsil predicted in 2008 that access to wafering, which had been outsourced to external partners since 2000, could be a scarce factor. For this reason, one of the strategic reasons for Topsil's acquisition of Cemat Silicon S.A. in 2008 was that the acquisition would facilitate in-house wafering and polishing capacity.

Since the takeover, Topsil has relocated part of the wafering of FZ silicon to its Polish subsidiary and this relocation process accelerated towards the end of 2009 after some delays. Hence, the company still aims to exploit the overall wafering capacity in Poland with its own FZ and CZ products before the end of 2011.

All in all, the acquisition of Cemat Silicon S.A. is expected to generate substantial earnings synergies. In addition to the use of in-house wafering capacity for selected FZ specifications, synergies are expected to be achieved in line with general optimisation of production and work processes across units and through a new product mix of Cemat Silicon S.A.'s current sales.

# **GROUP CHART**



Topsil Semiconductor Materials A/S is the sole shareholder of Cemat Silicon S.A. in Poland, which owns a 52.92% stake of Cemat 70 S.A.

#### Cemat 70 S.A.

Cemat Silicon S.A. owns approximately 53% of the share capital of Cemat 70 S.A., a real estate company, whose activities include ownership of the buildings from which Cemat Silicon S.A. operates. In addition to Cemat Silicon S.A., its largest tenancy, Cemat 70 S.A. has approximately 60 tenancies, which are centrally located in Warsaw.

Topsil will explore the opportunities for divesting its ownership interest in Cemat 70 S.A. in order to dedicate its resources to its core business: The production of silicon.

# MANDATORY CORPORATE GOVERNANCE STATEMENT

## RISK ASSESSMENT AND INTERNAL CONTROL SYSTEMS

The Board of Directors of Topsil has the overall responsibility for the establishment of an efficient risk management system, comprising systematic internal control and follow-up.

The audit committee set up in 2009 consisting of all the members of the Board of Directors focuses especially on risk management and internal control relating to financial reporting. The terms of reference and a detailed annual work plan was prepared and adopted in connection with the establishment of the audit committee. According to the terms of reference, the relevant guidelines and policies are subject to approval by the audit committee, which should also discuss important accounting principles applied by the group.

### GENERAL RISK ASSESMENT AND MANAGEMENT

As part of the Board of Director's annual strategy review, Management conducts overall risk assessment for the group in order to determine which processes and factors, internal as well as ex-

ternal, could possibly affect the group's business platform and development.

The risk assessment comprises identification of business risks, and control measures are identified for the most significant risks, e.g. in the form of action plans to reduce and handle risks.

In connection with the current follow-up on the group's strategy and development, Management assesses the identified risks and considers any new risks during the strategy period.

The objective of risk management is not to eliminate all risks, but to actively determine which risks are acceptable to and manageable by the group and which risks to avoid entirely. Risk management is an integral part of the day-to-day business management and is subject to continuous review by the Board of Directors and Management. The Board of Directors and Management have assessed that the most significant risks, in addition to financial risks, relate to supplier and customer relations due to the limited number of suppliers who can supply raw materials of a sufficient quality and customers demanding the group's finished goods.

The group has arranged for insurance cover within a number of general areas, including all risks insurance (machinery, equipment, inventories and business interruption), transport insurance, professional and product liability insurance, debtor insurance and directors' and officers' liability insurance. In addition, the group has taken out workers' compensation insurance based on local conditions.

The group operates with a low-risk profile so that currency, interest rate and credit risks arise only in connection with commercial relations. Group policy is not to actively conduct speculation in financial risks.

Due to the nature of its operations and financing, the group is exposed to fluctuations in exchange rates and interest rates. The group manages its financial risks by means of a model to manage its cash forecasting.

The group's currency, interest rate, credit and liquidity risks are described in a note to the consolidated financial statements.

# Risk Assessment Relating to the Financial Reporting Process

The overall risk assessment also covers risks relating to financial reporting and hence matters which could affect the completeness, accuracy and valuation relative to the group's financial reporting. The risk assessment further includes the risk of loss or misuse of assets.

### **Control System**

Topsil's CEO is responsible for maintaining efficient internal controls. The CEO has organised the staff functions in a Management Team. The Management Team comprises the CEO and seven managers and specialists, who are each responsible for the internal control of their respective area of responsibility, such as sales, logistics, procurement, production, quality assurance, finance and IT. A description of the management structure at Topsil can be found on the company's website.

All subsidiaries and business units of the group have appropriate internal controls, covering the most significant risks. Internal policies and procedures, manuals and legislation and any other external regulation form the basis of the internal control environment and the group's employees are held responsible through organisational structures in the group with clearly defined responsibilities and authorities.

Control measures may alleviate the identified risks and en-

sure compliance with the basic criteria for financial reporting. The group's control measures comprise general as well as detailed controls to prevent, identify and correct errors and irregularities. The group has the following overall control measures:

- Manual controls examples of important manual controls are signed bookkeeping lists, reconciliations, rights of access, master data and segregated functions to the extent permitted by the size of the organisation.
- Programmed controls examples of important programmed controls are validation of entries, including that data is registered and applied centrally, automatic reconciliation of invoices with purchase orders and other reconciliation between the ERP modules.
- General IT control examples of important IT controls are user administration, production and test environment and backup procedures.
- Documentation of procedures is part of the internal control system and consists of flowcharts of procedures and descriptions of control measures. The process comprises formal as well as informal procedures used by Management, process owners and control operators, including assessments of results relative to budgets, strategy plans and selected key performance indicators (KPIs). The group has established procedures to provide Management with a basis for assessing the group's financial position. These procedures/reports comprise:
  - Review of strategic and business objectives at least every second year.
  - Formalised annual budget with forecast and estimation procedures.

Furthermore, management reporting is prepared, comprising:

- Financial results and financial position, including analysis of cash flows and financial structure in the parent company and subsidiaries
- Comparison of budgeted financial results, results from previous years and actual results
- Project management and cost control as well as current project reporting, follow-up and review of accounting policies and estimates

Also, the external auditors report to Management and the audit committee who assess the results of current investigations prepared to determine to what extent Management and the audit committee can rely on the reports/processes which are primarily prepared and performed by the finance department.

# CORPORATE GOVERNANCE

Topsil's Board of Directors and Management continually consider measures and procedures for ensuring good corporate governance and business ethics. These efforts are based on applicable legislation and the guidelines established by the Board of Directors for the Management of the group and, in addition, the continuous review of and compliance with NASDAQ OMX Copenhagen's and the Danish Corporate Governance Committee's recommendations on corporate governance. Topsil basically concurs with the recommendations, and the Board of Directors and Management believe that Topsil complies with the recommendations.

A full account of Topsil's position on the individual recommendations, according to the 'comply or explain' principle, is available on Topsil's website, www.topsil.com. The section below provides an overview of the recommendations or standard practices with which Topsil does not comply as well as details on matters to be described in annual reports according to corporate governance recommendations.

### **Shareholders and Annual General Meeting**

The Board of Directors and Management perform current assessments of whether the group's capital and share structures are consistent with the interests of the shareholders. With the profit generated for 2009, the Board of Directors finds that the capital and share structures of the group are appropriate and sufficient for a foreseeable future.

The group makes use of electronic document exchange and electronic mail in its communications with shareholders, see section 92 of the Danish Public Companies Act. Notices convening shareholders to annual and extraordinary general meetings and agendas for the meetings are sent via e-mail.

Shareholders who have requested to be notified of annual and extraordinary general meetings are convened by e-mail. Printed versions of annual reports may be requested by telephone or by e-mail to investor@topsil.com.

#### Stakeholders

The Board of Directors ensures that good and constructive relations and an active dialogue exist with the group's stakeholders and that the interests and roles of stakeholders are respected. Due to its size, the group does not presently have a written policy for its stakeholder relations.

#### **Board of Directors**

When composing the Board of Directors, the aim is that the majority of the Board members elected by the shareholders should be independent of special interests, whether they be related to the group, major shareholders, chief suppliers or key accounts.

Three out of four of the Board members elected by the shareholders are independent of special interests. The deputy chairman of the Board of Directors, Eivind Dam Jensen, is a major shareholder of Topsil and the owner of Ejendomsaktieselskabet Bangs Gård, which owns and leases the head office at Linderupvej 4, DK-3600 Frederikssund to Topsil. The transactions are disclosed in note 40 to the financial statements.

Board meetings are held at least six times a year. In 2009, the Board of Directors held eight meetings, and five ordinary meetings have currently been scheduled for 2010. In addition, the Board of Directors and Management plan to meet in the fourth quarter of 2010 to discuss and define their most important tasks in relation to the overall strategic management.

It is up to each member of the Board to assess how many directorships he/she is able to undertake while serving on the Board of Topsil. In principle, this is considered a personal matter; however, the issue is discussed in connection with the Board's annual self-assessment.

### **Audit committee**

At the general meeting on 29 April 2009, the Board of Directors informed the shareholders that the company had decided to appoint an audit committee consisting of the joint Board of

Directors. Subsequently, the Board of Directors has focused on finding a more suitable composition which will be implemented in the course of 2010.

# Remuneration of members of the Board of Directors and Management

The fee paid to the members of the Board of Directors must be competitive and reasonable having regard to the duties and responsibilities of the office. The fee paid to the members of the Board of Directors is determined at the first Board meeting and is paid as a lump sum in the year following the approval of the annual report by the Annual General Meeting. The fees paid to the chairman, deputy chairman and ordinary members of the Board of Directors are disclosed in note 5 to the financial statements, in compliance with IFRS.

The Board does not receive options, bonuses or any other performance remuneration. The remuneration of the group's Board of Directors and Management is regularly reviewed by the Board of Directors with a view to ensuring that there is a fair balance between the efforts of members of the Board of Directors and Management and their value creation for the group and their remuneration.

The remuneration paid to the members of Management (basic salary, bonus, etc.) must reflect shareholder interest and conditions and be reasonable relative to the tasks to be performed and the responsibility involved. The remuneration and bonuses paid to the members of Management are disclosed in note 5 to the financial statements. In case of substantial or atypical contributions to non-pay benefits, severance agreements, etc. for Management, such contributions will also be specified in the annual report. There were no costs of this nature in 2009.

Members of Topsil's Management and a number of managerial employees have been granted warrants. Management's share, terms and conditions and valuation are disclosed in note 7 to the financial statements. Topsil's current incentive-based remuneration scheme and guidelines were presented and adopted by the shareholders in 2009 and are available from Topsil's website under "Investor Relations".

# Material agreements with members of the Board of Directors and Management

Other than as provided above, the group has not entered into any material agreements with members of the Board of Directors and Management.

# MANDATORY CORPORATE SOCIAL RESPONSIBILITY STATEMENT

### **Corporate Social Responsibility**

Responsibility is considered to be an integral part of Topsil's values in all respects and is central to the company's objectives and strategies. Based on our customers' wishes and needs, we consider financial matters on the one side and the welfare of our employees, local society and environment on the other side.

Topsil has only a few written policies on corporate social responsibility but we basically support the UN Global Compact principles on human rights, labour standards, the environment and anti-corruption. In the course of 2010, Topsil will focus on preparing policies, objectives and procedures for our voluntary work with social and environmental issues and on securing that the progress of the initiatives resolved are reported to our stakeholders on an ongoing basis.

Our intention is not only to comply with Danish and international rules and conventions, but also, through current control, optimisation, operationalisation and reporting to increase our financial, social and environmental performance through responsible conduct.

### **Employees**

Topsil had 370 employees at 31 December 2009; 92 in Denmark and 278 in Poland. We wish to create room for action for our managers and employees in order to enhance motivation and provide opportunities for individual achievement while at the same time requiring responsible conduct from each individual employee.

Being able to recruit and retain the most valued staff, regardless of gender, religion or ethnic background is crucial to Topsil. We do not discriminate when we employ, promote or lay off people. Instead, we offer all employees a professional employment framework and the opportunity to develop their personal and professional skills. The group gives high priority to maintaining a good working environment and strives to be a professionally managed enterprise in all respects.

Topsil believes that a high level of employee satisfaction is key

to creating a strong enterprise attractive to everyone. For this reason, we focus at group level on employee satisfaction, health and absence policies under the label of health promotion and health policy. Topsil has chosen a proactive approach to health promotion aspects, including life style, working environment and corporate social responsibility. We have high ambitions — despite our size, we aim to be among the best workplaces within this area.

The aim of health promotion is to retain employees and create social commitment and a healthy and secure workplace with high levels of employee satisfaction and safety. The initiative is based on a principle of quid pro quo. This involves both value-based and contents-based aspects. Most people will at some point experience difficult times due to events in their personal or professional lives. Topsil wishes to support employees going through such difficult times. Our health policy means that we take an active stance in our employees' challenges and problems in this area and that health forms an integral part of all management decisions.

# Management

Topsil has a flat and dynamic organisation dedicating its efforts to create a climate based on collaboration and where innovation and creativity is rewarded. We work continuously to improve processes supporting knowledge-sharing and collaboration across the organisation.

Personal and job profiles for key employees are available at our intranet, which means that information on their skills and responsibilities are available to everybody. Our managers perform annual employee performance reviews to gain an overview of skills, strengths and development needs and make sure that the company has the best employees.

### **Training**

Training is important for Topsil as well as for our employees' professional development. For this reason, we support employees who wish to participate in relevant courses and training processes and we offer good opportunities for job rotation.

### **Labour Standards**

The parent company is a member of the Confederation of Danish Industry and comply with industry collective agreements. Freedom of organisation applies to both blue and white collar employees and we recognise the right to collective negotiations. Cemat Silicon S.A. is not a member of an employer association and the employees enjoy freedom of association just like Topsil's employees.

### Occupational health and safety

Topsil must be a safe workplace. Complying with working and safety instructions, using the required personal protective gear and performing our work with care is part of our corporate culture. All our blue-collar employees have attended first-aid and fire-fighting courses and all workstations have been evaluated.

As a production company, we are subject to a natural work risk and our active safety team makes sure that improvements are carried out on a current basis with a view to safety in line with the implementation of changes in our production processes. Topsil aims to continue to be a safe and healthy workplace.

# Environment

Topsil seeks to show responsibility towards the environment and reduce the consumption of water, consumables, heat and electricity. In respect of wastewater, emissions and waste, the company has been approved in accordance with chapter 5 of the Danish Environmental Protection Act. As previously mentioned, Topsil's production facilities at Frederikssund and in Warsaw are certified to the ISO 14001:2004 standard.

Calculations of emissions were not performed at Topsil's production facilities in 2009.

There are no current plans of major environmental initiatives for the present location at Frederikssund. The project planning for the new plant will comprise environmental considerations.

# SHAREHOLDER INFORMATION

The group has adopted an information and communication policy to ensure that Topsil is seen as a noticeable, trustworthy, accessible and professional business with a high level of information, a consistent information flow and an open dialogue with its stakeholders.

The Board of Directors and Management aim to provide the best basis for the stakeholders to assess the company's shares and thus for the share price to reflect the current position of the group and its future prospects.

At the same time, the information and communication policy will ensure that Topsil meets the disclosure requirements of the equity market and that inside information, which must be assumed to affect the price of Topsil's share considerably, is not disclosed to unauthorised persons.

The full wording of Topsil's information and communication policy is available on the group's website under "Investor Relations".

The contact to shareholders, prospective investors and equity analysts is handled by Keld Lindegaard Andersen, CEO, e-mail: keld.lindegaard.andersen@topsil.com, tel.: +45 4736 5600.

### Share capital and shareholder structure

The share capital of Topsil Semiconductor Materials A/S amounts to DKK 101,990,183.50 nominal value divided into 407,960,734 shares of DKK 0.25 each. The group has one share class only, and no shares are subject to restrictions on voting rights.

### Share price performance

Topsil's shares are listed on NASDAQ OMX Copenhagen and traded under ISIN DK0010271584. In 2009, the price of the Topsil share increased by 50%, and the share traded at 1.25 at 31 December 2009, resulting in a market capitalisation of DKK 510m.

#### **Shareholders**

The number of registered shareholders was 6,909 at 31 December 2009, representing approximately 74% of the share capital. Shareholders holding more than 5% of the share capital are listed in the table below

# Trading in the Topsil share by members of the Board of Directors and Management

The Board of Directors has adopted guidelines for trading in the company's shares, which are laid down in the rules of procedure and the internal rules of the group. These guidelines apply to trading by the group as well as by members of the Board of Directors and Management and managerial employees. Similarly, the group has written guidelines prohibiting the abuse and the disclosure of inside information.

