



# Higher aluminium prices, more than offset by currency and seasonality

Third quarter presentation

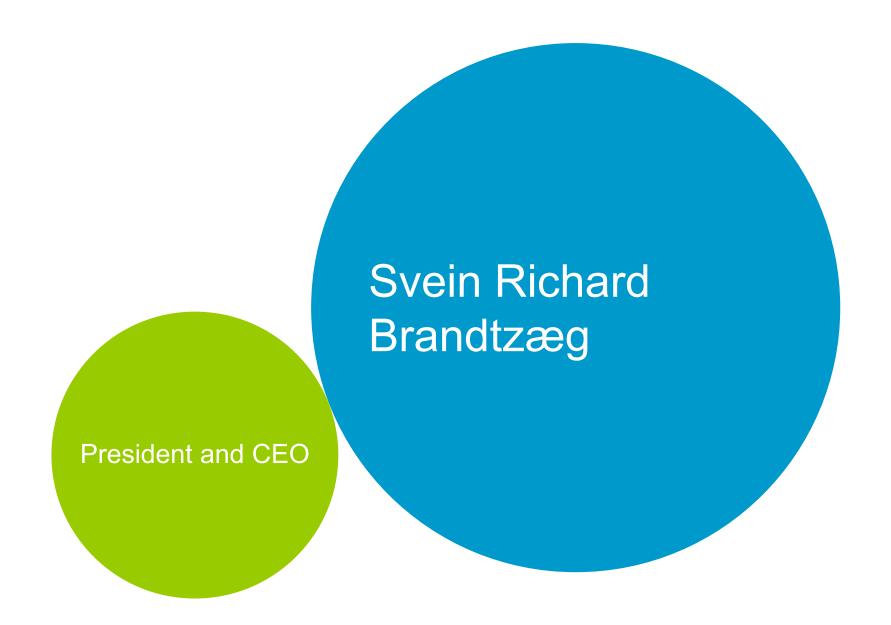
### Cautionary note

Certain statements included in this announcement contain forward-looking information, including, without limitation, information relating to (a) forecasts, projections and estimates, (b) statements of Hydro management concerning plans, objectives and strategies, such as planned expansions, investments, divestments, curtailments or other projects, (c) targeted production volumes and costs, capacities or rates, start-up costs, cost reductions and profit objectives, (d) various expectations about future developments in Hydro's markets, particularly prices, supply and demand and competition, (e) results of operations, (f) margins, (g) growth rates, (h) risk management, and (i) qualified statements such as "expected", "scheduled", "targeted", "proposed", "intended" or similar.

Although we believe that the expectations reflected in such forward-looking statements are reasonable, these forward-looking statements are based on a number of assumptions and forecasts that, by their nature, involve risk and uncertainty. Various factors could cause our actual results to differ materially from those projected in a forward-looking statement or affect the extent to which a particular projection is realized. Factors that could cause these differences include, but are not limited to: our continued ability to reposition and restructure our upstream and downstream businesses; changes in availability and cost of energy and raw materials; global supply and demand for aluminium and aluminium products; world economic growth, including rates of inflation and industrial production; changes in the relative value of currencies and the value of commodity contracts; trends in Hydro's key markets and competition; and legislative, regulatory and political factors.

No assurance can be given that such expectations will prove to have been correct. Hydro disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.









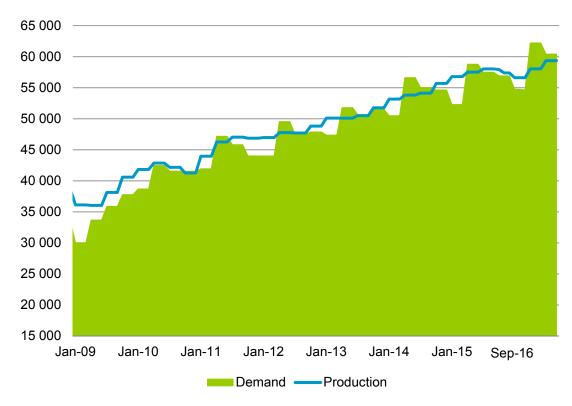
- Underlying EBIT of NOK 1 477 million
- Higher realized aluminium prices, offset by currency developments
- Record-high alumina production of 6.5 million mt annualized
- Seasonally lower metal sales
- Trial production started at new automotive line in Germany
- Better improvement program on track for 2019 target of NOK 2.9 billion
- Global primary aluminium demand growth expected at 4-5 percent in 2016