The trading window for members of the Board of Directors and Management and other insiders to whom the guidelines for insiders apply is set at four weeks following the publication of each interim report and only if they do not possess inside information. Subscription for employee shares/exercise of employee warrants already held is not subject to the rule even if the subscription/exercise takes place outside the four-week window.

It is the responsibility of the chairman of the Board of Directors to inform insiders in case the trading window is closed due to inside information.

### Register of shareholders

Topsil's shares are issued to bearer, but may be registered by name in the group's register of shareholders. Registered shareholders receive notices convening general meetings directly and have voting rights. Furthermore, registered shareholders and

Composition of Shareholders at 31.12.09	Number of shares	Capital in DKK	Capital %	Votes %
EDJ-Gruppen,				
Bangs Gård, Torvet 21				
DK-6701 Esbjerg, Denmark	63,063,311	15,765,827,75	15.46	15.46
Other registered shareholders	239,577,593	59,894,398,25	58.73	58.73
Shareholders not registered by name	105,319,830	26,329,957,50	25.81	25.81
Total	407,960,734	101,990,183,50	100.00	100.00

other stakeholders may automatically receive copies of annual reports, interim reports and other stock exchange announcements by subscribing to Topsil's electronic news service on the group's website.

Shareholders may be registered by name by contacting their bankers or stockbroker. Topsil's register of shareholders is managed by Computershare A/S, Kongevejen 418, DK-2840 Holte, Denmark.

## **Dividend policy**

It is Topsil's policy that the shareholders should obtain a return on their investment in the form of an appreciating share price and/or dividend. Dividends will be paid with due consideration to the necessary consolidation of equity forming the basis for the continued growth of the group.

### Proposed dividend for 2009

The Board of Directors proposes to the Annual General Meeting that the profit for the year be applied to optimise capital resources and that no dividend be paid in respect of the financial year 2009.

# Annual general meeting

The Annual General Meeting will be held on 28 April 2010 at 10:00 am, at Plesner law firm, Amerika Plads 37, DK-2100 Copenhagen Ø, Denmark.

#### **OVERVIEW OF STOCK EXCHANGE ANNOUNCEMENTS IN 2009**

Date	Announcement
24.03	Full year profit announcement 2008
30.03	Capital increase due to exercise of warrants
01.04	Report on insider transaction
01.04	Change in Articles of Association
03.04	Capital increase – correction
20.04	Annual report 2008
20.04	Notice of Annual General Meeting 2009
30.04	Decisions of Annual General Meeting 2009
01.05	Notice of extraordinary general meeting
14.05	Decisions of extraordinary general meeting 2009
15.05	Change in Articles of Association
25.05	Interim report for the three months ended 31 March 2009
25.05	Warrant and bonus programme for the Management
	and warrant programme for managerial employees
25.05	Change in Articles of Association
20.08	Interim report for the six months ended 30 June 2009
12.11	Interim report for the nine months ended 30 September 2009
01.12	Report on insider transaction
14.12	Topsil Semiconductor Materials acquires the
	remaining shares of Cemat Silicon S.A.
18.12	Financial calendar 2010
OVERV	IEW OF STOCK EXCHANGE ANNOUNCEMENTS IN 2010

11.03 Topsil establishes strong growth platform

and resolves to expand production capacity

Date Announcement

18.11 Interim report – Q3 2010

2010	2010 FINANCIAL CALENDAR				
Date	Announcement	Silent period			
25.03	Annual report 2009	25.02.10 - 25.03.10			
28.04	Annual general meeting				
27.05	Interim report – Q1 2010	29.04.10 - 27.05.10			
26.08	Interim report – H1 2010	29.07.10 – 26.08.10			

21.10.10 - 18.11.10

# **COMPANY INFORMATION**

## TOPSIL SEMICONDUCTOR MATERIALS A/S

Linderupvej 4, DK-3600 Frederikssund, Denmark CVR No. 24 93 28 18

Domicile: Frederikssund, Denmark Tel: +45 4736 5600, Fax: +45 4736 5601 E-mail: topsil@topsil.com Web: www.topsil.com

### **Board of Directors:**

Jens Borelli-Kjær, chairman (50) MSc (physics) B.Com (international trade) MBA (INSEAD) Term expires in 2010

Eivind Dam Jensen, deputy chairman (58) State-authorised estate agent Elected to the Board of Directors in 2005 Term expires in 2010

Jørgen Frost, Board member (55) MSc (engineering) B.Com (marketing) Elected to the Board of Directors in 2006 Term expires in 2010

Ole Christian Andersen, Board member (43) MSc (electronics), B.Com (Part I) Elected to the Board of Directors in 2007 Term expires in 2010

Board members elected by the employees: Trine Schønnemann (42) Key Account Manager, employed in 1997 Business diploma (International Marketing) Elected to the Board of Directors in 2003 Term expires in 2011

Leif Jensen (52) Senior Silicon Scientist, employed in 1986 BSc (electronics) Elected to the Board of Directors in 2008 Term expires in 2011

### Directorships:

Vitral A/S, CEO UAB, Vitral, Lithuania, CEO

Ejendomsaktieselskabet Bangs Gård, CEO, and Board Member Aktieselskabet Eivind Dam Jensen, CEO, and Board member Statsaut. Ejendomsmæglerfirma E. Dam Jensen, Owner

Blendex A/S, CEO and Board member Frost Invest A/S, CEO, founder and board member Vestergaard Company Holding A/S, board member Kongskilde Industries A/S, board member RMIG A/S, board member Nangate A/S, CEO and board member OCA Holding ApS, director OCA Family Holding ApS, director

## Management Board:

Keld Lindegaard Andersen (49) CEO, employed in 2005 MA, MBA

Jørgen Bødker (52) VP, Sales & Marketing, employed in 2002 BSc (electronics) B.Com (Business administration)

## Auditors:

**Deloitte** Statsautoriseret Revisionsaktieselskab

State-authorised accountant Tim Kjær-Hansen State-authorised accountant Jørgen Holm Andersen

# STATEMENT BY MANAGEMENT ON THE ANNUAL REPORT

We have today presented the annual report of Topsil Semiconductor Materials A/S for the financial year 1 January - 31 December 2009.

The annual report is prepared in accordance with International Financial Reporting Standards as adopted by the EU and additional Danish disclosure requirements for annual reports of listed companies.

In our opinion, the consolidated financial statements and the parent financial statements give a true and fair view of the Group's and the Parent's financial position at 31 December 2009 as well as of their financial performance and their cash flows for the financial year 1 January – 31 December 2009.

We also believe that the management commentary contains a fair review of the development and performance of the Group's and the Parent's business and of their financial position as a whole, together with a description of the principal risks and uncertainties that they face.

We recommend the annual report for adoption at the Annual General Meeting.

25 March 2010

MANAGEMENT:

Keld Lindegaard Andersen Chief Executive Officer

Jørgen Bødker

VP Logistics, Sales and Marketing

**BOARD OF DIRECTORS** 

Jens Borelli-Kjær Chairman Eivind Dam Jensen Vice-Chairman Ole C. Andersen

Jørgen Frost Board Menher

Leif Jensen

Trine Schønnemann

(Representatives elected by the employees)

# INDEPENDENT AUDITOR'S REPORT

# TO THE SHAREHOLDERS OF TOPSIL SEMICONDUCTOR MATERIALS A/S Report on the consolidated financial statements and parent financial statements

We have audited the consolidated financial statements and parent financial statements of Topsil Semiconductor Materials A/S for the financial year 1. januar – 31. december 2009, which comprise the income statement and statement of comprehensive income, balance sheet, statement of changes in equity, cash flow statement and notes, including the accounting policies, for the Group as well as the Parent. The consolidated financial statements and parent financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the EU and additional Danish disclosure requirements for listed companies.

# Management's responsibility for the consolidated financial statements and parent financial statements

Management is responsible for the preparation and fair presentation of consolidated financial statements and parent financial statements in accordance with International Financial Reporting Standards as adopted by the EU and additional Danish disclosure requirements for listed companies. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of consolidated financial statements and parent financial statements that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate accounting policies, and making accounting estimates that are reasonable in the circumstances.

# Auditor's responsibility and basis of opinion

Our responsibility is to express an opinion on these consolidated financial statements and parent financial statements based on our audit. We conducted our audit in accordance with Danish and International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements and parent financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements and parent financial statements. The proce-

dures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements and parent 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 consolidated financial statements and parent 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 consolidated financial statements and parent financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Our audit has not resulted in any qualification.

#### Opinion

In our opinion, the consolidated financial statements and parent financial statements give a true and fair view of the Group's and the Parent's financial position at 31 December 2009, and of their financial performance and their cash flows for the financial year 1. januar - 31. december 2009 in accordance with International Financial Reporting Standards as adopted by the EU and additional Danish disclosure requirements for listed companies.

### Statement on the management's review

Management is responsible for preparing a management's review that contains a fair review in accordance with the Danish Financial Statements Act.

Our audit did not include the management's review, but we have read it pursuant to the Danish Financial Statements Act. We did not perform any procedures other than those performed during the audit of the consolidated financial statements and parent financial statements.

Based on this, we believe that the disclosures in the management's review are consistent with the consolidated financial statements and parent financial statements.

Copenhagen, 25 March 2010

Deloitte
Statsautoriseret Revisionsaktieselskab

Tim Kjær-Hansen State Authorised, Public Accountant Jørgen Holm Andersen State Authorised, Public Accountant

# **INCOME STATEMENT**

# 1 JANUARY – 31 DECEMBER

Parent Company				Group		
Note	2008	2009	DKK '000	2009	2008	
4	261,658	345,724	Revenue	423,483	289,402	
	11,824	(1,957)	Change in finished goods and work in progress	15,142	13,063	
	1,004	2,284	Work carried out for own account	2,284	1,004	
	60	131	Other operating income	131	60	
	(125,170)	(144,461)	Costs of raw materials and consumables	(216,366)	(138,224)	
	(34,235)	(36,616)	Other external expenses	(51,349)	(41,981)	
5, 6, 7	(46,272)	(57,346)	Staff costs	(73,512)	(51,099)	
8	(6,058)	(6,416)	Depreciation, amortisation and impairment	(15,580)	(8,071)	
	62,811	101,343	Operating profit (EBIT)	84,233	64,154	
9	5,830	1,081	Financial income	6,577	6,167	
10	(5,327)	(14,204)	Financial expenses	(15,051)	(8,252)	
	63,314	88,220	Profit before tax	75,759	62,069	
11	(16,382)	(23,108)	Tax on the profit for the year	(23,977)	(16,204)	
	46,932	65,112	Profit for the year	51,782	45,865	
			Distribution of profit for the year:			
			Parent company shareholders	50,520	46,044	
			Minority interests	1,262	(179)	
				51,782	45,865	

# **STATEMENT OF COMPREHENSIVE INCOME**

# 1 JANUARY – 31 DECEMBER

Parent Company				Group		
Note	2008	2009	DKK '000	2009	2008	
	46,932	65,112	Profit for the year	51,782	45,865	
	0	0	Foreign exchange adjustment relating to foreign companies	257	(26,886)	
	46,932	65,112	Comprehensive income for the year	52,039	18,879	
			Distribution of comprehensive income for the year:			
	46,932	65,112	Parent company shareholders	50,472	28,338	
	0	0	Minority interests	1,567	(9,359)	
	46,932	65,112		52,039	18,879	
12	0.12	0.16	Earnings per share (DKK)	0.12	0.11	
12	0.11	0.15	Diluted earnings per share (DKK)	0.12	0.11	

# **BALANCE SHEET AS AT 31 DECEMBER 2009**

# **ASSETS**

	Parent C	Gro	oup		
Note	2008	2009	DKK '000	2009	2008
	11,720	9,483	Completed development projects	10,279	11,720
	0	0	Goodwill	17,830	17,758
	0	0	Right of use	0	15,510
	0	0	Other intangible assets	1,001	1,317
	638	2,413	Development projects in progress	2,413	638
8,13,14	12,358	11,896	Intangible assets	31,523	46,943
	0	0	Buildings	0	59,038
	22,434	22,667	Plant and machinery	69,800	81,598
	2,532	7,851	Other fixtures and fittings, tools and equipment	8,245	3,597
	6,569	11,101	Property, plant and equipment under construction	16,013	6,769
8,15	31,535	41,619	Property, plant and equipment	94,058	151,002
16	153,725	159,687	Investments in subsidiaries	0	0
17	66,694	80,099	Other non-current receivables etc.	80,099	66,694
	220,419	239,786	Financial assets	80,099	66,694
	264,312	293,301	Non-current assets	205,680	264,639
18	58,825	70,948	Inventories	107,971	85,310
19	46,595	75,863	Trade receivables	94,023	65,262
	0	23,180	Receivables subsidiaries	0	0
20	13,297	19,471	Other receivables	24,462	20,152
	358	389	Prepayments	389	358
	60,250	118,903	Receivables	118,874	85,772
21	9,404	10,377	Cash and cash equivalents	11,840	68,154
31	0	0	Assets held for sale	147,402	0
	128,479	200,228	Current assets	386,087	239,236
	392,791	493,529	Assets	591,767	503,875

# **EQUITY AND LIABILITIES**

	Parent C	ompany		Gro	oup
Note	2008	2009	DKK '000	2009	2008
22	100,848	101,990	Share capital	101,990	100,848
23	0	0	Translation reserve	(17,753)	(17,706)
23	844	4,880	Reserve for share-based payments	4,880	844
	95,951	161,177	Retained earnings	146,923	95,063
			Equity attributable to parent company		
	197,643	268,047	shareholders	236,040	179,049
	0	0	Equity attributable to minority interests	64,577	70,197
	197,643	268,047	Equity	300,617	249,246
24	104,167	99,867	Debt to credit institutions	105,295	116,076
25	0	0	Finance lease liabilities	304	614
	10,548	7,911	Prepayments received on account from customers	7,911	10,548
26	0	0	Other non-current liabilities	815	1,845
11	3,745	4,403	Deferred tax liabilities	6,578	16,973
	118,460	112,181	Non-current liabilities	120,903	146,056
24	23,321	38,726	Debt to credit institutions	47,654	39,793
25	0	0	Finance lease liabilities	141	191
27	23,332	19,567	Trade creditors	49,176	31,958
	0	45	Prepayments received on account from customers	45	3,659
11	4,047	12,657	Income tax payable	12,657	4,046
28	962	4,175	Provisions	4,175	962
29	25,026	38,131	Other payables	43,472	27,964
	76,688	113,301	Current liabilities	157,320	108,573
31	0	0	Liabilities relating to assets held for sale	12,927	0
	76,688	113,301	Current liabilities	170,247	108,573
	195,148	225,482	Total liabilities	291,150	254,629
	392,791	493,529	Equity and liabilities	591,767	503,875
32			Operating lease liabilities		
33-34			Charges, warranty commitments and contingent liabilities		
35-44			Notes without reference		

# **STATEMENT OF CHANGES IN EQUITY FOR 2009**GROUP

	Share	Translation	Reserve for share-based	Retained	Equity attributable to parent company	Equity attributable to minority	Total
DKK '000	capital	reserve	payment	earnings	shareholders	interests	equity
Equity as at 01.01.08	99,706	0	1,111	48,510	149,327	79,556	149,327
Comprehensive income							
for the year	0	(17,706)	0	46,044	28,338	(9,359)	18,979
Share-based payment,							
see note 7	0	0	691	0	691		691
Share-based payment, exercised share warrants,							
see note 7	0	0	(394)	394	0		
Share-based payment, lapsed share warrants,							
see note 7	0	0	(564)	0	(564)		(564)
Cash capital increase	1,142	0	0	115	1,257		1,257
Equity as at 31.12.08	100,848	(17,706)	844	95,063	179,049	70,197	249,246
Equity as at 01.01.09	100,848	(17,706)	844	95,063	179,049	80,197	249,246
Comprehensive income for the year	0	(48)	0	50,520	50,473	1,567	52,039
Acquisition of outstanding minority stakes in Cemat							
Silicon S.A.	0	0	0	1,225	1,225	(7,187)	5,962
Share-based payment, see note 7	0	0	4,036	0	4,036		4,036
Cash capital increase	1,142	0	0	115	1,257		1,257
Equity as at 31.12.09	101,990	(17,754)	4,880	146,923	236,039	64,577	300,617

# PARENT COMPANY

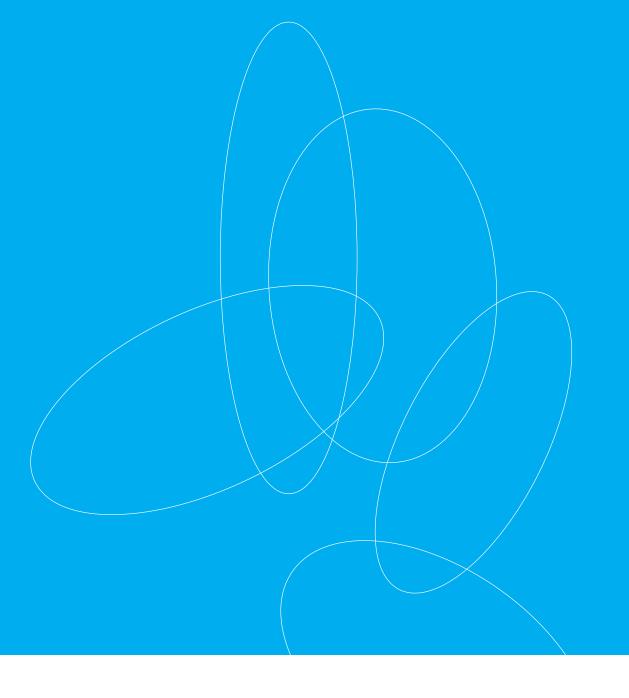
		Reserve for share-		
DKK '000	Share capital	based payment	Retained earnings	Total equity
Equity as at 01.01.08	99,706	1,111	48,510	149,327
Comprehensive income for the year	0	0	46,932	46,932
Share-based payment, see note 7	0	691	0	691
Share-based payment, exercised share warrants,				
see note 7	0	(394)	394	0
Share-based payment, lapsed share warrants,				
see note 7	0	(564)	0	(564)
Cash capital increase	1,142	0	115	1,257
Equity as at 31.12.08	100,848	844	95,951	197,643
Equity as at 01.01.09	100,848	844	95,951	197,643
Comprehensive income for the year	0	0	65,112	65,111
Share-based payment, see note 7	0	4,036	0	4,036
Cash capital increase	1,142	0	115	1,257
Equity as at 31.12.09	101,990	4,880	161,177	268,047

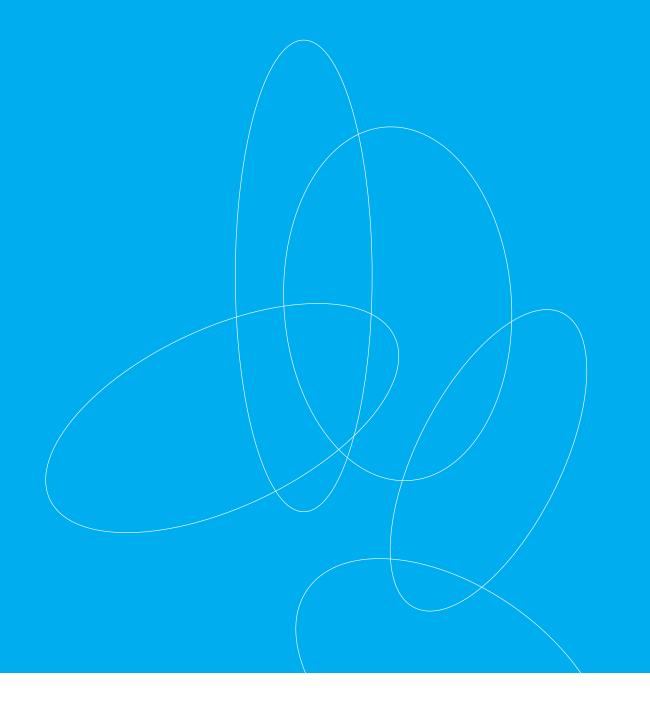
# **CASH FLOW STATEMENT FOR 2009**

	Parent C	ompany	Group		
Note	2008	2009	DKK '000	2009	2008
	62,811	101,343	Operating profit (EBIT)	84,233	64,154
	6,058	6,416	Depreciation, amortisation and impairment	15,826	8,071
			Share-based payment recognised in the		
	127	4,036	income statement	4,036	127
30	(34,697)	(74,221)	Change in net working capital	(42,928)	(49,347)
	34,299	37,574	Cash flows from operating activities	61,167	23,005
	(14,698)	(14,649)	Income tax paid	(15,829)	(15,356)
	5,830	1,081	Financial income received	4,101	6,167
	(5,178)	(13,394)	Financial expenses paid	(12,258)	(8,021)
	20,253	10,612	Cash flows from operating activities	37,181	5,795
	(1,082)	(1,775)	Acquisition etc. of intangible assets	(2,557)	(1,082)
	(7,656)	(14,265)	Acquisition etc. of property, plant and equipment	(22,179)	(8,058)
	(153,725)	(5,962)	Acquisition of financial assets/company	0	(76,461)
	(162,463)	(22,001)	Cash flows from investing activities	(24,736)	(85,601)
	127,488	0	New loan raised	0	132,848
	0	(3,288)	Other repayments to credit institutions	(16,961)	0
	1,257	1,257	Proceeds from the issue of shares, net	1,257	1,257
	0	0	Acquisition of minority shares	(5,962)	0
	(14,901)	0	Paid-up deposit	0	(14,901)
	113,844	(2,031)	Cash flows from financing activities	(21,666)	119,204
	(28,366)	(13,420)	Cash flows for the year	(9,221)	39,398
	37,770	9,404	Cash and cash equivalents at 1 January	68,154	37,770
			Market value adjustment of cash and cash		
	0	0	equivalents	418	(9,014)
21	9,404	(4,016)	Cash and cash equivalents at 31 December	59,351	68,154

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# **NOTES**





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#### 1. Accounting policies

The annual report of Topsil Semiconductor Materials A/S for 2009 is presented in accordance with the International Financial Reporting Standards (IFRS) as adopted by the EU and additional Danish disclosure requirements for annual reports of listed companies in reporting class D, pursuant to the Danish Statutory Order on Adoption of IFRS issued in accordance with the Danish Financial Statements Act and the Rules and Regulations of NASDAQ OMX Copenhagen.

The consolidated and parent company financial statements also comply with IFRS issued by the International Accounting Standard Board (IASB).

The consolidated and parent company financial statements are presented in Danish kroner (DKK), which is the presentation currency of the group and the functional currency of the parent company.

The consolidated and parent company financial statements are based on the historical cost principle.

# Implementation of new and changed standards and interpretations

The following new and changed standards and interpretations applicable to financial years commencing on 1 January 2009 have been implemented in the annual report for 2009.

## Standards impacting presentation and disclosure:

Amended IAS 1, Presentation of Financial Statements (September 2007)

IAS 1(2007) introduces amendments to terminology relating to financial statements and changes in the format and contents of the financial statements.

Amended IFRS 7, Financial Instruments: Disclosure – Improving Disclosures about Financial Instruments (March 2009) Amendments to IFRS 7 relate to enhanced disclosures about fair value and liquidity risk. The implementation of the standard did not give rise to further disclosures.

IFRS 8, Operating Segments (November 2006) IFRS 8 is a disclosure standard which did not lead to changes in segments but resulted in changes in the identification of group segments. See separate note on operating segments.

# Standards and interpretations impacting future results or financial position

Amended IAS 23, Borrowing Costs (March 2007)

As a result of the implementation of the amended IAS 23, the group must include borrowing costs in the cost of qualifying assets in the form of intangible assets and property, plant and equipment as well as inventories with long production periods.

To date, the group has not capitalised interest in the cost of non-current assets. In compliance with the provisions on commencement of the amended IAS 23, borrowing costs are only recognised in the cost of qualifying assets where construction or production is initiated on or after 1 January 2009.

In 2009, the group had no qualifying assets, see IAS 23.5-7.Accordingly, no financial expenses for intangible assets and property, plant and equipment have been recognised during the year.

Amended IFRS 3, Business Combinations (January 2008) In accordance with the commencement provisions in the amended IFRS 3, this standard only has future effect. As there has been no business combinations in 2009, this standard did not affect the annual report for 2009.

Other than as set out above, the accounting policies have been consistently applied and are described in the following.

# Standards and interpretations that have not yet come into force

At the date of publishing this annual report, the following new or amended standards and interpretations have not yet taken effect and therefore have not been incorporated into this annual report:

IAS 24, Related parties (November 2009)	The amendment grants relief from certain disclosure requirements relating to transactions between enterprises subject to control or controlling influence of the same state. Furthermore, the definition of related parties is specified further.
	The amendment comes into force for financial years beginning on or after 1 January 2011. The amendment has not yet been adopted for use in the EU.
Amended IFRS 39, Financial Instruments: Recognition	The amendment specifies hedging provisions for hedging inflation risks and applying options as hedge instruments.
and measurement (Eligible Hedged Items) (July 2008)	The amendment comes into force for financial years beginning on or after 1 July 2009 and musbe implemented retroactively.
Amended IFRS 2, Share- based payment (Group Cash-settled Share- based Payment Transac-	The amendment which primarily incorporates previous interpretations into the standard specifies the scope of IFRS 2 and the accounting for share-based payment in the annual report of a subsidiary when it receives goods or services which the parent company or another group enterprise must settle.
tions) (June 2009)	The previous provisions of commencement and transition of the interpretations will continue in the amended standard. The other amendments come into force for financial years beginning on o after 1 January 2010. The amendments have not yet been adopted for use in the EU.
IFRS 9, Financial Instruments: Classification and measure- ment (November 2009)	IFRS 9 relates to the accounting for financial assets in relation to classification and measurement According to IFRS 9, the 'held to maturity' and 'financial assets available for sale' categories are abolished. A new optional category is established for equity instruments not held for sale which or initial recognition are classified in the "fair value through other comprehensive income" category. In the future, financial assets must be classified either as "measured at amortised cost" or "fair value through profit or loss", or in the case of equity instruments complying with the relevant criteria as "fair value through other comprehensive income".  The standard comes into force for financial years beginning on or after 1 January 2013. The standard has not yet been adopted for use in the EU.
Minor amendments of various standards as a result of the IASB's annual improvement process (April 2009)	The amendments are the result of a number of proposals in IASB's annual improvement process which conducts required corrections of discrepancies in the standards or specifications of existing provisions in the standards. Most of the amendments take effect for financial years beginning or or after 1 January 2010. The amendments have not yet been adopted for use in the EU.
IFRIC 14, The Limit on a Defined Benefit Asset, Minimum Funding Require- ments and their Interac- tion (November 2009)	As a result of the amendment, companies are not allowed to recognise prepayments for minimum contributions as assets.  The amendment comes into force for financial years beginning on or after 1 January 2011. The amendment has not yet been adopted for use in the EU.
IFRIC 17, Distributions of Non-Cash Assets to Owners (November 2008)	IFRIC 17 relates to the accounting for distributions of non-cash assets to owners.  The interpretation comes into force for financial years beginning on or after 1 July 2009.
IFRIC 19, Extinguishing financial liabilities with equity instruments (November 2009)	IFRIC 19 relates to a company's accounting for a financial liability which according to agreement with a creditor is converted in full or in part into shares or other equity instruments in the company. The interpretation comes into force for financial years beginning on or after 1 July 2010. The interpretation has not yet been adopted for use in the EU.

The Board of Directors and Management believe that the application of these other new and amended standards and interpretations will not have any material impact on the annual reports of the coming financial years. Otherwise, the accounting policies are consistent with last year's, as described in the following.

### 1. Accounting policies, continued

### Consolidated financial statements

The consolidated financial statements consolidate the financial statements of the parent company, Topsil Semiconductor Materials A/S, and subsidiaries in which the parent company directly or indirectly holds more than 50% of the rights.

#### **Basis of consolidation**

The consolidated financial statements are prepared on the basis of the financial statements of the parent company and those of the subsidiaries which are all prepared in accordance with the group's accounting policies.

On consolidation, items of the same nature are aggregated and intra-group income and expenses, intra-group balances and shareholdings are eliminated. Unrealised gains and losses on transactions between consolidated companies are also eliminated.

The items of the financial statements of subsidiaries are fully consolidated in the consolidated financial statements. The minority interests' proportionate share of the profit and the comprehensive income is included in the consolidated profit for the year and as a separate item under the consolidated equity.

### **Business combinations**

Newly acquired companies are recognised in the consolidated financial statements from the date of acquisition. The date of acquisition is the date when control of the company actually passes to the group.

Acquisitions are accounted for using the purchase method, under which the identifiable assets, liabilities and contingent liabilities of companies acquired are measured at fair value at the date of acquisition. Non-current assets held for sale are measured at fair value less expected costs to sell.

Restructuring costs are only recognised in the take-over balance sheet if they represent a liability to the acquired company. The tax effect of revaluations is taken into account. The cost of a company is the fair value of the consideration paid plus costs directly attributable to the business combination. If the final determination of the consideration is conditional on one or more future events, such adjustments are only recognised in cost if the event in question is likely to occur and its effect on cost can be reliably measured.

Any excess of the cost of an acquired company over the fair value of the acquired assets, liabilities and contingent liabilities (goodwill) is recognised as an asset under intangible assets and tested at least annually for impairment. If the carrying amount of an asset exceeds its recoverable amount, the asset is written down to the lower recoverable amount.

In case of negative differences (negative goodwill), the calculated fair values and the calculated cost of the company are reassessed. If the fair value of the acquired assets, liabilities and contingent liabilities still exceeds cost following the reassessment, the difference is recognised as income in the income statement.

# Foreign currency translation

On initial recognition, transactions denominated in currencies other than the individual company's functional currency are

translated at the exchange rate ruling at the transaction date. Receivables, payables and other monetary items denominated in foreign currencies that have not been settled at the balance sheet date are translated at the exchange rates at the balance sheet date. Exchange differences between the exchange rate at the date of the transaction and the exchange rate at the date of payment or the balance sheet date, respectively, are recognised in the income statement under financial items.

Property, plant and equipment and intangible assets, inventories and other non-monetary assets acquired in foreign currency and measured based on historical cost are translated at the exchange rates at the transaction date.

On recognition in the consolidated financial statements of subsidiaries whose financial statements are presented in a functional currency other than DKK, the income statements are translated at average exchange rates for the respective months, unless these deviate materially from the actual exchange rates at the transaction dates. In that case, the actual exchange rates are used. Balance sheet items are translated at the exchange rates at the balance sheet date. Goodwill is considered to belong to the acquired company in question and is translated at the exchange rate at the balance sheet date.

Exchange differences arising on the translation of foreign subsidiaries' opening balance sheet items to the exchange rates at the balance sheet date and on the translation of the income statements from average exchange rates to exchange rates at the balance sheet date are taken directly to equity. Similarly, exchange differences arising as a result of changes made directly in the equity of the foreign company are also taken directly to equity.

Foreign exchange adjustment of receivables from or debt to subsidiaries which are considered part of the parent company's overall investment in the subsidiary in question are also taken directly to equity in the consolidated financial statements, whereas they are recognised in the income statement of the parent company.

## **Derivative financial instruments**

On initial recognition, derivate financial instruments are measured at fair value at the settlement date. Directly attributable costs related to the purchase or issuance of the individual financial instruments (transaction costs) are added to the fair value on initial recognition unless the financial asset or the financial liability is measured at fair value through profit or loss.

Subsequently, the derivative financial instruments are measured at fair value at the balance sheet date. Positive and negative fair values of derivative financial instruments are recognised under other receivables and other payables, respectively.

Changes in the fair value of derivative financial instruments designated as and qualifying for recognition as fair value hedges of a recognised asset or a recognised liability are recognised in the income statement together with any changes in the value of the hedged asset or hedged liability.

Changes in the fair value of derivative financial instruments designated as and qualifying for recognition as effective hedges of future transactions are recognised directly in equity. The ineffective part is recognised immediately in the income statement. When the hedged transactions are realised, the cumulative changes are recognised as part of the cost of the respective transactions.

Derivative financial instruments that do not qualify for hedge accounting are considered trading portfolios and are measured at fair value. Any fair value changes are recognised in the income statement under financial items as they occur.

Certain contracts include terms and conditions similar to those of derivative financial instruments. To the extent that the embedded derivative financial instruments differ significantly from the overall contract, they are recognised and measured as separate instruments at fair value, unless the contract in question in its entirety is recognised and measured at fair value.

## Share-based incentive plans

Share-based incentive plans in which employees can only opt to buy shares in the parent company (equity-based plans) are measured at the equity instruments' fair value at the grant date and recognised in the income statement under staff costs over the vesting period. The balancing item is recognised directly in equity.

The fair value of the equity instruments is stated using the Black&Scholes model, see note 7.

Employee shares granted and exercised during the financial year are recognised as an expense at an amount calculated as the difference between the market price and the exercise price at the grant date.