# Current global undersupply, continued strong demand growth in China

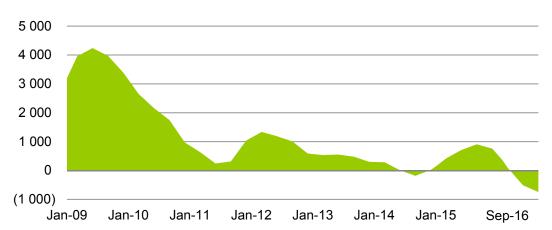
#### Demand and production

Quarterly annualized, in 1 000 mt primary aluminium



#### Production less demand

12 month rolling quarterly average, in 1 000 mt primary aluminium



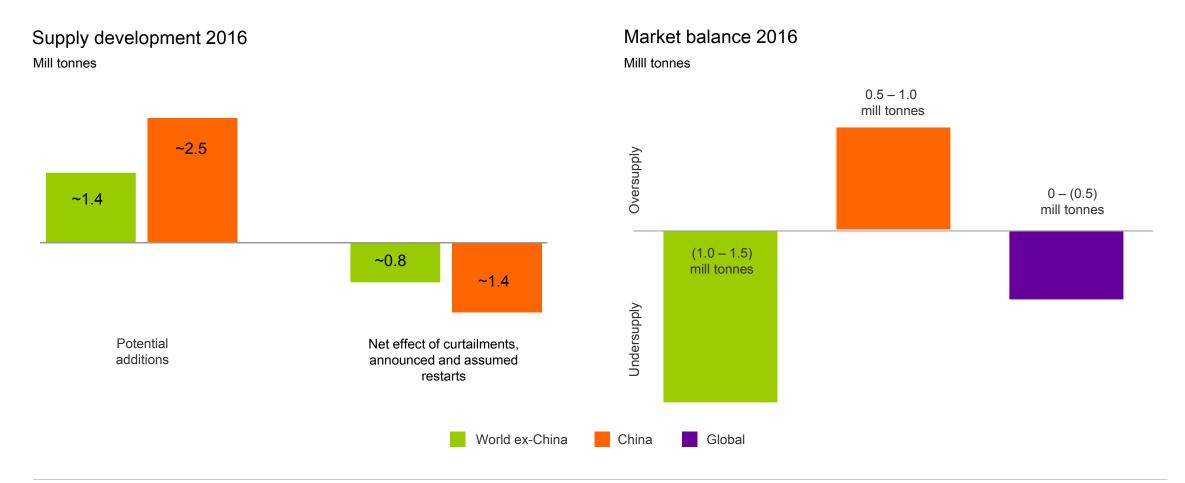
- ~4.7 % demand growth Q3-16 vs Q3-15
  - ~ 6.7 % China
  - ~ 2.5 % Western Europe
  - ~ 1.3 % North America
  - (~ 4.6 %) Central and South America
- Global primary aluminium demand growth expected at 4-5% in 2016

Source: CRU, Hydro analysis



# Primary aluminium market expected to be largely balanced in 2016

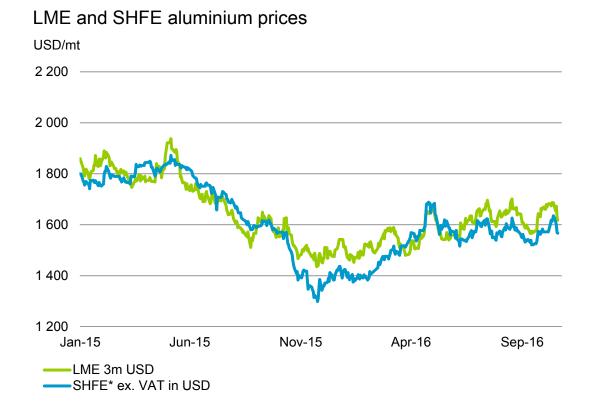
Tighter 2016 global market balance on the back of improved market balance in China

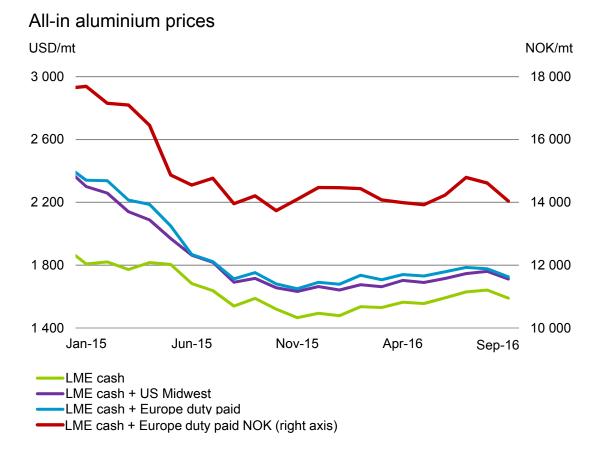


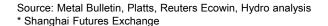
Source: CRU, Hydro analysis



# Slightly increasing average all-in aluminium prices in Q3



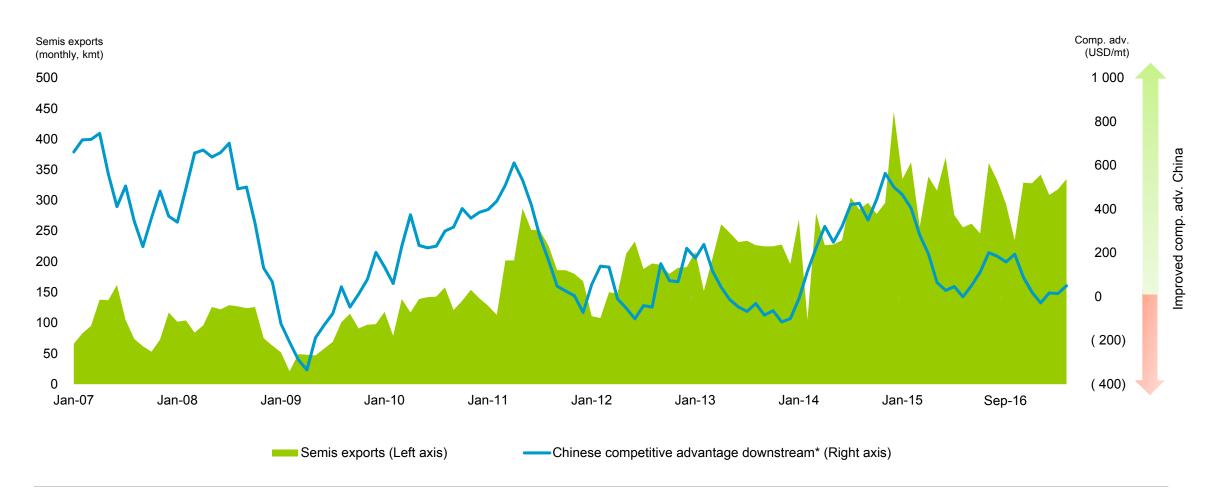






### Stable Chinese export levels YTD 2016 vs YTD 2015

Limited arbitrage opportunity



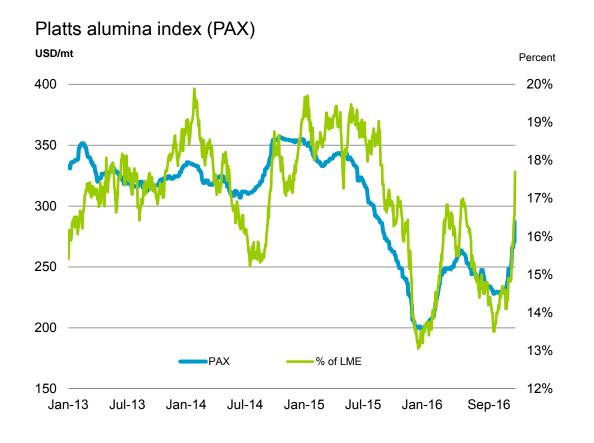
Source: CRU/Ecowin

Europe: LME cash + European duty-paid standard ingot premium China: SHFE cash + avg. local premium + freight – export rebates (~13 %)