### Tax

Income tax for the year comprises the current tax for the year and changes in deferred tax. The tax expense relating to the profit or loss for the year is recognised in the income statement, and the tax expense relating to changes directly recognised in equity is recognised directly in equity.

Current tax payable and receivable is recognised in the balance sheet as the tax charge on the taxable income for the year, adjusted for tax paid on account.

The current tax charge for the year is calculated based on the tax rates and rules applicable at the balance sheet date.

Deferred tax is measured using the tax rates and tax rules that, based on legislation in force or in reality in force at the balance sheet date, are expected to apply in the respective countries when the deferred tax is expected to crystallise as current tax. Changes in deferred tax as a result of changed tax rates or rules are recognised in the income statement, unless the deferred tax can be attributed to items previously recognised directly in equity. In the latter case, the change is also recognised directly in equity.

Deferred tax is measured using the balance sheet liability method on all temporary differences between the carrying amount and the tax base of assets and liabilities. However, deferred tax is not recognised on temporary differences relating to the initial recognition of goodwill or the initial recognition of a transaction, apart from business combinations, and where the temporary difference existing at the date of initial recognition affects neither profit/loss for the year nor taxable income.

Deferred tax is provided on temporary differences arising

on investments in subsidiaries and associates, unless the parent company is able to control when the deferred tax is to be realised and it is likely that the deferred tax will not crystallise as current tax within the foreseeable future.

Deferred tax is calculated based on the planned use of the individual asset and the settlement of the individual liability, respectively.

Deferred tax assets, including the tax value of tax loss carry-forwards, are recognised in the balance sheet at the value at which the asset is expected to be realised, either through a set-off against deferred tax liabilities or as net tax assets to be offset against future positive taxable income. At each balance sheet date, it is assessed whether it is likely that there will be sufficient future taxable income for the deferred tax asset to be utilised.

#### INCOME STATEMENT

#### Revenue

Revenue generated from the sale of silicon ingots and wafers and rent is recognised in the income statement when delivery has taken place and the risk has passed to the buyer.

Revenue is measured as the fair value of the consideration received or receivable. If interest-free credit has been granted for payment of the outstanding consideration extending beyond the usual credit period, the fair value of the consideration is calculated by discounting future payments. The difference between the fair value and the nominal value of the consideration is recognised as financial income in the income statement over the extended credit period by using the effective interest method.

Revenue is calculated exclusive of VAT, taxes, discounts, etc. collected on behalf of third parties.

## Costs of raw materials and consumables

Costs of raw materials and consumables comprise direct costs incurred in generating the revenue. Costs concerning development projects in the production environment that do not qualify for recognition in the balance sheet are also recognised in costs of raw materials and consumables.

# Other operating income and operating costs

Other operating income and costs include items of a secondary nature relative to the main activity of the group, including gains and losses on sales of intangible assets and property, plant and equipment, if the selling price of the assets exceeds the original cost.

### Other external expenses

Other external expenses include distribution, selling and advertising costs, administrative expenses, expenses for office premises, bad debts, etc. Other external expenses also comprise costs of development projects that do not qualify for recognition in the balance sheet.

### **Government grants**

Government grants are recognised when there is reasonable assurance that the conditions for the grant have been met and that the grant will be received.

### 1. Accounting policies, continued

Grants to cover expenses incurred are recognised in the income statement proportionally over the periods in which the associated expenses are recognised. The grants are set off against the expenses incurred. Government grants associated with an asset are deducted from the cost of the asset.

#### Staff costs

Staff costs comprise wages and salaries and social security costs, pensions, share-based payment, etc. to the employees of the group.

Staff costs also comprise costs for development projects that do not qualify for recognition in the balance sheet.

#### **Financial items**

Financial items comprise interest income and expenses, the interest element of finance lease payments, realised and unrealised foreign exchange gains and losses as well as surcharges and allowances under the Tax Prepayment Scheme.

#### **BALANCE SHEET**

# Intangible assets Goodwill

On initial recognition, goodwill is measured and recognised as the excess of the cost of the acquired company over the fair value of the acquired assets, liabilities and contingent liabilities, as described under the consolidated financial statements.

On recognition of goodwill, the goodwill amount is allocated to those of the group's activities that generate separate cash flows (cash-generating units).

Goodwill is not amortised, but is tested for impairment at least once a year, as described below.

# Other intangible assets

Development projects concerning products and processes which are clearly defined and identifiable are recognised as intangible assets if it is probable that the product or the process will generate future economic benefit for the group and the development costs of the individual asset can be measured reliably.

The group recognises borrowing costs in the cost of qualifying assets with long production periods.

The depreciation base is cost less the residual value. The residual value is the amount expected to be obtainable in a sale of the asset, less costs to sell, if the asset already had the age and were in such condition as the asset is expected to be at the end of its useful life. The cost of a total asset is split into smaller parts that are depreciated separately if such components have different useful lives.

Other development costs are recognised as costs in the income statement when incurred.

On initial recognition, development projects are measured at cost. The cost of development projects includes costs such as salaries and amortisation that are directly attributable to the development projects and are necessary to complete the project calculated from the date when the development project first qualifies for recognition as an asset.

Completed development projects are amortised on a straight-line basis over their expected useful lives. The amortisation period is usually five years, but may in certain cases be as long as 20 years if this longer amortisation period is deemed to be more representative of the group's use of the developed product, etc. Amortisation for the year is included in the income statement under 'Depreciation and amortisation".

Development projects are written down to their recoverable amount where this is lower than the carrying amount, as described below. Development projects in progress are tested for impairment at least once a year.

Other acquired intellectual property rights in the form of rights of use, patents and customer lists are measured at cost less accumulated amortisation and impairment. Other intellectual property rights are amortised on a straight-line basis over the remaining life of the patent. If the actual life of the patent is shorter than either the remaining term or the contract period, amortisation is provided over the shorter life of the patent.

Other intellectual property rights are written down to their recoverable amount where this is lower than the carrying amount, as described below.

### Property, plant and equipment

Buildings, plant and machinery, operating equipment, fixtures and fittings are measured at cost less accumulated depreciation and impairment.

Cost comprises the purchase price and any costs directly attributable to the acquisition and any preparation costs incurred until the date when the asset is available for use. In the case of assets produced by the group itself, cost comprises costs that are directly attributable to the production of the asset including materials, components, sub-suppliers and wages. For assets held under finance leases, the cost is the lower of the fair value of the asset and the present value of the future lease payments.

The group recognises borrowing costs in the cost of qualifying assets with long production periods.

The depreciation base is cost less the residual value. The residual value is the amount expected to be obtainable in a sale of the asset, less costs to sell, if the asset already had the age and were in such condition as the asset is expected to be at the end of its useful life. The cost of a total asset is split into smaller parts that are depreciated separately if such components have different useful lives.

Straight-line depreciation is provided based on the estimated useful lives of the assets as follows:

Depreciation methods, useful lives and residual values are reassessed annually.

Property, plant and equipment are written down to their recoverable amount if this is lower than the carrying amount, see below.

# Impairment of property, plant and equipment, intangible assets and investments in subsidiaries

The carrying amounts of property, plant and equipment, intangible assets with determinable useful lives and investments in subsidiaries are tested at the balance sheet date to determine whether there are any indications of impairment. If this is the case, the recoverable amount of the asset is determined to establish if there is a need to recognise an impairment loss and the extent of such impairment loss. The recoverable amount of development projects in progress and goodwill is tested annually regardless of whether any indication of impairment has been established.

If the asset does not generate any cash flows independently of other assets, the recoverable amount is calculated for the smallest cash-generating unit of which the asset forms part.

The recoverable amount is calculated as the higher of the fair value less costs to sell and the value in use of the asset or the cash-generating unit, respectively. In determining the value in use, the estimated future cash flows are discounted to their present value, using a discount rate reflecting current market assessments of the time value of money as well as risks that are specific to the asset or the cash-generating unit and which have not been taken into account in the estimated future cash flows.

If the recoverable amount of the asset or the cash-generating unit is lower than the carrying amount, the carrying amount is written down to the recoverable amount. For cash-generating units, the impairment loss on goodwill is written down, followed by any further required write-down on the other assets of the unit, such individual assets not being written down to a value lower than their fair value less expected costs to sell.

Impairment losses are recognised in the income statement. If write-downs are subsequently reversed as a result of changes in the assumptions on which the calculation of recoverable amount is based, the carrying amount of the asset or the cashgenerating unit is increased to the adjusted recoverable amount, not exceeding the carrying amount that the asset or cash-generating unit would have had, had the write-down not been made. Impairment of goodwill is not reversed.

## Investments in subsidiaries

On initial recognition, investments in subsidiaries are measured at cost plus transaction costs. Where the recoverable amount of the investments is lower than cost, the investments are written down to this lower value. Cost is also written down if the dividend distributed exceeds the accumulated earnings in the company since the parent company's acquisition of the investments.

### **Inventories**

Inventories are measured at the lower of cost according to the FIFO method and net realisable value.

The cost of raw materials and consumables comprises the purchase price plus delivery costs. The cost of manufactured goods and work in progress comprises the cost of raw materials, consumables and direct labour as well as allocated fixed and variable indirect production costs.

Variable indirect production costs comprise indirect materials and wages and are allocated based on preliminary calculations

of the goods actually produced. Fixed indirect production costs comprise maintenance costs and depreciation and impairment of the machinery and equipment used in the production process as well as general factory administration and management expenses. Fixed production costs are allocated on the basis of the normal capacity of the production plant.

The net realisable value of inventories is calculated as the expected selling price less costs of completion and costs incurred to make the sale.

#### Receivables

Receivables comprise long-term deposits in connection with goods purchased and goods sold, and trade receivables from goods sold and services. Receivables are included in the category loans and receivables, which are financial assets with fixed or determinable payments that are not listed on an active market and are not derivative financial instruments.

Receivables are measured at fair value on initial recognition and subsequently at amortised cost, which usually corresponds to the nominal value less provision for bad debts. Impairment loses are assessed individually.

### Assets held for sale and related liabilities

Assets held for sale comprise assets and liabilities in Cemat 70 S.A., the most important asset of which is land and buildings let on market terms. A sale is expected to take place within 12 months of the balance sheet date. The largest individual tenant is Cemat Silicon S.A.

Assets held for sale are not depreciated but are written down to the lower of fair value less expected costs to sell and the carrying amount. Assets held for sale are recognised in current assets.

Assets and directly related liabilities are recognised in separate line items in the balance sheet. The line items are specified in the notes.

## **Prepayments**

Prepayments comprise costs incurred relating to subsequent financial years. Prepayments are measured at cost.

# Pension liabilities etc.

The group has entered into defined contribution plans and similar plans with a substantial part of the group's employees. In respect of defined contribution plans, the group currently makes fixed contributions to independent pension funds etc. The contributions are recognised in the income statement during the period in which the employee renders the related service. Amounts due are recognised in the balance sheet as a liability.

# **Provisions**

Provisions are recognised when the group has a legal or constructive obligation as a consequence of past events during the financial year or prior years, and when it is likely that settlement of the obligation will require an outflow of the group's financial resources. Warranty commitments cover commitments to repair faulty or defective products sold within the warranty period.

### 1. Accounting policies, continued

Provisions are measured as the best estimate of the costs required to settle the liabilities at the balance sheet date. Provisions with an expected term of more than a year after the balance sheet date are measured at present value.

#### Lease liabilities

Lease liabilities concerning assets held under finance leases are recognised in the balance sheet as liabilities and measured at the inception of the lease at the lower of the fair value of the leased asset and the present value of future lease payments.

On subsequent recognition, lease liabilities are measured at amortised cost. The difference between the present value and the nominal value of the lease payments is recognised in the income statement over the term of the lease as a financial expense.

Lease payments concerning operating leases are recognised in the income statement on a straight-line basis over the term of the lease.

### Other financial liabilities

Other financial liabilities comprise bank loans, trade creditors and other amounts owed to public authorities. On initial recognition, other financial liabilities are measured at fair value less transaction costs. In subsequent periods, financial liabilities are measured at amortised cost, applying the effective interest method, to the effect that the difference between the proceeds and the nominal value is recognised in the income statement as financial expenses over the term of the loan.

### **CASH FLOW STATEMENT**

The consolidated cash flow statement is presented according to the indirect method and shows cash flows from operating, investing and financing activities as well as cash and cash equivalents at the beginning and the end of the year.

The cash effect of acquisitions and divestments of companies is shown separately under cash flows from investing activities. In the cash flow statement, cash flows relating to acquired companies are recognised from the date of acquisition, while cash flows relating to divested companies are recognised up until the date of divestment.

Cash flows from operating activities are stated as operating profit, adjusted for non-cash operating items and changes in working capital and financial income and expenses, less the income tax paid during the year attributable to operating activities.

Cash flows from investing activities comprise payments related to the purchase and sale of financial assets, including deposits and non-current prepayments for goods, subsidiaries as well as the purchase, development, improvement, sale, etc. of intangible assets and property, plant and equipment.

Cash flows from financing activities comprise changes in the size or the composition of the parent company's share capital and related costs as well as the raising and repayment of loans, instalments on interest-bearing debt, acquisition of treasury shares and payment of dividends. Furthermore, cash flows regarding assets held under finance leases in the form of lease payments made are recognised.

Cash and cash equivalents comprise cash less bank overdrafts that are an integral part of the cash management.

### Segment information

The group's sole segment is the "production and sale of silicon ingots and wafers".

## Key figures and ratios

The financial ratios have been defined and calculated in accordance with "Recommendations and Financial Ratios 2005" issued by the Danish Association of Financial Analysts (See next page).

The calculations of earnings per share and earnings per share, diluted, are specified in note 12.

EBITA (Earnings Before Interest, Tax and Amortisation) is defined as the operating profit (EBIT) plus amortisation and impairment of goodwill for the year.

Net working capital (NWC) is defined as the value of inventories, receivables and other operating assets less trade creditors and other short-term operating liabilities. Cash and cash equivalents and deferred tax are not included in net working capital.

Net interest-bearing debt is defined as interest-bearing liabilities less interest-bearing assets including cash and cash equivalents.

Capital employed is defined as the net working capital plus the carrying amount of property, plant and equipment and intangible assets and less other provisions and non-current operating liabilities.

EBITDA (Earnings Before Interest, Tax, depreciation and Amortisation) is defined as the operating profit plus amortisation and impairment of goodwill for the year.

Key figure	Calculation formula
Profit margin	EBIT
	Revenue
Return on invested capital (%)	EBITA
incl. goodwill	Average invested capital
Return on equity (%)	Profit for the year after tax exclusive of minorities
	Average equity exclusive of minorities
Financial gearing	Net interest-bearing debt
	Total equity
EBITDA margin	EBITDA*100
	Revenue
Revenue/invested capital	Revenue
	Invested capital

#### 2. Significant accounting estimates, assumptions and uncertainties

Many financial statement items cannot be measured reliably, but must be estimated. Such estimates comprise judgements made on the basis of the most recent information available at the reporting date. It may be necessary to change previous estimates as a result of changes to the assumptions on which the estimates were based or due to supplementary information, additional experience or subsequent events.

In applying the accounting policies described, the Board of Directors and Management have exercised the following critical accounting judgements that significantly affect the annual report:

 Recognition and measurement of development projects, goodwill, rights of use, inventories, trade receivables and provisions are subject to accounting estimates. The value of assets and liabilities often depends on future events that are subject to some degree of uncertainty. In that connection, it is necessary to assume e.g. a course of events that reflects the Board of Directors' and Management's assessment of the most probable course of events.

- Assets held for sale are recognised at market price which is estimated to equal the historical cost of the net assets. Several offers have been received for the shares in Cemat70 S.A. which have been close to the purchase price.
- Although the group trades extensively with customers and suppliers in foreign currencies, the functional currency of the parent company is still deemed to be Danish kroner based on IAS 21.9-12.

#### 3. Segment information

Based on IFRS 8, operating segments, it has been assessed whether the group has segments which are liable for reporting.

The group's internal reporting to the parent company's Board of Directors and Management covers the group as a whole, but with sub-specification of the legal entities in Denmark and Po-

land, respectively. However, it is assessed that the legal entities meet the requirements for consolidation, see IFRS 8.12, and therefore, Topsil has a single segment: "Production and sale of silicon ingots and wafers".

#### Other segment information:

Specification of sale of products as set out below:

Parent Company		Revenue	Group	
2008	2009	DKK '000	2009	2008
221,326	339,874	Sale of silicon ingots and wafers	397,532	239,844
0	0	Rent	9,371	1,732
40,332	5,850	Remelt	5,850	40,332
0	0	Other	10,730	7,494
261,658	345,724	Total	423,483	289,402

#### 3. Segment information, continued

# Revenue by geographical areas:

Parent Company		Geographical segments	Group		
2008	2009	DKK '000	2009	2008	
186,310	239,299	Europe	258,739	195,162	
27,961	17,583	USA	32,357	32,569	
47,387	88,842	Asia	132,387	61,671	
261,658	345,724	Total	423,483	289,402	

Information about major customers:

Of the total consolidated revenue, DKK 224,654 thousand (2008: DKK 153,276 thousand) comprised sales to three customers, with whom long-term agreements on the delivery of silicon ingots have been concluded.

#### Non-current assets by physical location:

Parent C	ompany		Gro	oup
2008	2009	DKK '000	2009	2008
110,587	133,614	Denmark	133,614	110,589
153,725	159,687	Poland	72,066	154,050
264,312	293,301	Total	205,680	264,639

#### 4. Revenue

The major part of consolidated revenue relates to the sale of goods, while a minor part relates to rental income from properties in Poland.

#### 5. Staff costs

Parent Company			Group	
2008	2009	DKK '000	2009	2008
750	1,000	Directors' fees	1,000	750
38,020	44,585	Salaries and wages	53,707	41,499
2,240	1,427	Bonuses for managerial employees	2,149	2,240
1,875	2,223	Bonuses for Management	2,223	1,875
127	4,036	Share-based payment	4,036	127
2,861	3,551	Pension contributions, defined contribution plan	3,740	2,861
399	524	Other social security costs	6,657	1,747
46,272	57,346	Total	73,512	51,099
87	91	Average number of full-time employees	377	140

The average number of full-time employees is based on pension contributions for parent company employees. In respect of subsidiaries, the calculation of average number of employees is based on the number of employees at the end of each month.

At 31 December 2009, the parent company had 92 full-time employees and the group had 370 full-time employees.

#### **Group and Parent Company**

Remuneration of Board of Directors, Management and managerial employees

					Other ma	anagerial	
	Board of	Directors	Manag	Management		employees	
	2009	2008	2009	2008	2009	2008	
Directors' fees	1,000	750	0	0	0	0	
Salaries and wages	0	0	2,989	2,784	8,402	6,326	
Bonuses for managerial employees	0	0	0	0	2,149	2,240	
Bonuses for Management	0	0	2,223	1,875	0	0	
Pension contributions	0	0	412	249	654	535	
Share-based payment	0	0	1,383	66	2,653	61	
Total	1,000	750	7,007	4,974	13,858	9,162	

Fees to the Chairman of the Board of Directors for the current term amounts to DKK 300 thousand (2008: DKK 200 thousand), Deputy chairman DKK 225 thousand (2008: DKK 150 thousand) and other Board members DKK 150 thousand each (2008: 100 thousand).

The Management and other managerial employees are covered by special bonus plans. Management's bonuses are performance-driven and relate to developments in sales volumes and financial results achieved. In addition to this, special individual performance goals apply in respect of other managerial employees.

#### 2009

For the financial year 2009, the CEO will receive a bonus of 1.0% of the profit before tax as appearing from the consolidated accounts and 4.0% of the growth in consolidated profit before tax, calculated relative to the profit before tax of the consolidated accounts for 2008.

For the financial year 2009, the VP, Sales, Logistics and Marketing will receive a bonus of 0.7% of the profit before tax as appearing from the consolidated accounts and 2.8% of the growth in consolidated profit before tax, calculated relative to the profit before tax of the consolidated accounts for 2008.

#### 2008

Under this bonus scheme, the CEO receives 2% on ordinary activities before tax, the VP Sales, Logistics and Marketing 1% before tax and other managerial employees 0.5% of the profit on ordinary activities before tax.

#### 6. Pension plans

The group has solely entered into defined contribution plans.

Parent C	Parent Company			Group	
2008	2009	DKK '000	2009	2008	
2,861	3,551	Contributions to defined contribution plans	3,740	2,861	
2,861	3,551	Total	3,740	2,861	

Under defined contribution plans, the employer pays regular contributions to an independent pension company, pension fund or the like, but has no risk in relation to the future development of interest rates, inflation, mortality, disability, etc. in so far as the amount that will eventually be paid to the employee is concerned.

#### 7. Share-based payment

Management and a number of managerial employees were granted warrants in 2009 to subscribe for shares in the group at a fixed strike price. The warrant plan is an equity-based share-based payment scheme. The value of the warrants is recognised in the income statement under staff costs on a straight-line basis from the grant date up to the vesting date, which means that at the exercise date no further recognition is made in the income statement.

# 7. Share-based payment, continued

# Specification of outstanding warrants (Parent Company and Group)

	No. of warrants held thousands	Weighted average exercise prices DKK
Warrants granted at 01.01.08	11,149	0.57
Granted during the financial year	0	0
Forfeited due to termination of employment	(790)	1.98
Exercised during the financial year	(4,569)	0.28
Lapsed during the financial year	(359)	1.91
Warrants granted at 31.12.08	5,431	0.53
Warrants granted at 01.01.09	5,431	0.53
Granted during the financial year	28,697	0.81
Forfeited due to termination of employment	0	0
Exercised during the financial year	(4,569)	0.28
Lapsed during the financial year	(862)	1.89
Warrants granted at 31.12.09	28,697	0.81
	2009	2008
Number of exercisable warrants at year end	0	0
Number of exercisable warrants at the release of the full-year profit announcement (thousands)	9,566	5,431
Total fair value of outstanding warrants (DKK '000) at 31.12	13,642	2,755
Fair value per warrant	0.48	0.51
Weighted average strike price per warrant	0.81	0.53

In 2009, the fair value of warrants was recognised at DKK 4,036 thousand, against DKK 127 thousand in 2008.

# The grant year, strike price and exercise period for the individual grants are as follows:

		Exercise					Yet to be
Year of grant	Strike price	period (*)	Granted	Lapsed	Not exercised	Exercised	exercised
2009	0.81	2010	9,565,620	-	-	-	9,565,620
2009	0.81	2011	9,565,620	-	-	-	9,565,620
2009	0.81	2012	9,565,620	-	-	-	9,565,620
Total			28,696,860				28,696,860

 $<sup>\</sup>begin{tabular}{ll} \textbf{(*)} The warrants can be exercised during a 6-week period following the release of the full-year profit announcement. \\ \end{tabular}$ 

The calculated fair values at allocation are based on the Black&Scholes model for valuation of warrants including dilution.

# The assumptions applied in determining the fair value at the grant date of warrants granted during the year are as follows:

	Allocated in	Allocated in
thousands	2009	2008
Average share price	0.92	0
Strike price	0.81	0
Expected volatility	68.3%	0
Expected term	1-3 years	0
Expected dividend per share	0	0
Risk-free interest rate	1.7%-2.0%	0
Warrants granted (thousands)	28,697	0
Fair value per warrant	0.36	0
Total fair value (DKK '000)	10,252	0

No warrants were granted to managerial employees in 2008.

The expected volatility is based on the historical volatility (calculated over the past year) adjusted for expected changes as a result of publicly available information. The fair value is based on the warrants being exercised at the first-coming opportunity.

Warrants that have not been exercised are forfeited if the owner terminates his/her employment. In the event of changes in the group's capital structure resulting in a dilution of the value of the warrants, the employees are entitled to subscribe for a further number of warrants corresponding to the ratio between the group's share capital before and after the change in its capital structure. In the event of changes in the control of the group, the employee will be entitled to exercise all his/her warrants, which exercise is to take place during the first coming exercise period. If the warrants are not exercised during the first coming exercise period, the unexercised warrants will lapse. Under the warrants programme, it is possible for the employees to postpone the exercise of the warrants by one or two years. However, warrants not exercised in 2012 will lapse.

## In 2009, the following changes occurred in the number of warrants held by Management and the Board of Directors:

Number of warrants	Held 01.01.09	Exercised 2009	Lapsed 2009	Allocated 2009	Held 31.12.09
Keld Lindegaard Andersen, CEO	1,965,750	1,965,750	0	5,897,250	5,897,250
Jørgen Bødker, VP Sales, Logistics					
and Marketing	1,310,500	1,310,500	0	4,128,075	4,128,075
Leif Jensen, Senior Silicon Scientist	430,938	430,938	0	0	0
Hans P. Mikkelsen, Supply Chain Manager	430,938	430,938	0	1,896,058	1,896,058
Theis Leth Sveigaard, Expansion Projects					
Manager	430,938	430,938	0	1,847,927	1,847,927
Thomas Clausen, R&D Manager	430,937	0	430,937	1,641,812	1,641,812
Jens Christian Nielsen, CFO	430,937	0	430,937	2,610,978	2,610,978
Per Kringhøj, Head of Technical Department	0	0	0	2,489,015	2,489,015
Pia Prag Hansen, Head of Production	0	0	0	1,756,952	1,756,952
Martin O. Hansen, CEO (CS)	0	0	0	3,177,012	3,177,012
Ole Andersen, Head of Production (CS)	0	0	0	1,567,326	1,567,326
Roman Nowak, Vice President (CS)	0	0	0	673,782	673,782
Maciek Lichowski, Sales Manager (CS)	0	0	0	561,485	561,485
Waldemar Kot, QA Manager (CS)	0	0	0	449,188	449,188
Employees marked with CS are part of the management of Cemat Silicon S.A., Poland					
Total	5,430,938	4,569,064	861,874	28,696,860	28,696,860

The remaining warrants can be exercised during a six-week period following the release of the full-year profit announcement for the financial years 2010-2012, the first time on 25 March 2010.

# 8. Depreciation, amortisation and impairment

Parent Company		_	Gro	oup
2008	2009	DKK '000	2009	2008
2,407	2,237	Amortisation, intangible assets	2,406	2,462
3,651	4,179	Depreciation, property, plant and equipment	10,786	5,609
0	0	Depreciation and amortisation, assets held for sale	2,388	0
6,058	6,416	Total	15,580	8,071

# 9. Financial income

Parent Company			Group	
2008	2009	DKK '000	2009	2008
0	310	Interest from associates	0	0
3,825	771	Interest on bank deposits, etc.	4,101	4,162
2,005	0	Foreign exchange adjustments	2,476	2,005
5,830	1,081	Total	6,577	6,167

#### 10. Financial expenses

Parent C	Company		Group	
2008	2009	DKK '000	2009	2008
2,488	11,500	Interest on mortgages and bank loans	12,347	2,488
149	807	Other interest	807	404
2,637	12,307	Interest expenses	13,154	2,892
2,690	653	Fees, warranties, etc.	653	2,690
0	1,244	Foreign exchange adjustments	1,244	2,670
5,327	14,204	Total	15,051	8,252

# 11. Tax on the profit for the year and deferred tax (Group)

Current tax for the financial year was calculated at a tax rate of 25% for the years 2009 and 2008.

DKK '000	20	09	2008	
Current tax	(23,610)		(15,430)	
Change in deferred tax	(346)		(774)	
Prior year adjustments	(21)		0	
	(23,977)		(16,204)	
Tax on the profit for the year is specified as follows:				
Profit before tax	75,759		62,069	
Tax at a rate of 25%	(18,940)	(25.0%)	(15,517)	(25.0%)
Effect of changed tax rate in foreign companies	(748)	(1.0%)	(75)	(0.1%)
Tax base of non-deductible expenses	(1,297)	(1.7%)	(108)	(0.2%)
Adjustment of deferred tax relating to prior years	0	0.0%	(467)	(0.7%)
Value adjustment in respect of tax asset, etc.	(2,969)	(3.9%)	(37)	(0.1%)
Adjustments relating to previous years	(21)	(0.0%)	0	(0%)
Effective tax rate for the year	(23,977)	(31.6%)	(16,204)	(26.1%)

Deferred tax for the group has been recognised in the balance sheet as follows:	2009	2008
Temporary differences in tax assets and liabilities	(17,453)	(16,973)
Deferred tax relating to assets held for sale	10,875	0
Deferred tax, see balance sheet	(6,578)	(16,973)

DKK '000	Deferred tax 01.01.08	Recognised in income statement 2008	Exchange adjustment 2008	Acquisition/ sale of companies 2008	Deferred tax 31.12.08
Intangible assets	(3,421)	115	414	(3,581)	(6,473)
Property, plant and equipment	1,268	(1,043)	1,447	(12,598)	(10,926)
Inventories	(1,006)	78	129	(1,256)	(2,055)
Inventories	0	86	16	(184)	(82)
Other payables	431	583	(230)	1,779	2,563
Temporary differences	(2,728)	(181)	1,776	(15,840)	(16,973)
Tax loss carry-forwards	467	(467)	0	0	0
Unused tax losses	467	(467)	0	0	0
Total	(2,261)	(648)	1,776	(15,840)	(16,973)

DKK '000	Deferred tax 01.01.09	Recognised in income statement 2009	Exchange adjustment 2009	Acquisition/ sale of companies 2009	Deferred tax 31.12.09
Intangible assets	(6,473)	775	6	0	(5,692)
Property, plant and equipment	(10,926)	(1,923)	(78)	0	(12,927)
Inventories	(2,055)	1,364	48	0	(643)
Trade receivables	(82)	152	7	0	77
Other provisions	2,563	(809)	(22)	0	1,732
Temporary differences	(16,973)	(441)	(39)	0	(17,453)
Tax loss carry-forwards	0	2,969	0	0	2,969
Unutilised tax losses	0	2,969	0	0	2,969
Value adjustments	0	(2,969)	0	0	(2,969)
Total	(16,973)	(441)	(39)	0	(17,453)

The group believes that the tax loss cannot be used within the next few years. Therefore, the tax loss has been recognised as an expense in the profit for the year.

# Tax on the profit for the year and deferred tax (Parent Company)

DKK '000	20	09	20	08
Current tax	(22,430)		(14,898)	
Change in deferred tax	(658)		(1,484)	
Adjustments relating to previous years	(21)		0	
Total	(23,109)		(16,382)	
Tax on the profit for the year is specified as follows:				
Profit before tax	88,220		63,314	
Tax at a rate of 25%	(22,055)	(25.0%)	(15,829)	(25.0%)
Tax base of non-deductible expenses	(1,032)	(1.2%)	(86)	(0.1%)
Prior year adjustments relating to deferred tax	0	0.0%	(467)	(0.8%)
Prior year adjustments	(21)	0.0%	0	0%
Effective tax rate for the year	(23,108)	(26,2%)	(16,382)	(25.9%)

# 11. Tax on the profit for the year and deferred tax (Group), continued

DKK '000	Deferred tax 01.01.08	Recognised in income statement 2008	Deferred tax 31.12.08
Intangible assets	(3,421)	115	(3,306)
Property, plant and equipment	1,268	(1,163)	105
Inventories	(1,006)	(171)	(1,177)
Other payables	431	202	633
Temporary differences	(2,728)	(1,017)	(3,745)
Tax loss carry-forwards	467	(467)	0
Unutilised tax losses	467	(467)	0
Total	(2,261)	(1,484)	(3,745)

DKK '000	Deferred tax 01.01.09	Recognised in income statement 2009	Deferred tax 31.12.09
Intangible assets	(3,306)	332	(2,974)
Property, plant and equipment	105	(1,121)	(1,016)
Inventories	(1,177)	115	(1,062)
Trade receivables	0	0	0
Other payables	633	16	649
Temporary differences	(3,745)	(658)	(4,403)

# 12. Earnings per share

Parent C	Parent Company			Group	
2008	2009	DKK '000	2009	2008	
0.12	0.16	Earnings per share	0.12	0.11	
0.11	0.15	Diluted earnings per share	0.12	0.11	

# Calculations of earnings per share based on the following:

Parent Company		Group		
2008	2009	tkr,	2009	2008
		Return used in the calculation of earnings		
46,932	65,112	per share	50,520	46,044
		Earnings used in the calculation of diluted		
46,932	65,112	earnings per share	50,520	46,044

Parent Company			Gro	oup
2008	2009	thousands	2009	2008
403,011	406,818	Average number of shares issued	406,818	403,011
403,011	406,818	Average number of shares used to calculate earnings per share	406,818	403,011
5,431	28,697	Dilutive effect of outstanding subscription rights	28,697	5,431
408,442	435,515	Average number of shares used to calculate diluted earnings per share	435,515	408,442
		I control of the second of the		