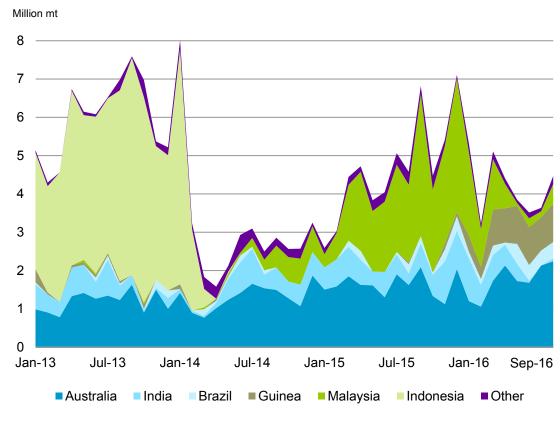


<sup>\*</sup> Est. metal cost China versus Europe

# Alumina prices down in Q3, increasing Chinese bauxite imports from Guinea and Brazil



#### Monthly Chinese bauxite imports

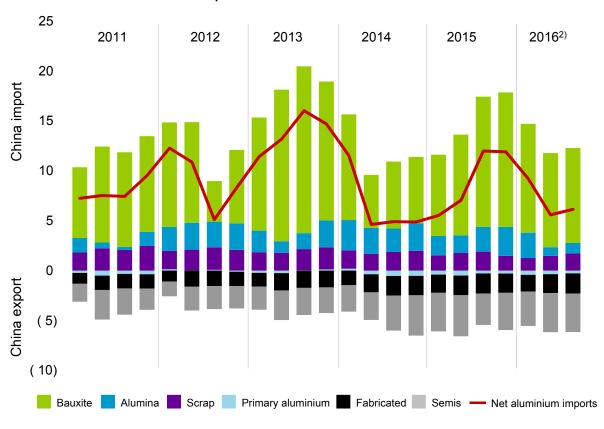


Source: Platts, Ecowin, China Customs



### China Q3 net imports largely stable

#### Annualized aluminium equivalents<sup>1)</sup>, million mt



- Bauxite and alumina
  - Alumina imports slightly up in Q3
  - Increasing volumes from Guinea and Brazil
- Primary aluminium
  - Export at low levels
- Scrap
  - Imports slightly up in Q3
- Semis and fabricated
  - Stable exports in Q3
  - Preliminary export figures indicate September exports at same level as July/August

Source: CRU/Antaike/Hydro analysis



<sup>1)</sup> Bauxite/alumina to aluminium conversion factor: 5.0/1.92

<sup>2)</sup> Quarterly annualized for Q3 based on Jul/Aug data; full Q3 figures not available

# Better program on track for 2019 target

NOK 2.9 billion targeted in 2016-2019, NOK 1.1 billion in 2016

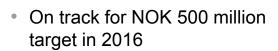


- On track for NOK 400 million target in 2016
- USD 180 JV program on target to be completed by end-2016



- Behind the NOK 200 million target for 2016
- Strong operational improvements, offset by portfolio mix and delayed ramp-up of the UBC recycling line
- Trial production started at new automotive line





- High and stable production at Alunorte and Paragominas
- Logistical optimization
- Raw material efficiency

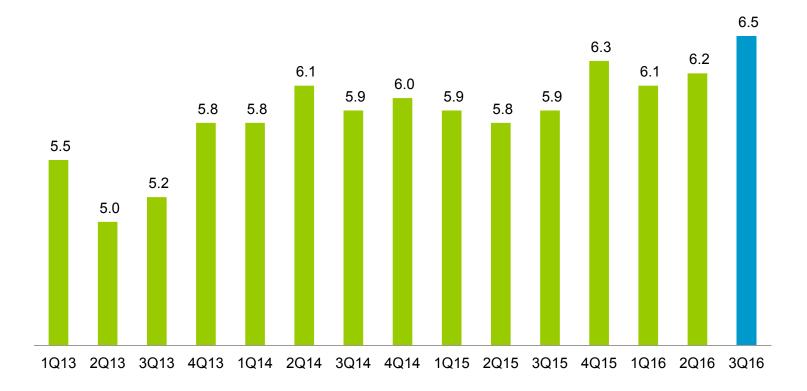






### Record-high Q3 alumina production at Alunorte

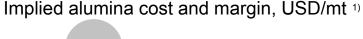
#### Annualized alumina production, million mt

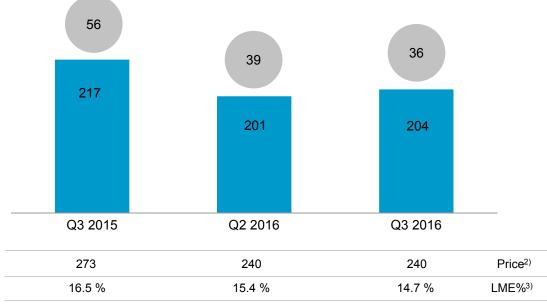


- Record-high annualized production of 6.5 million mt
- Strong improvement trend
- Positive impact from Bauxite & Alumina Business System (BABS)
- Continuous efforts to stabilize production at nameplate capacity of 6.3 million mt annualized production