# 13. Intangible assets (Group)

DKK '000	Right of use etc.	Goodwill	Other intangible assets	Completed development projects	Development projects in progress	Total
Cost at 01.01.08	0	0	56	32,151	1,504	33,711
Foreign exchange adjustments	(2,030)	(2,320)	(173)	0	0	(4,523)
Addition on company acquisitions	17,572	20,078	1,513	0	0	39,163
Addition of assets developed in-house	0	0	0	0	1,082	1,082
Transfer	0	0	0	1,948	(1,948)	0
Cost at 31.12.08	15,542	17,758	1,396	34,099	638	69,433
Depreciation and impairment at 01.01.09	0	0	(45)	(19,983)	0	(20,028)
Foreign exchange adjustments	2	0	1	0	0	3
Depreciation	(34)	0	(35)	(2,396)	0	(2,465)
Depreciation, amortisation and impairment 31.12.08	(32)	0	(79)	(22,379)	0	(22,490)
Carrying amount 31.12.08	15,510	17,758	1,317	11,720	638	46,943

DKK '000	Right of use etc.	Goodwill	Other intangible assets	Completed development projects	Development projects in progress	Total
Cost at 01.01.09	15,542	17,758	1,396	34,099	638	69,433
Foreign exchange adjustments	67	72	(209)	210	0	140
Addition of assets developed in-house	0	0	783	0	1,775	2,558
Disposal, assets held for sale	(15,609)	0	0	0	0	(15,609)
Transfers	0	0	(783)	783	0	0
Cost at 31.12.09	0	17,830	1,187	35,092	2,413	56,522
Depreciation and impair- ment at 01.01.09	(32)	0	(79)	(22,379)	0	(22,490)
Foreign exchange adjustments	(306)	0	(22)	1	0	(327)
Depreciation	(180)	0	(85)	(2,435)	0	(2,700)
Disposal, assets held for sale	518	0	0	0	0	518
Depreciation, amorti- sation and impairment	•		(406)	(24.042)		(24.000)
31.12.09	0	0	(186)	(24,813)	0	(24,999)
Carrying amount 31.12.09	0	17,830	1,001	10,279	2,413	31,523

DKK '000	Patents and licences	Completed development projects	Development projects in progress	Total
Cost at 01.01.08	56	32,151	1,504	33,711
Addition of assets developed in-house	0	0	1,082	1,082
Transfer	0	1,948	(1,948)	0
Cost at 31.12.08	56	34,099	638	34,793
Depreciation and impairment at 01.01.08	(45)	(19,983)	0	(20,028)
Depreciation	(11)	(2,396)	0	(2,407)
Depreciation and impairment at 31.12.08	(56)	(22,379)	0	(22,435)
Carrying amount at 31.12.08	0	11,720	638	12,358

DKK '000	Patents and licences	Completed development projects	Development projects in progress	Total
Cost at 01.01.09	56	34,099	638	34,793
Addition of assets developed in-house	0	0	1,775	1,775
Cost at 31.12.09	56	34,099	2,413	36,568
Depreciation and impairment at 01.01.09	(56)	(22,379)	0	(22,435)
Depreciation	0	(2,237)	0	(2,237)
Depreciation and impairment at 31.12.09	(56)	(24,616)	0	(24,672)
Carrying amount at 31.12.09	0	9,483	2,413	11,896

The Board of Directors and Management consider all intangible assets apart from goodwill to have limited economic lives. The group holds a patent, which is capitalised under patents and licences. This patent has a remaining term of 16 years. The main activities in 2009 related to in-house development of processes for production of new variants of silicon crystals.

#### Goodwill

Goodwill has arisen in connection with the acquisition of Cemat Silicon S.A. and its subsidiary. The goodwill is based on the financial benefits achieved by Cemat Silicon S.A. and the parent company Topsil Semiconductor Materials A/S in the form of Cemat's expanded access to wafering and wafer polishing as well as Topsil's opportunity to increase sales to existing and Cemat's customers, based on the employees and know-how taken over. The recoverable value is calculated for the group as a whole, i.e. a cash-generating unit, as it is assessed that due to the increased organisational integration and intra-group trading, it is not possible to calculate individual cash flows for the various legal entities.

The greatest uncertainties in this respect are associated with determining discount factors and growth rates as well as expected changes in selling prices and production costs during the budget and terminal periods. Growth rates are based on analyses prepared by a recognised research institute with industry knowledge. Growth and inflation was not calculated for the terminal period.

The discount factors determined reflect the market valuations of the time value of money expressed by a risk-free interest rate and the specific risks associated with each individual cash-generating unit. The discount factors are determined on a pre-tax basis. Calculations of present values are based on a discount factor of 12.5% (2008: 12.5%) The discount factor is based on a risk-free rate of 3.27%, corresponding to the rate of interest on a 10-year EURO bond (German) and an expected risk premium which relates to the company and to the sector's risk profile.

The estimated changes in selling prices and production costs are based on historical experience as well as expectations as to future market changes.

The calculation of the value in use of the cash-generating units is based on the cash flows included in the most recent management-approved budgets for the coming financial years and the strategy plan.

At the balance sheet date, the present value of the cash-generating unit exceeds the carrying amount, which means that write-down of goodwill is not required.

# 14. Research and development costs

Parent C	Company		Group		
2008	2009	DKK '000	2009	2008	
638	1,774	Research and development costs incurred	1,774	638	
(638)	(1,774)	Development costs recognised as intangible assets	(1,774)	(638)	
0	0	Research and development costs incurred recognised in income statement	0	0	

# 15. Property, plant and equipment (Group)

		Plant and	Other	Plant in	
DKK '000	Property	machinery	equipment	progress	Total
Cost at 01.01.08	0	59,433	6,749	2,910	69,092
Foreign exchange adjustments	(7,708)	(7,515)	(147)	(303)	(15,673)
Addition on company acquisitions	67,023	65,775	1,277	2,622	136,697
Additions	258	740	289	6,770	8,057
Transfers	0	4,141	1,089	(5,230)	0
Cost at 31.12.08	59,573	122,574	9,257	6,769	198,173
Depreciation and impairment at 01.01.08	0	(37,410)	(4,152)	0	(41,562)
Foreign exchange adjustments	33	83	4	0	120
Depreciation	(568)	(3,649)	(1,512)	0	(5,729)
Depreciation and impairment at 31.12.08	(535)	(40,976)	(5,660)	0	(47,171)
Carrying amount at 31.12.08	59,038	81,598	3,597	6,769	151,002
Of which assets held under finance leases	0	0	805	0	805

		Plant and	Other	Plant in	
DKK '000	Property	machinery	equipment	progress	Total
Cost at 01.01.09	59,573	122,574	9,257	6,769	198,173
Foreign exchange adjustments	238	843	5	2	1,088
Additions	855	1,125	458	19,742	22,180
Transfers	0	2,856	6,984	(9,840)	0
Disposals	0	(3,873)	(12)	0	(3,885)
Disposal, assets held for sale	(60,666)	(9,611)	(867)	(660)	(71,804)
Cost at 31.12.09	0	113,914	15,824	16,013	145,751
Depreciation and impairment at 01.01.09	(535)	(40,976)	(5,660)	0	(47,171)
Foreign exchange adjustments	(122)	(215)	(15)	0	(352)
Depreciation	(2,900)	(7,920)	(2,060)	0	(12,880)
Disposals	0	3,265	0	0	3,265
Disposal, assets held for sale	3,557	1,732	156	0	5,445
Depreciation and impairment at 31.12.09	0	(44,114)	(7,579)	0	(51,693)
Carrying amount at 31.12.09	0	69,800	8,245	16,013	94,058
Of which assets held under finance leases	0	0	445	0	445

# 15. Property, plant and equipment (Parent Company), continued

DKK '000	Plant and machinery	Other equipment	Plant in progress	Total
Cost at 01.01.08	59,433	6,749	2,910	69,092
Additions	597	289	6,770	7,656
Transfers	2,022	1,089	(3,111)	0
Cost at 31.12.08	62,052	8,127	6,569	76,748
Depreciation and impairment at 01.01.08	(37,410)	(4,152)	0	(41,562)
Depreciation	(2,208)	(1,443)	0	(3,651)
Disposals	0	0	0	0
Depreciation and impairment at 31.12.08	(39,618)	(5,595)	0	(45,213)
Carrying amount at 31.12.08	22,434	2,532	6,569	31,535

DKK '000	Plant and machinery	Other equipment	Plant in progress	Total
Cost at 01.01.09	62,052	8,127	6,569	76,748
Additions	177	46	14,372	14,595
Transfers	2,856	6,984	(9,840)	0
Disposals	(1,406)	(14)	0	(1,420)
Cost at 31.12.09	63,679	15,143	11,101	89,923
Depreciation and impairment at 01.01.09	(39,618)	(5,595)	0	(45,213)
Depreciation	(2,479)	(1,700)	0	(4,179)
Disposals	1,085	3	0	1,088
Depreciation and impairment at 31.12.09	(41,012)	(7,293)	0	(48,304)
Carrying amount at 31.12.09	22,667	7,851	11,101	41,619

# 16. Investments in subsidiaries

Parent Company

r dicite company				
	2008	2009	DKK '000	
	0	153,725	Cost at 1 January	
	153,725	5,962	Addition on company acquisitions	
	153,725	159,687	Cost at 31 December	

No write-downs of investments in subsidiaries has been made for the financial period.

	Registered office	Ownership 2009 %	Share of voting rights 2009	Activities
				Production and sale of silicon wafers to the semiconductor
Cemat Silicon S.A.	Poland	100.00	100.00	industry

	Registered office	Ownership 2008 %	Share of voting rights 2008	Activities
				Production and sale of silicon wafers to the semiconductor
Cemat Silicon S.A.	Poland	94.23	90.02	industry

#### 17. Other receivables, non-current etc.

Parent Company		Group		
2008	2009	DKK '000	2009	2008
39,636	38,926	Held in escrow accounts as guarantee to supplier	38,926	39,636
14,901	31,615	Prepayment of goods	31,615	14,901
		Prepayments from customers held in escrow		
9,865	7,266	accounts	7,266	9,865
2,250	2,250	Deposit, rent	2,250	2,250
42	42	Other	42	42
66,694	80,099	Total	80,099	66,694

On concluding a supplier contract for delivery of raw materials until 2012, the group agreed to deposit USD 7.5m. This deposit agreement expires on 31 December 2012, whereupon the deposit will be released. Another agreement was concluded with a different supplier for delivery of raw materials in 2009 for the period 2010–2017. Under the agreement, a prepayment of EUR 2.7m was required in 2009.

Prepayments from customers cover an agreement to deliver goods until 2012, in which connection security has been provided for the group in the form of an escrow account until 2012. This escrow account is blocked.

## 18. Inventories

Parent Company			Group	
2008	2009	DKK '000	2009	2008
21,357	35,437	Raw materials and consumables	46,419	38,900
30,804	34,617	Work in progress	51,810	39,634
6,664	894	Manufactured goods and goods for resale	9,742	6,776
58,825	70,948	Total	107,971	85,310

The parent company wrote down inventories by a total DKK 481 thousand in 2009 compared to DKK 85 thousand in 2008, while inventories belonging to the group were written down by DKK 4,954 thousand in 2009, against DKK 711 thousand in 2008.

#### 19. Trade receivables

Parent C	Parent Company			Group	
2008	2009	DKK '000	2009	2008	
46,595	76,247	Trade receivables	94,407	65,372	
46,595	76,247		94,407	65,372	
		Impairment losses included in the above receivables are recognised in "Other external			
0	(384)	expenses"	(384)	(110)	
46,595	75,863	Total	94,023	65,262	

#### Overdue receivables

Parent Company		Group		
2008	2009	DKK '000	2009	2008
8,489	10,751	Overdue by up to 1 month	12,872	12,188
45	241	Overdue by 1 to 3 months	2,154	1,647
410	363	Overdue by more than 3 months	889	1,314
8,944	11,355	Total	15,915	15,149

#### Overdue receivables distributed on receivables not written down

Parent Company		Group		
2008	2009	DKK '000	2009	2008
6,391	1,217	Europe	4,455	8,945
353	787	USA	833	1,500
2,200	9,351	Asia	10,627	4,704
8,944	11,355	Total	15,915	15,149

A provision account is used to reduce the carrying amount of receivables if the amount is found to be impaired based on an individual assessment of each debtor's ability to pay, for example in case of suspension of payment, bankruptcy, etc. Receivables are written down to net realisable value, corresponding to the sum of future net payments expected to be received.

The carrying amount of receivables equals their fair value. Receivables are not interest-bearing until approximately 30–60 days after the invoice date. After this date, interest accrues on the receivables at a monthly rate of 1% of the outstanding amount.

#### Provision account for receivables:

Parent Company		Group		
2008	2009	DKK '000	2009	2008
0	0	Provision account at 01.01.	110	0
0	0	Losses identified for the year	0	0
0	0	Reversed provisions	(110)	0
0	384	Loss provisions for the year	384	110
0	384	Provision account at 31.12.	384	110

#### 20. Other receivables

Parent Company			Group	
2008	2009	DKK '000	2009	2008
9,344	18,483	VAT on exports and prepaid VAT	18,483	9,344
3,953	988	Other	5,979	10,808
13,297	19,471	Total	24,462	20,152

Other receivables are measured at amortised cost, unless otherwise disclosed.

Other receivables are not subject to particular credit risks. In conformity with last year, no impairment losses on such receivables are recognised. None of these receivables are overdue.

#### 21. Cash and cash equivalents, see cash flow statement

Parent Company		Group		
2008	2009	DKK '000	2009	2008
9,404	10,377	Cash holdings and bank deposits	11,840	68,154
0	0	Cash holdings in assets held for sale	61,904	0
0	(14,393)	Current bank debt (overdraft facility)	(14,393)	0
9,404	(4,016)	Total	59,351	68,154

The group's cash and cash equivalents primarily consist of deposits in banks. Therefore, no significant credit risk is deemed to be associated with the cash and cash equivalents.

Bank deposits and bank debts carry floating rates of interest. The carrying amount equals the fair value of the assets. The group has unused bank overdraft facilities totalling DKK 6,101 thousand. DKK 62m (2008: DKK 58m) of the group's free cash flow derived from the company Cemat 70 S.A., in which Topsil Semiconductor Materials A/S exercises control through an ownership interest of 53%.

## 22. Share capital

The share capital consists of 407,960,734 shares each with a nominal value of DKK 0.25. The shares are not divided into classes and no shares have special rights.

Units	2009	2008
Number of shares at 1 January	403,391,670	398,822,609
Capital increase through cash payment	4,569,064	4,569,061
Number of shares at 31 December	407,960,734	403,391,670
DKK '000		
Denomination, nom. value DKK 0.25	100,848	99,706
Capital increase through cash payment	1,142	1,142
Total	101,990	100,848

The capital increase in 2008 and 2009 concerned the exercise of warrants for Management and managerial employees.

#### 23. Other reserves

The translation reserve comprises all foreign exchange adjustments arising on the translation of the financial statements of entities which have a functional currency other than Danish kroner.

The reserve for share-based payment comprises the accumulated value of vested warrant plans (equity-based plans) measured at the fair value of the equity instruments at the grant date and recognised over the vesting period. The reserve will be dissolved as the employees exercise their vested rights to acquire share warrants or the rights expire without being exercised.

# 24. Other credit institutions and bank debt

Parent Company			Group	
2008	2009	DKK '000	2009	2008
127,488	138,593	Debt to credit institutions	152,949	155,869
127,488	138,593		152,949	155,869
		The debt falls due as follows:		
23,321	38,726	Within 1 year	47,654	39,793
20,833	24,334	Between 1 and 2 years from the balance sheet date	29,761	27,554
20,834	24,333	Between 2 and 3 years from the balance sheet date	24,334	26,022
20,833	24,334	Between 3 and 4 years from the balance sheet date	24,333	20,833
20,834	24,333	Between 4 and 5 years from the balance sheet date	24,334	20,834
20,833	2,533	More than 5 years after the balance sheet date	2,533	20,833
127,488	138,593		152,949	155,869
		Other debt to credit institutions and bank debt is recognised in the balance sheet as follows:		
23,321	38,726	Current liabilities	47,654	39,793
104,167	99,867	Non-current liabilities	105,295	116,076
	•		•	
127,488	138,593	Total	152,949	155,869

Debt to credit institutions does not include interest.

Name	Company	Currency	Maturity	Fixed or floating rate	Interest rate % p.a.	Fair value DKK '000
	Cemat-					
Overdraft facility	Poland	PLN	2010	Floating	Wibor+3.9%	3,044
	Cemat-					
Loan	Poland	JPY	2010	Floating	Libor+5.0%	6,384
	Cemat-					
Loan	Poland	JPY	2011	Floating	Libor+5.0%	4,928
					Cibor3+	
Overdraft facility, parent company		DKK	2010	Floating	3.5%/6.5%	14,393
Acquisition loan, parent company		DKK	2015	Floating	3.5%/6.5%	124,200
31.12.2009						152,949

The differentiation of the interest margin on the parent company's acquisition loan is that when the principal is greater than DKK 65m, the loan carries interest at cibor3+6.5% p.a. When the principal has been reduced to less than DKK 65m, the loan carries interest at Cibor3+3.5% p.a. Financial covenants are attached to the loan relating to the group's earnings and solvency ratio.

Name	Company	Currency	Maturity	Fixed or floating rate	Interest rate % p.a.	Fair value DKK '000
	Cemat-					
Overdraft facility	Poland	USD	2009	Floating	Libor+1.4%	9,722
	Cemat-					
Loan	Poland	JPY	2012	Floating	Libor+1.8%	18,659
					Cibor3+	
Acquisition loan, parent company		DKK	2014	Floating	3.5%/6.5%	127,488
31.12.2008						155,869

#### 25. Finance lease liabilities (Group)

	Minimum lease payment, DKK '000		Present value lease payme	
	2009	2008	2009	2008
Finance lease liabilities fall due as follows:				
Within 1 year of the balance sheet date	141	191	141	191
Between 1 and 5 years from the balance sheet date	304	614	304	614
More than 5 years after the balance sheet date	0	0	0	0
At 31.12.	445	805	445	805

The carrying amount equals the fair value of the liabilities. The finance lease liabilities comprise automobiles.

#### 26. Other non-current liabilities

Parent C	ompany		Gro	oup
2008	2009	DKK '000	2009	2008
0	0	Pensions	652	261
0	0	Other liabilities	163	1,584
0	0	Total	815	1,845

#### 27. Trade creditors

Parent C	ompany		Gro	oup
2008	2009	DKK '000	2009	2008
23,332	19,567	Amounts owed to suppliers for goods and services delivered	49,176	31,958
23,332	19,567	Total	49,176	31,958

The carrying amount equals the fair value of the liabilities. Amounts owned to suppliers fall due within 1 year.

#### 28. Provisions

Parent Company		Gro	oup	
2008	2009	DKK '000	2009	2008
232	962	Warranty commitments, 01.01.	962	232
0	(962)	Used during the year	(962)	0
730	4,175	Provisions made during the year	4,175	730
962	4,175	Warranty commitments, 31.12.	4,175	962

During the year, a further provision for warranty commitments was made of DKK 4,175 thousand, corresponding to the production price of a number of customer orders and expected loss on produced wafers.

The orders were for selected silicon wafers not compliant with the specifications. Consequently, new wafers will be delivered in the first half of 2010 free of charge.

#### 29. Other payables

Parent Company		Gro	oup	
2008	2009	tkr,	2009	2008
		Payroll liabilities, tax liabilities, accrued social		
241	1,558	security contributions, etc.	4,926	241
4,555	5,065	Holiday pay liabilities etc.	5,893	4,555
12,537	21,925	VAT and other tax liabilities	21,925	15,105
7,693	9,583	Other accrued expenses	10,728	8,063
25,026	38,131	Total	43,472	27,964

The carrying amount of payables in respect of payroll, income tax, social security contributions, holiday pay, etc., derivative financial instruments, VAT and other taxes, income tax payable and other accrued expenses payable correspond to the fair value of these liabilities.

Holiday pay liabilities, etc. represent the group's obligation to pay wages and salaries during holidays in the next financial year, to which the employees have earned entitlement as at the balance sheet date.

#### 30. Change in net working capital

Parent Company		Gro	oup	
2008	2009	DKK '000	2009	2008
(11,824)	(12,123)	Change in inventories	(22,944)	(10,794)
(21,180)	(48,878)	Change in receivables	(49,684)	(21,359)
(1,693)	9,960	Change in trade creditors and other payables	29,700	(17,194)
0	(23,180)	Change in receivables in subsidiaries	0	0
(34,697)	(74,221)	Total	(42,928)	(49,347)

Changes in net working capital include assets and liabilities held for sale.

#### 31. Assets held for sale

In 2009, the management of Topsil Semiconductor Materials A/S resolved to accelerate the divestment of its ownership interest in Cemat70 S.A., in which the company holds a controlling interest through its wholly owned subsidiary Cemat Silicon S.A.

Cemat70 S.A.'s principal assets are land and buildings which are let on market terms, i.a. to Cemat Silicon S.A. which is the largest single tenant.

Negotiations have been conducted with various prospective buyers of the shareholding. The shareholding is expected to be divested within 12 months. Assets and liabilities relating to this shareholding have been classified as Assets held for sale in the balance sheet at 31 December 2009, see below.

Proceeds from the sale of the shareholding in Cemat 70 S.A. are expected to exceed the carrying amounts of the related assets and liabilities.

DKK '000	2009
Right of use	15,380
Property	57,107
Plant and machinery	7,879
Other fixtures and fittings, tools and equipment	710
Property, plant and equipment under construction	659
Inventories	388
Trade receivables	2,829
Prepayments	546
Cash and cash equivalents	61,904
Assets held for sale	147,402
Debt to credit institutions	473
Deferred tax liabilities	10,875
Trade creditors	1,474
Provisions	105
Liabilities relating to assets held for sale	12,927
Net assets held for sale	134,475

#### 32. Operating lease liabilities

It is parent company policy to lease cars on operating lease contracts. The average lease period is 36 months. All lease contracts follow a fixed instalment profile and none of them contain provisions on conditioned lease payments apart from provisions on index-linking based on public indexes. The lease contracts are non-cancellable during the agreed lease period but can be extended on new terms.

Parent Company			Gro	oup
2008	2009	DKK '000	2009	2008
		Non-cancellable operating leases are specified as follows:		
910	563	0-1 years	563	910
709	416	1-5 years	416	709
0	0	More than 5 years	0	0
1,619	979	Total	979	1,619

An amount of DKK 825 thousand (2008: DKK 882 thousand) relating to operating leases has been recognised in the income statement for 2009.

#### 33. Charges

In security of acquisition loan and increased operating credits with the group's banker, the parent company has provided a charge on the acquired shares in Cemat Silicon S.A. and issued a floating charge of DKK 75,000 thousand. On unsecured claims, inventories and operating equipment, charges of DKK 25,000 thousand have been provided for each of the mentioned categories.

In addition, the group has two mortgage deeds registered to the mortgager, one for DKK 10,000 thousand nominally and one for DKK 5,250 thousand nominally, concerning production plant and chattels, respectively, provided as security for the loan.

Parent c	ompany		Gro	oup
2008	2009	DKK '000	2009	2008
49,501	46,192	Carrying amount of escrow accounts	46,192	49,501

In Cemat Silicon S.A. and Cemat 70 S.A., a charge has been provided on assets with a carrying amount of DKK 47.4m as security for loans and operating credits.

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#### 34. Guarantee commitments and contingent liabilities

The parent company has issued a payment guarantee of PLN 2,550,000 to Raiffeisen Bank, Warsaw, as security for credit facilities in Cemat Silicon S.A.

#### 35. Company acquisition

The group did not acquire any companies in 2009.

During the financial year 2008, the group acquired the following company:

Name	Primary activity	Date of acquisition	Acquirer's ownership interest %	Ownership interest acquired %	Cost DKK '000
Cemat Silicon S.A., Warsaw	Production and sale of silicon crystals and wafers	28.10.2008	94.23	90.02	153,725
					153,725

Furthermore, Cemat Silicon S.A. owns 52.92% of the capital of the real estate company Cemat70 S.A., whose activities include ownership of the buildings from which Cemat Silicon S.A. operates. In addition to Cemat Silicon, Cemat70 S.A. has some 60 tenancies.

	Carrying amount DKK '000	Fair value adjustment DKK '000	Fair value DKK '000
Intangible assets (right of use, land, fixed-term)	0	17,572	17,572
Other intangible assets (customer lists etc.)	237	1,276	1,513
Production plant	53,419	16,252	69,671
Property	16,969	50,054	67,023
Inventories	31,063	46	31,109
Trade receivables	18,851	0	18,851
Deferred tax assets	1,858	0	1,858
Other receivables	5,907	0	5,907
Cash and cash equivalents	77,264	0	77,264
Bank debt	(26,027)	0	(26,027)
Trade creditors	(28,253)	0	(28,253)
Provisions	(4,551)	0	(4,551)
Tax provisions	0	(1,034)	(1,034)
Deferred tax liabilities	(1,512)	(16,188)	(17,700)
Net assets	145,225	67,978	213,203
Minority interests	(51,332)	(28,224)	(79,556)
Equity, Topsil's share	93,893	39,754	133,647
Goodwill on acquisition			20,078
Cost paid in cash			153,725
Acquired cash and cash equivalents, see above			(77,264)
Net cash flow impact			76,461

The cost of Cemat Silicon S.A. was paid in cash. Acquisition costs, including legal fees, audit fees, other specialist fees and other directly attributable purchase costs are included in the cash acquisition cost. The above-mentioned purchase costs amount to DKK 5m.

Fair value adjustment of the right of use and buildings is based on valuation reports and conservative estimates received from an independent valuer.

After recognition at fair value of identifiable assets and liabilities, goodwill amounts to DKK 20.1m. Goodwill represents assets, stated at fair value, which cannot be measured accurately or reliably. These values include the employees in the acquired company, their know-how and access to wafering and wafer polishing. Another contributing factor is the synergies between Cemat Silicon S.A. and the parent company's existing activities.

The group assesses that the synergies from the acquisition will contribute some DKK 25m when their full effect has been achieved after three years. Of the 2008 revenue, DKK 27.7m derived from Cemat Silicon S.A. and the company reported a loss before tax of DKK 1.2m.

If Cemat Silicon S.A. had been owned by the group from 01.01.08, revenue for 2008 would have been DKK 402m and the profit before tax DKK 64m.

#### 36. Other contractual commitments

#### Raw material suppliers

The parent company has concluded a six-year long-term agreement (2007–2012) for the supply of polysilicon (the group's primary raw material) with an approved raw material supplier.

The agreement is a combination agreement with a fixed volume at fixed (but index-linked) prices and a variable volume at market prices. The variable volume may not exceed the fixed volume in any given calendar year. The agreement is therefore limited in terms of volume. Under the long-term agreement, the group is committed to purchasing a minimum volume.

The parent company has furthermore concluded a new long-term agreement to ensure additional supplies of polysilicon for the period 2010–2017. In the opinion of the Board of Directors and Management, the agreement was entered into on an arm's length basis. Under the terms of the agreement, the parent company is required to make a prepayment. The prepayment will be used in payment of raw materials as delivery takes place over the period 2010 to 2017.

The agreements concluded may be terminated in case of a takeover of control of the parent company. In the event of a takeover, the supplier may terminate the agreement. The effect of such termination may jeopardise the continued existence of the group.

#### Customers

To minimise the group's exposure when concluding contracts for the supply of polysilicon in fixed minimum volumes and at fixed (index-linked) prices, the group has concluded contracts on similar terms with its key customers.

More than 30% of the group's budgeted/forecast sales for the period 2009–2012 is covered through customer contracts at fixed (index-linked) prices to several of the group's key customers.

#### Øvrige

A lease for buildings is non-cancellable until 15.09.10 and the liability is DKK 1.1m.

#### 37. Financial risks and financial instruments

The group's and the parent company's financial assets and liabilities can be specified as follows:

Parent company		Gro	oup	
2008	2009	DKK '000	2009	2008
46,595	75,863	Trade receivables	94,023	65,262
0	23,180	Corporate receivables	0	0
13,297	19,471	Other receivables, current	24,462	20,152
51,793	48,484	Other receivables, non-current	48,484	51,793
9,404	10,377	Cash and cash equivalents	11,840	68,154
0	0	Cash holdings in assets held for sale	61,904	0
121,089	177,375	Loans and receivables	240,713	205,361
104,167	99,867	Debt to credit institutions, non-current	105,295	116,076
23,321	38,726	Debt to credit institutions, current	47,654	39,793
0	0	Finance lease liabilities	445	805
23,332	19,567	Trade creditors	49,176	31,959
25,026	38,131	Other payables	43,472	27,964
0	0	Other debt in assets held for sale	2,052	0
175,846	196,291	Financial liabilities measured at amortised cost	248,094	216,596

#### The group's risk management policy

Risk management is an integral part of the day-to-day business management and is subject to continuous review by the Board of Directors and Management. The Board of Directors and Management have assessed that significant risks, other than financial risks, are associated with supplier and customer relations. Due to the nature of its operations and financing, the group is exposed to risks in relation to changes in exchange rates and interest rates. The group manages the financial risks centrally and co-ordinates cash management, capital procurement and investment of surplus cash. Following the acquisition of Cemat Silicon S.A., internal business procedures are being updated. The group has a low risk profile so that currency, interest rate and credit risks arise only in connection with commercial relations. It is the group's policy not to actively speculate in financial risks.

The group manages its financial risks by means of a model for managing its cash forecasting, which covers a period of 1 year.

#### 37. Financial risks and financial instruments, continued

#### **Currency risks**

Currency risk comprises the risk of loss (or the possibility of a gain) as the exchange rates change. Currency risk arises when income and expense items in foreign currency are recognised in the income statement or from value adjustments of balance sheet items denominated in other currencies.

A significant part of the group's sales takes place in USD and EUR. Purchases of raw materials etc. typically also take place in USD and EUR, whereas other expense items are typically purchased in DKK or PLN. The group does not use derivative financial instruments to hedge currency risks relating to current cash flows or balance sheet items. Instead the group uses currency received to settle liabilities denominated in the same currency, thus generally reducing its currency risks.

In addition to balance sheet items denominated in foreign currency deriving from the company's ongoing transactions, the group has provided substantial cash security in USD to uphold the raw materials agreement (2009–2012).A USD/DKK exchange rate fluctuation of +/- DKK 0.50 would subject the group to currency risk of about +/- DKK 4.3m calculated on the basis of items denominated in USD at the balance sheet date. Similarly, a PLN/DKK exchange rate fluctuation of +/- DKK 0.20 would subject the group to currency risk of about +/- DKK 5.3m calculated on the basis of items denominated in PLN at the balance sheet date.

The group's currency risk relating to fluctuations in the EUR/DKK rate is considered to be insignificant.

# Below, the group's unhedged net position as at the balance sheet date is shown: (Group)

	Cash,					
	escrow					
	accounts and		Debt		Of which	Unhedged
	securities	Receivables	liabilities	Net position	hedged	net position
Currency	DKK '000	DKK '000	DKK '000	DKK '000	DKK '000	DKK '000
USD	49,499	20,957	(25,667)	44,789	0	44,789
PLN	61,933	8,450	(22,840)	47,543	0	47,543
EUR	7,928	63,637	(397)	71,168	0	71,168
GBP	0	61	(11)	50	0	50
NOK	0	16	(601)	(585)	0	(585)
JPY	534	5,308	(11,312)	(5,470)	0	(5,470)
DKK	2,292	20,056	(186,609)	(164,261)	0	(164,261)
Other currencies	42	0	(657)	(615)	0	(615)
31.12.2009	122,228	118,485	(248,094)	7,381	0	7,381

Currency	escrow accounts and securities DKK '000	Receivables DKK '000	Debt liabilities DKK '000	Net position DKK '000	Of which hedged DKK '000	Unhedged net position DKK '000
USD	57,361	33,609	(34,976)	55,994	0	55,994
PLN	56,314	13,477	(6,085)	63,706	0	63,706
EUR	16,019	25,299	(7,079)	34,239	0	34,239
GBP	0	756	0	756	0	756
NOK	0	0	(232)	(232)	0	(232)
JPY	0	7	(18,659)	(18,652)	0	(18,652)
DKK	0	1,751	(149,007)	(147,256)	0	(147,256)
Other currencies	42	726	(559)	209	0	209
31.12.2008	129,736	75,625	(216,597)	11,236	0	11,236

	2009	2008
Equity sensitivity to exchange rate fluctuations (DKK '000)		
Impact if the USD exchange rate were DKK 0.50 lower than the actual rate	(4,300)	(5,300)
Impact if the PLN exchange rate were DKK 0.20 lower than the actual rate	(5,300)	(7,100)
Profit sensitivity to exchange rate fluctuations (DKK '000)		
Impact if the USD exchange rate were DKK 0.50 lower than the actual rate	(4,300)	(5,300)
Impact if the PLN exchange rate were DKK 0.20 lower than the actual rate	(5,300)	(7,100)

#### (Parent Company)

Cash,	
escrow	

Currency	accounts and securities DKK '000	Receivables DKK '000	Debt liabilities DKK '000	Net position DKK '000	Of which hedged DKK '000	Unhedged net position DKK '000
Currency						
USD	49,487	14,463	(8,016)	55,934	0	55,934
EUR	7,040	83,654	(397)	90,297	0	90,297
GBP	0	61	(11)	50	0	50
NOK	0	16	(601)	(585)	0	(585)
JPY	0	264	0	264	0	264
DKK	2,292	20,056	(186,609)	(164,261)	0	(164,261)
Other currencies	42	0	(657)	(615)	0	(615)
31.12.2009	58,861	118,514	(196,291)	(18,916)	0	18,916

Cash,

Currency	accounts and securities DKK '000	Receivables DKK '000	Debt liabilities DKK '000	Net position DKK '000	Of which hedged DKK '000	Unhedged net position DKK '000
USD	57,354	24,477	(24,397)	57,434	0	57,434
EUR	15,091	20,893	(1,651)	34,333	0	34,333
GBP	0	755	0	755	0	755
NOK	0	0	(232)	(232)	0	(232)
DKK	0	1,751	(149,007)	(147,256)	0	(147,256)
Other currencies	42	726	(559)	209	0	209
31.12.2008	72,487	48,602	(175,846)	54,757	0	54,757

	2009	2008
Equity sensitivity to exchange rate fluctuations (DKK '000)		
Impact if the USD exchange rate were DKK 0.50 lower than the actual rate	(5,400)	(5,500)
Profit sensitivity to exchange rate fluctuations (DKK '000)		
Impact if the USD exchange rate were DKK 0.50 lower than the actual rate	(5,400)	(5,500)

# Interest rate risks

The parent company's acquisition loan and, as a result, the group's interest rate exposure is mainly attributable to interestbearing debt. A 1% change in the group's effective interest rate would impact the parent company's earnings by some DKK 0.8m p.a.