## Implied alumina cost slightly up in Q3, stable realized alumina prices





1) Realized alumina price minus underlying EBITDA for B&A, per mt alumina sales

EBITDA margin per mt

2) Realized alumina price

Implied EBITDA cost per mt

3) Realized alumina price as % of three-month LME price with one month lag

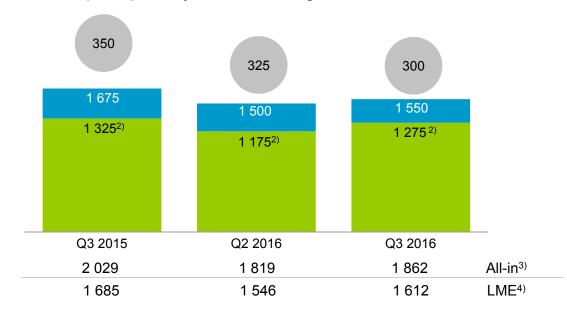
#### **Developments Q3 vs Q2**

- USD 3 per mt increased implied alumina cost
- Stable realized alumina prices
- Increased production at Alunorte and Paragominas
- Improved raw material efficiency at Alunorte
- Increased alumina sourcing costs
- Negative currency effects



### Increased implied primary cost, higher realized prices

#### All-in implied primary cost and margin, USD/mt 1)



- All-in Implied EBITDA cost per mt
- LME Implied EBITDA cost per mt
- All-in EBITDA margin per mt

#### **Developments Q3 vs Q2**

- USD ~50 per mt increased implied primary cost
- Higher all-in prices
- Higher raw material costs, lower fixed costs
- Lower sales volumes
- Negative currency effects
- Positive non-operational effects at Ardal and Albras in Q2



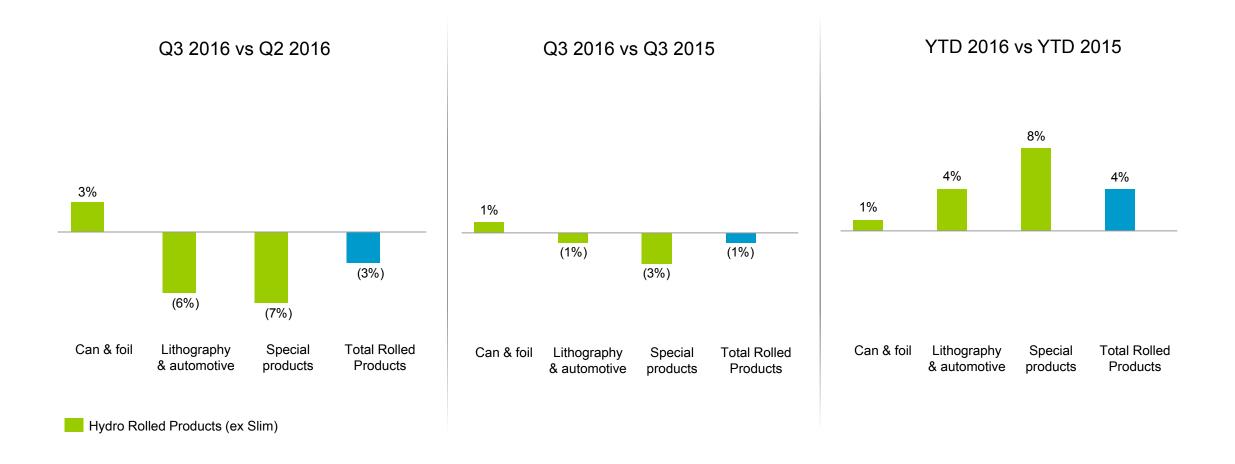
<sup>1)</sup> Realized all-in aluminium price minus underlying EBITDA margin, including Qatalum, per mt aluminium sold

<sup>2)</sup> Realized LME aluminium price minus underlying EBITDA margin, including Qatalum, per mt primary aluminium produced

<sup>3)</sup> Realized LME plus realized premiums, including Qatalum

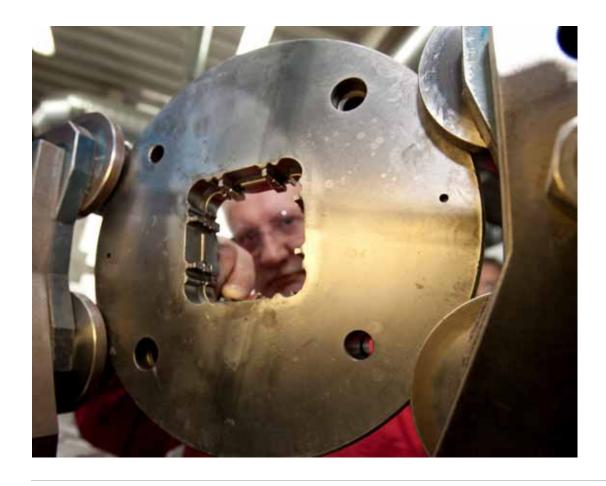
<sup>4)</sup> Realized LME, including Qatalum

### Seasonally weaker Q3, but overall healthy demand in Rolled Products





### Seasonally weaker demand for extruded products

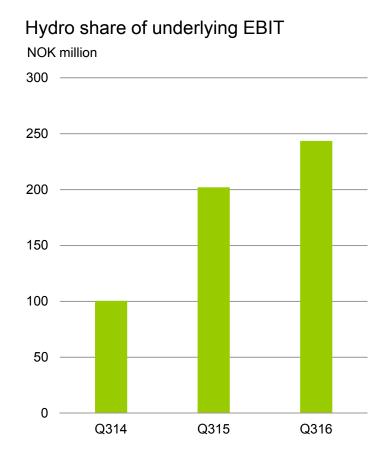


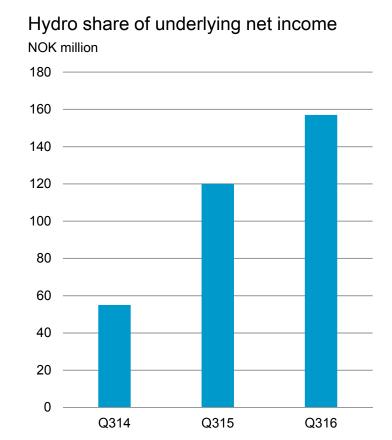
- Seasonally weaker demand in Q3
  - ~4.6% decrease in North America
  - ~5.8% decrease in Europe
- Demand increased from same quarter last year
  - ~0.7% in North America due to increased building activity and automotive demand, but slowing demand from the transportation segment
  - ~2.1% in Europe due to positive developments in automotive and transportation, but a mixed picture in building and construction
- Outlook
  - Continued moderate market growth in Europe, driven by automotive and transportation
  - Continued demand growth in North America, but signs of flattening out in certain market segments
  - Seasonally lower demand in Q4

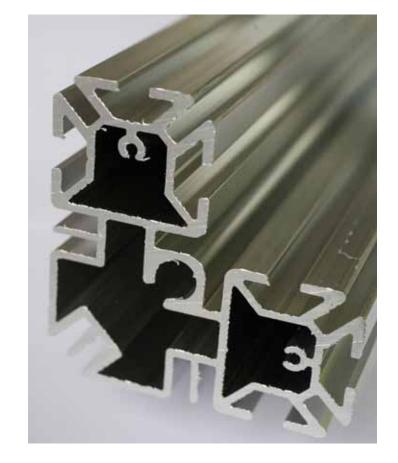




# Earnings continue to improve in Sapa



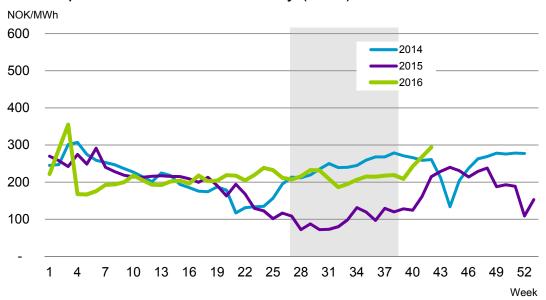






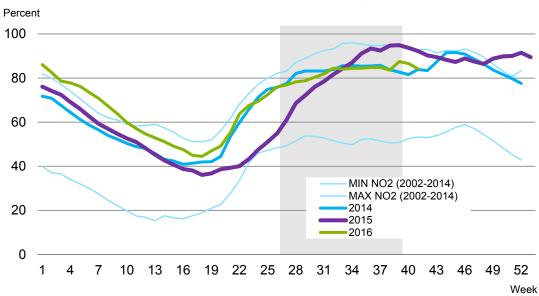
### Energy: Stable prices, lower inflow towards end of the quarter

#### Market price Southwestern Norway (NO2)



Energy price NOK/MWh	Q3 2016	Q2 2016
Southwestern Norway (NO2)	212	213
System	235	223

#### Water reservoir levels Southwestern Norway (NO2)



Reservoir levels	Sep 30, 2016	Jun 30, 2016
Southwestern Norway (NO2)	87.5%	72.5%
Norway	86.1%	66.1%



<sup>\*</sup>Graphs updated per week 41

### Karmøy Technology Pilot advancing toward 2017 start-up

~40% completed by end-Q3



- On track for first metal second half 2017
- Capex 2015/YTD 2016 of NOK 1.6 bn
  - Of which Enova support NOK 0.4 bn
- Net capex BNOK 2.7:
  - Total capex BNOK 4.3
  - Enova support BNOK 1.6

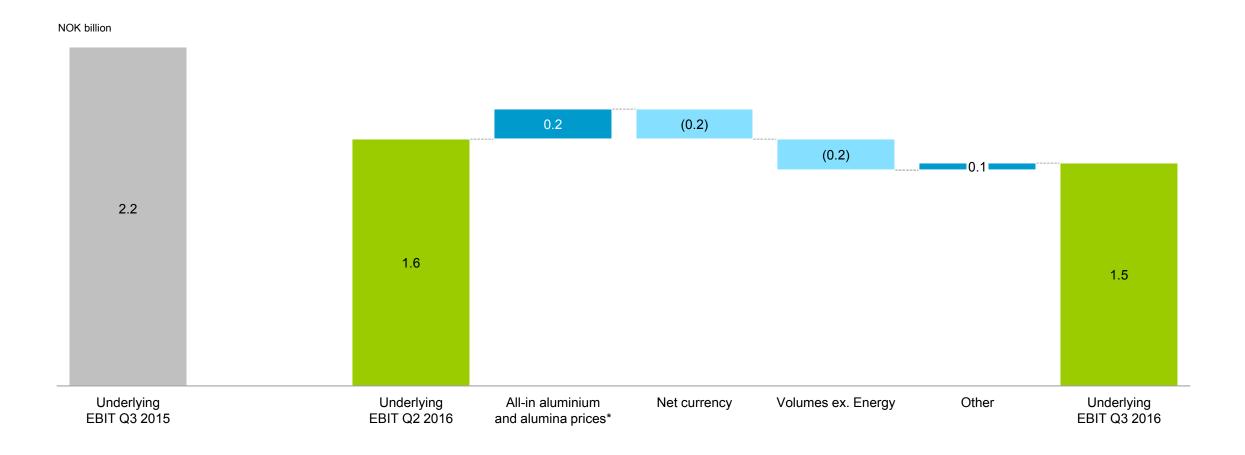








# Higher aluminium prices more than offset by currency and seasonality



<sup>\*</sup> Price revenue effects



# Key financials

### Underlying EPS down to 0.46 NOK/share

NOK million	Q3 2016	Q2 2016	Q3 2015	First 9 months 2016	First 9 months 2015
Revenue	20 174	20 391	21 594	60 703	67 320
Underlying EBIT	1 477	1 618	2 215	4 596	8 090
Items excluded from underlying EBIT	(101)	360	(586)	451	(557)
Reported EBIT	1 376	1 978	1 630	5 047	7 533
Financial income (expense)	317	948	(3 341)	2 266	(4 763)
Income (loss) before tax	1 693	2 926	(1 711)	7 313	2 770
Income taxes	(574)	(849)	367	(1 736)	(979)
Net income (loss)	1 119	2 077	(1 345)	5 578	1 791
Underlying net income (loss)	958	1 126	1 377	2 906	5 413
Reported EPS, NOK	0.53	0.95	(0.65)	2.61	0.76
Underlying EPS, NOK	0.46	0.52	0.61	1.37	2.39