Interest rate risks (Parent company)	2009	2008
Profit sensitivity to interest rate fluctuations (DKK '000)		
Impact of an effective interest rate of +/- 1%	+/- 800	+/- 500

A 1% change in the group's effective interest rate would impact the group's earnings by some DKK 0.3m p.a.

Interest rate risks (Group)	2009	2008
Profit sensitivity to interest rate fluctuations (DKK '000)		
Impact of an effective interest rate of +/- 1%	+/- 300	+/- 230

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#### 37. Financial risks and financial instruments, continued

#### **Credit risks**

The group's credit risks associated with financial activities correspond to the amounts recognised in the balance sheet. The group assesses the need for insurance on individual debtors on an ongoing basis. The assessment is based on the individual debtor's current and anticipated dealings with the group.

The primary credit risk of the group is associated with trade receivables. The group's cash and cash equivalents and deposits are placed with the group's bankers, and the vast majority with the group's principal banker. No special credit risks are believed to exist in this relation as debtor insurance on selected debtors was taken out in 2009.

#### Capital management

The group reviews the need to adapt its capital structure on an ongoing basis. In connection with the acquisition of Cemat Silicon S.A., Poland, in 2008, the parent company raised an acquisition loan and increased its operating credit. In the Board of Directors' and Management's assessment, the group's future expansion plans can also be funded by means of the existing bank facilities and the commitments obtained in 2009 as well as a capital increase in the course of 2010.

The priority of the free cash flow generated by the group is first to repay interest-bearing debt as it falls due and secondly to use it for product development and shareholder dividends.

Equity as a percentage of the balance sheet total at the end of 2009 was 54.3% (2008: 50.3%) in the parent company. The realised return on equity for 2008 was 36.5%. Despite the considerable increase in non-current liabilities, the Board of Directors and Management still assess the group to be financially strong, which is considered necessary.

It is the group's policy that the shareholders should obtain a return on their investment in the form of a price increase and a dividend that exceeds a risk-free investment in bonds.

#### The group's gearing at the balance sheet date is calculated as follows:

Parent C	ompany		Group		
2008	2009	DKK '000	2009	2008	
127,488	138,593	Credit institutions/bank debt	152,949	155,869	
(9,404)	(10,377)	Cash and cash equivalents	(11,840)	(68,154)	
0	0	Cash holdings in assets held for sale	(61,904)	0	
(51,793)	(48,484)	Other receivables, non-current	(48,484)	(51,793)	
66,291	79,732	Net interest-bearing debt	30,721	35,922	
197,643	262,085	Equity	300,617	249,246	
0.3	0.4	Financial gearing	0.1	0.1	

The acquisition loan raised is subject to covenants relating to the group's future EBITDA and solvency ratio and the investment level in the coming years.

#### Cash flow

The group had a positive cash flow from operations and investments during the financial year. The cash flow from financing had a negative effect on the cash position, causing a cash outflow for the year of DKK 9m. At the balance sheet date, the parent company had a cash outflow of DKK 4m, whereas at group level, there was a free cash flow of DKK 73.7m. DKK 61m of the free cash flow derived from Cemat70 S.A., in which Topsil Semiconductor Materials A/S exercises control through an ownership interest of 53%. Management believes that the cash and the present operating credits make up sufficient capital resources. At the balance sheet date in 2008, the parent company had free cash flows of DKK 9.4m, while at group level, the free cash flow amounted to DKK 68.2m, DKK 58m of which derived from Cemat70 S.A.

#### 38. Fee for auditors appointed by the general meeting

Parent Company		Group		
2008	2009	DKK '000	2009	2008
360	520	Deloitte, audit of annual report	1,045	766
0	3	Deloitte, assurance engagements other than audits	0	0
3,372	1,252	Deloitte, non-audit services	1,740	3,372
3,732	1,775	Total	2,785	4,138

# 39. Related parties

The group has no related parties exercising control.

The group has the following related parties:

- · Cemat Silicon S.A., Poland
- · Cemat70 S.A., Poland
- · Ejendomsaktieselskabet Bangs Gård is owned by the Deputy chairman of the Board of Directors who is also a shareholder
- Frost Invest A/S is owned by a member of the Board of Directors
- CCMA Holding ApS is owned by a member of the Board of Directors

The group had transactions with the following related parties in 2009:

- Ejendomsaktieselskabet Bangs Gård
- · Cemat Silicon S.A.
- · Cemat70 S.A.

The Deputy chairman of the Board of the parent company, Eivind Dam Jensen, is the managing director and member of the board of Ejendomsaktieselskabet Bangs Gård, which owns the parent company's premises in Frederikssund.

# 40. Related party transactions

Parent Company		Group		
2008	2009	DKK '000	2009	2008
1,206	1,438	Rent, Ejendomsaktieselskabet Bangs Gård	1,438	1,206
0	70,904	Subsidiaries, sale of goods	0	0
0	93,389	Subsidiaries, purchase of goods	0	0
0	310	Subsidiaries, interest income	0	0
1,206	166,041	Total	1,438	1,206

Other management remuneration, etc. is stated separately in connection with note 5, staff costs. All transactions with related parties have been carried out on an arm's length basis.

#### Overview of outstanding balances between related parties

Parent Company			Group	
2008	2009	DKK '000	2009	2008
2,250	2,250	Deposit, Ejendomsaktieselskabet Bangs Gård	2,250	2,250
1,076	(393)	Rent, etc., Ejendomsaktieselskabet Bangs Gård	(393)	1,076
0	24,547	Subsidiaries, lending	0	0
0	34,777	Subsidiaries, receivables	0	0
0	(36,144)	Subsidiaries, payables	0	0
3,326	25,037	Total	1,857	3,326

#### 41. Shareholder information

The parent company has registered the following shareholders holding more than 5% of the voting rights or nominal value of the share capital:

Composition of shareholders At 31 December 2009	Number of shares	Capital DKK	Capital %	Votes %
EDJ-Gruppen				
Bangs Gård, Torvet 21				
DK-6701 Esbjerg, Denmark	63,063,311	15,765,827.75	15.63	15.63

#### 42. Board of Directors and Management

The shareholdings of members of the Board of Directors and Management of Topsil Semiconductor Materials A/S in Topsil Semiconductor Materials A/S are set out below:

Aktiebesiddelse nominelt DKK '000

	Hommick Dick 000	
Shares (own and related parties*)	2009	2008
Jens Borelli-Kjær, Chairman	218	218
Eivind Dam Jensen, Deputy chairman (EDJ-Gruppen)	15,766	15,766
Jørgen Frost, Board Member	33	25
Ole Christian Andersen, Board Member	54	54
Trine Schønnemann, Board Member	21	21
Leif Jensen, Board Member	192	159
Keld Lindegaard Andersen, CEO	819	552
Jørgen Bødker, VP Sales, Logistics and Marketing	527	449
Total	17, 630	17,244

<sup>\*</sup> Related parties are defined as close relatives of the members of the Board of Directors and Management and companies in which such members hold managerial functions.

#### 43. Events after the balance sheet date

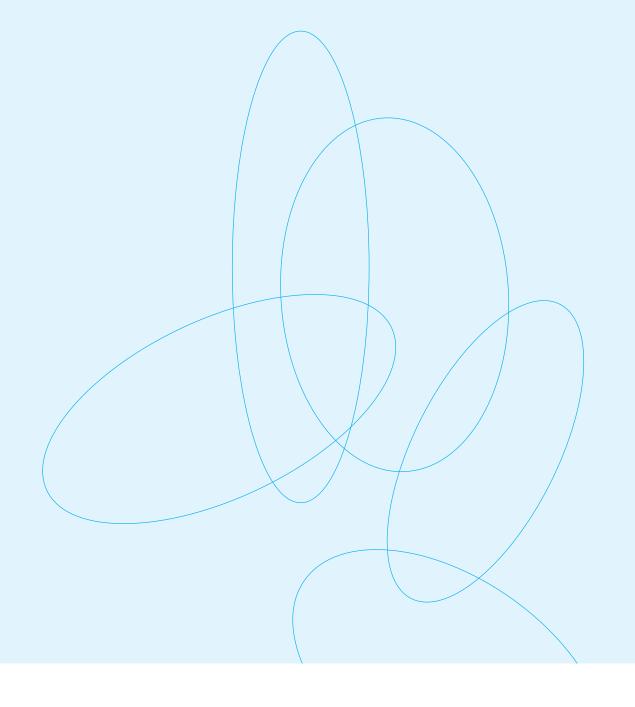
On March 11 2010, Topsil signed a new long-term raw materials agreement for polysilicon for Float Zone (FZ) products with one of the group's two existing suppliers. The new agreement will expire by the end of 2015 and replaces the existing agreement with the supplier for the period from 2007 through 2012.

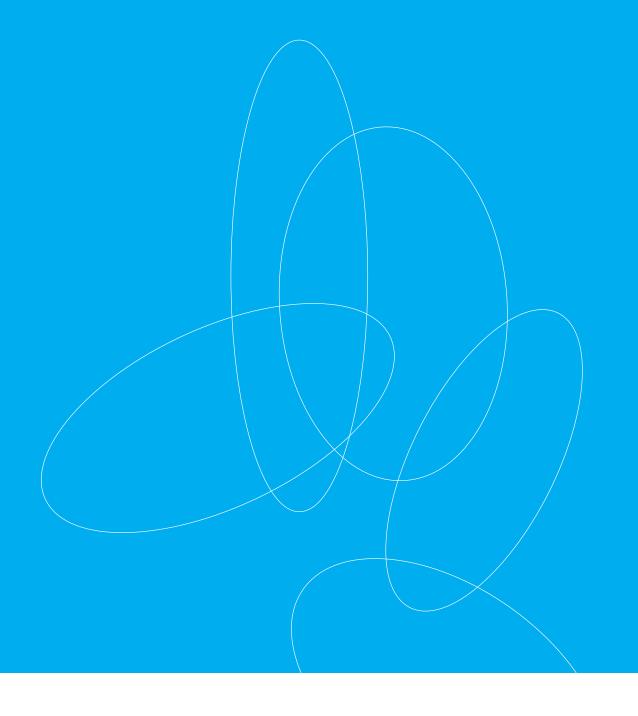
Concurrently, five new long-term customer agreements with the group's largest customers of FZ silicon were signed. Three of the agreements were concluded with customers who had not previously signed long-term agreements, whereas the two other agreements were renewals of existing agreements.

The five new agreements cover deliveries of increasing FZ volumes up to and including 2015. Together with an existing and unchanged customer agreement, which runs until 2012, Topsil's long-term customer agreements cover deliveries of FZ products for up to six years which corresponds to approximately 40% of the group's budgeted revenue for 2010.

## 44. Approval of the annual report for publication

The Board of Directors has approved this annual report for publication at a board meeting held on 25.03.10. The annual report will be presented to the shareholders of the parent company for adoption at the annual general meeting to be held on 28.04.10.





# **GLOSSARY**

AC/AC (Alternating Current/Alternating Current) converter

Converts alternating current into alternating current, e.g. from wind turbine to the power network.

AC/DC (Alternating Current/Direct Current) converter

Converts alternating current into direct current, e.g. for charging of batteries.

**Analogue** Electronic circuit with an infinite number of values

**Bipolar** Semiconductor property with two charge carriers (holes and electrons).

CNC (Computer Numerical Controlled) machines

Automated processing machine.

CZ-EPI (Czochralski-Epitaxi)

Crystal growth technique. Ordinary Czochralski silicon wafers coated with a thin layer of EPI (Epitaxi). The electrical properties can be very precisely controlled in the EPI layer. The silicon layer is the only one used by the electronic

component. The product is used in the consumer electronics segment.

Czochralski (CZ) Crystal growth technique for monocrystalline silicon, which is the most applied production method optimised for low to

medium-power components.

DC/AC (Direct Current/Alternating Current) converter

Converts direct current into alternating current, e.g. from solar cells to the power network.

**Digital** Electrical signal represented by the symbols 0 and 1.

**Diode** Electronic component rectifying alternating current to direct current.

Discrete Electronic component with limited functions, e.g. a thyristor. Manufactured as a separate component, as opposed to

**component** components in integrated circuits.

**Float Zone (FZ)** Crystal growth technique for monocrystalline silicon resulting in pure silicon for use in

 $high \ and \ medium-power \ components. \ More \ precise \ and \ purer \ production \ form \ than \ the \ CZ \ technology.$ 

**FZ-HPS** (Hyper Pure Silicon)

Specific silicon product based on the FZ technology. Primarily used for sensors and detectors.

**FZ-NTD** (Neutron Transmutation Doped)

 $Specific \ silicon\ product\ based\ on\ the\ FZ\ technology.\ Used\ for\ very\ high\ and\ high-power\ components.$ 

**FZ-PFZ** (Premium Float Zone)

 $Specific \ silicon\ product\ based\ on\ the\ FZ\ technology.\ Used\ for\ high\ and\ medium-power\ components.$ 

**HVDC** (High Voltage Direct Current) transmission systems

 $\label{thm:connection} \mbox{ Direct current connection typically applied for cross-border or underwater transmission of power.}$ 

**IGBT** (Insulated Gate Bipolar Transistor)

Electronic component for connecting and disconnecting power.

**Infrared** Long wavelength light/thermal radiation.

Monocrystalline Monocrystalline atoms joined in a symmetrical crystal lattice, e.g. a diamond.

**Polysilicon** Raw material for the production of monocrystalline silicon.

Power market The segment of the overall electronics market which is used for power electronics. E.g. products transmitting, converting

or otherwise controlling power generated by or driving machines.

**Power network** Electricity is transmitted to the 240V socket through the power network.

**Puller** Machine for processing of CZ or FZ silicon.

SEMI Semiconductor Equipment and Materials International – the industry organisation for the semiconductor industry;

ink: www.semi.org.

Semiconductor The element silicon is a semiconductor. Semiconductor materials may be both electrical conductors and electrical isolators,

which is the property that makes the material suitable for electronic components

Silane A gas applied to produce polysilicon in an reactor at Topsil's raw materials supplier. The process involving silane gives the

highest purity (high resistivity).

**Smart Grid** The grid that transmits power from the point of generation to the point of use.

**Smart power** A term covering the ongoing modernisation, efficiency enhancement and rethinking of the energy supply and consumption.

**Thyristor** Electronic component switching on power. The component is associated with low energy loss.

**Trichlorsilane** A gas applied to produce polysilicon in an reactor at Topsil's raw materials supplier. The process involving trichlorsilane is

slightly faster than the silane process but does not result in the same purity (high resistivity).

# TOPSIL IS COMMITTED TO QUALITY IN EVERY ASPECT OF OPERATION

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