# Items excluded from underlying EBIT

Excluded MNOK 101 in timing and other material effects

NOK million	Q3 2016	Q2 2016	Q3 2015	First 9 months 2016	First 9 months 2015
Underlying EBIT	1 477	1 618	2 215	4 596	8 090
Unrealized derivative effects on LME related contracts	32	146	(249)	314	(420)
Unrealized effects on power and raw material contracts	68	(114)	73	41	386
Metal effect, Rolled Products	48	17	(344)	23	(282)
Significant rationalization charges and closure costs	(124)	(67)	-	(192)	-
Impairment charges	(140)	-	-	(140)	-
Gains (losses) on divestments	-	329	-	314	-
Other effects	-	-	-	-	37
Items excluded in equity accounted investment (Sapa)	15	49	(65)	90	(278)
Reported EBIT	1 376	1 978	1 630	5 047	7 533

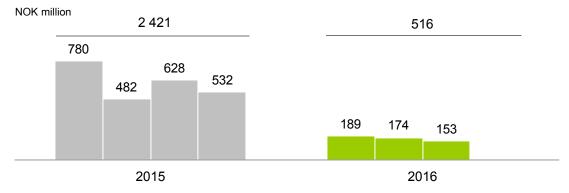


### **Bauxite & Alumina**

### Higher production and cost improvements more than offset by currency

Key figures	Q3 2016	Q2 2016	Q3 2015
Alumina production, kmt	1 635	1 554	1 498
Total alumina sales, kmt	2 221	2 078	2 268
Realized alumina price, USD/mt	240	240	273
Implied alumina cost, USD/mt	204	201	217
Bauxite production, kmt	2 777	2 609	2 735
Underlying EBITDA, NOK million	664	659	1 048
Underlying EBIT, NOK million	153	174	628

#### **Underlying EBIT**





#### Q3 results

- All-time high alumina production above nameplate capacity
- Higher bauxite production following planned maintenance
- Stable alumina sales price, but higher sourcing cost
- Improved raw material efficiency at Alunorte
- Negative currency development

- High production level and further cost improvements
- Lower net index exposure

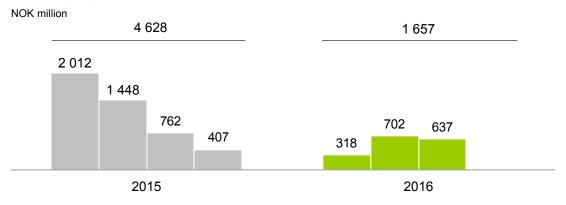


### **Primary Metal**

Higher all-in prices offset by higher costs, currency, and seasonally lower sales

Key figures	Q3 2016	Q2 2016	Q3 2015
Primary aluminium production, kmt	526	518	520
Total sales, kmt	573	596	550
Realized LME price, USD/mt	1 612	1 546	1 685
Realized LME price, NOK/mt	13 375	12 826	13 779
Realized premium, USD/mt	251	270	342
Implied all-in primary cost, USD/mt *	1 550	1 500	1 675
Underlying EBITDA, NOK million	1 125	1 186	1 245
Underlying EBIT, NOK million	637	702	762

#### **Underlying EBIT**





#### Q3 results

- · Higher realized all-in prices
- · Lower fixed costs, higher raw material costs
- Seasonally lower sales volumes
- Negative net currency effect
- Positive non-operational effects of MNOK~125 in Q2

- ~ 50% of primary production for Q4 priced at USD ~1 600 per mt, ex-Qatalum
- ~ 55% of premiums affecting Q4 booked at USD ~315 per mt, ex-Qatalum
  - Q4 realized premium expected in the range of 225-275 USD/mt
- Seasonally lower sales volumes
- Higher fixed costs



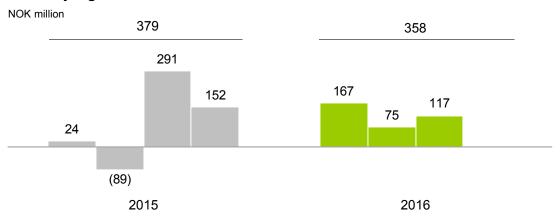
<sup>\*</sup> Realized all-in aluminium price minus underlying EBITDA margin, including Qatalum, per mt aluminium sold.

### **Metal Markets**

### Seasonality offset by positive contribution from metal sourcing and trading

Key figures	Q3 2016	Q2 2016	Q3 2015
Remelt production, kmt	125	146	117
Metal products sales, kmt 1)	720	777	676
Underlying EBITDA, NOK million	141	98	317
Underlying EBIT excl currency and inventory valuation effects, NOK million	116	113	189
Underlying EBIT, NOK million	117	75	291

#### **Underlying EBIT**





#### Q3 results

- Seasonally lower metal products and remelt sales
- · Positive contribution from metal sourcing and trading
- Minor positive currency and inventory valuation effects vs MNOK 38 negative in Q2

- Seasonally lower metal product sales
- Volatile trading and currency effects



<sup>1)</sup> Includes external and internal sales from primary casthouse operations, remelters and third-party metal sources.

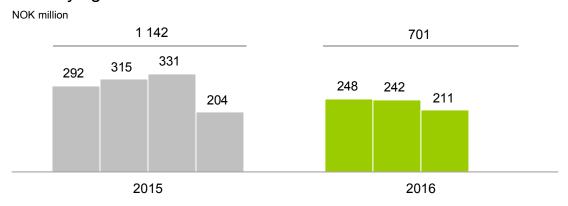
### **Rolled Products**

### Results down on seasonally lower shipments and reduced margins

Key figures	Q3 2016	Q2 2016	Q3 2015
External sales volumes, kmt	231	238	248
Underlying EBITDA, NOK million	407	432	517
Underlying EBIT, NOK million	211	242	331



#### **Underlying EBIT**



#### Q3 results

- Seasonally lower shipments
- Reduced average margin
- Neuss positively affected by higher all-in metal price

- · Seasonally weaker demand
- Higher costs due to seasonal maintenance activity
- Higher depreciation due to new automotive line 3 start-up
- · Neuss results driven by all-in metal and raw material price development



### Energy

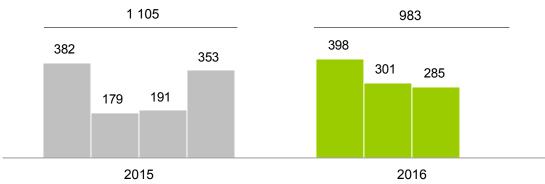
### Increased area and production costs partly offset by higher volumes

Key figures	Q3 2016	Q2 2016	Q3 2015
Power production, GWh	2 946	2 674	2 839
Net spot sales, GWh	1 699	1 393	1 363
Southwest Norway spot price (NO2), NOK/MWh	212	213	102
Underlying EBITDA, NOK million	336	352	241
Underlying EBIT, NOK million	285	301	191



#### **Underlying EBIT**





#### Q3 results

- Strong production level
- Stable power prices
- Higher area cost
- Higher property taxes\*

#### Outlook

Price and volume uncertainty



<sup>\*</sup> From 2015 property tax is charged to the period it becomes an unconditional payment obligation (in Norway when invoiced). This leads to periodic variations within the year without affecting the annual property tax level. The variation is around MNOK 45 per guarter with higher taxes in Q1 and Q3 and lower taxes in Q2 and Q4.

# Sapa JV

### Results down on seasonally weaker demand



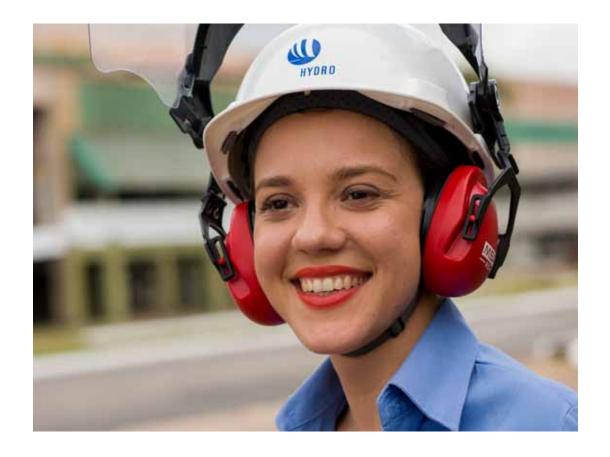
Key figures – Sapa (50%)	Q3 2016	Q2 2016	Q3 2015
Revenue, NOK million*	6 570	7 036	6 948
Underlying EBITDA, NOK million	406	566	367
Underlying EBIT, NOK million	244	402	202
Underlying Net income (loss), NOK million	157	270	120
Sales volumes (kmt)	170	183	171

- Quarter-on-quarter results down mainly on seasonally weaker demand
- Year-on-year results affected by:
  - Higher value-add margins
  - Continuous improvement efforts
  - Slightly reduced sales volumes, mainly in the US



<sup>\*</sup> Historical revenues have been reclassified

### Other and Eliminations

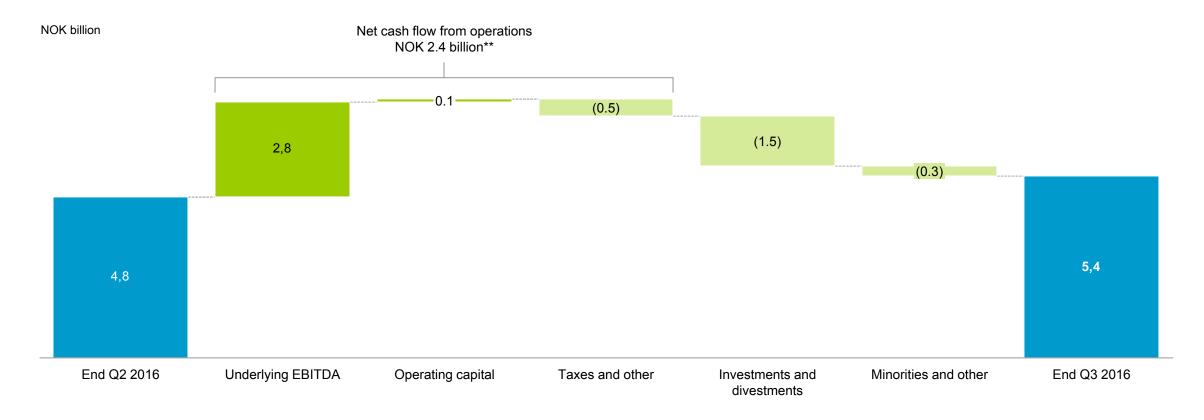


Other and Eliminations, Underlying EBIT, NOK million	Q3 2016	Q2 2016	Q3 2015
Sapa JV	157	270	120
Other	(66)	(100)	(95)
Eliminations	(17)	(45)	(13)
Other and Eliminations	75	125	12



### Net cash development Q3 2016

Increase in net cash position driven by cash flow from operations





<sup>\*\*</sup> Net cash provided by operating activities, less change in restricted deposits of ~(0.1) BNOK

# Adjusted net debt decreased further in Q3 2016

### Mainly due to higher net cash position

NOK billion	Sep 30 2016	Jun 30 2016	Mar 31 2016
Cash and cash equivalents Short-term investments Short-term debt Long-term debt	8.0 4.4 (3.6) (3.4)	9.2 2.6 (3.6) (3.5)	5.9 5.5 (3.8) (3.7)
Net cash/(debt)	5.4	4.8	3.9
Net pension liability at fair value, net of expected tax benefit Other adjustments <sup>1)</sup>	(8.6) (4.9)	(8.7) (4.8)	(8.4) (4.7)
Adjusted net debt ex. EAI	(8.1)	(8.8)	(9.2)
Net debt in EAI <sup>2)</sup>	(6.1)	(7.2)	(7.6)
Adjusted net debt incl. EAI	(14.2)	(15.9)	(16.8)

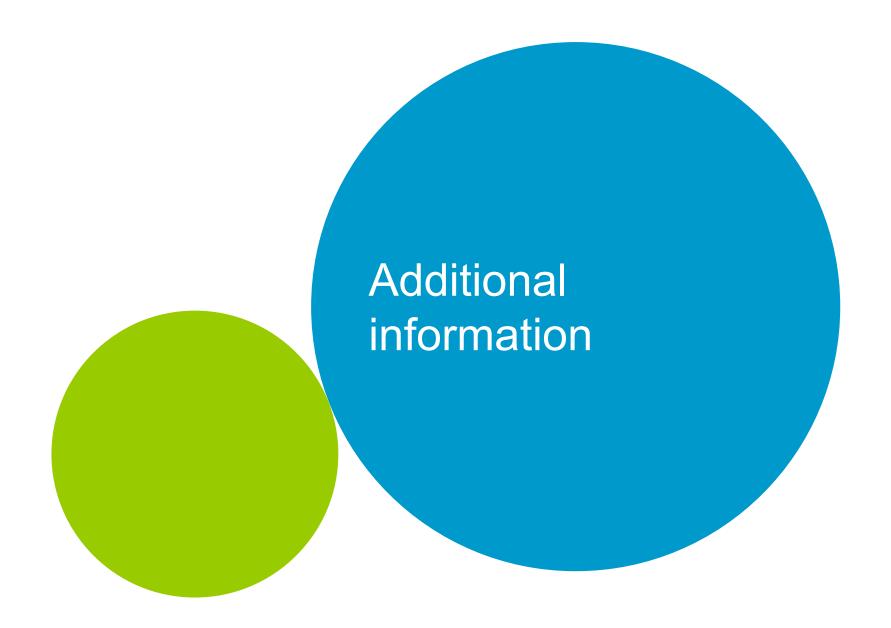




<sup>1)</sup> Operating lease commitments and other obligations

<sup>2)</sup> Equity accounted investments Qatalum and Sapa. Hydro share (50%) of net debt in Qatalum 5.9 BNOK, and in Sapa 0.3 BNOK at the end of Q3 2016







### Prudent financial framework

Strong balance sheet and reliable dividend in cyclical industry

Lifting cash flow potential

Improving efficiency, strengthening margins with operational and commercial excellence

Improvement efforts

- 4.5 BNOK 2011-2015 <sup>1)</sup>
- 2.9 BNOK 2016-2019 <sup>2)</sup>

Managing working capital

Financial strength and flexibility

Investment grade credit rating

> BBB Stable

Financial ratio targets over the cycle

- FFO/aND <sup>3)</sup> > 40%
- aND/E <sup>4)</sup> < 55%</li>

Strong liquidity

Disciplined capital allocation

Long-term sustaining capex below depreciation

• 3.5-4.0 BNOK per year

Total capex incl. growth

- 2015 BNOK 5.8
- 2016 BNOK 8.1<sup>5)</sup>
- Average 2016-2018 BNOK 6.1<sup>5)</sup>

Attractive organic growth prospects for the future

M&A optionality

Reliable shareholder remuneration policy

Sector competitive TSR

Dividend policy since 2014

- Dividend 1 NOK/share
- 40% payout ratio of Net Income over the cycle

Special dividends and share buybacks in the toolbox

Effective risk management

Volatility mitigated by strong balance sheet and relative positioning

Hedging policy

- Operational LME and currency hedging
- Limited financial hedging
- Long-term debt in USD

Diversified business



<sup>1)</sup> USD 300 program from 2009

<sup>2)</sup> Real 2015 terms

<sup>3)</sup> Funds from operations / adjusted net debt

<sup>4)</sup> Adjusted net debt / Equity

<sup>5)</sup> With Karmøy Technology Pilot net investment, after Enova support

# Hydro's aspiration underpinned by firm financial targets

Medium and long-term

	Ambition	Timeframe	Actual 2015
Improvement programs	2.9 BNOK	2016-2019	<b>4.5 BNOK</b> 2009 - 2015
Sustaining capex	3.5 - 4.0 BNOK	Over the cycle	4.6 BNOK 2015
Average capex incl. growth	6.1 BNOK <sup>1)</sup>	2016-2018	5.8 BNOK 2015
Dividend payout ratio	40% of net income	Over the cycle	~110% <sup>2)</sup> 2011-2015
FFO/adjusted net debt 3)	> 40%	Over the cycle	89% 2015
Adjusted net debt/equity	< 55%	Over the cycle	<b>20</b> % 2015
RoACE	Competitive 4)	Over the cycle	9.1% <sup>5)</sup> 2015





<sup>1)</sup> With Karmøy Technology Pilot net investment, after ENOVA support

<sup>2)</sup> Dividend paid divided by net income from continuing operations attributable to equity holders

<sup>3)</sup> FFO - funds from operations

<sup>4)-</sup>Measured against a relevant peer group

<sup>5)</sup> Underlying return on average capital employed (RoACE)

# Shareholder and financial policy

- Hydro aims to give its shareholders competitive returns compared to alternative investments in peers
- Maintained dividend policy
  - Ordinary dividend: 40% of net income over the cycle
  - Five-year average ordinary pay-out ratio 2011-2015 of ~110%
  - Committed to a stable and reliable dividend level: currently 1 NOK/share since 2014
  - Share buybacks and extraordinary dividends as supplement in periods with strong financials and outlook
- Maintain investment-grade rating
  - At least BBB Stable
  - Currently: BBB stable (S&P) & Baa2 stable (Moody's)
  - Competitive access to capital and important for Hydro's business model (counterparty risk and partnerships)
- Financial ratios over the business cycle
  - Funds from operations to adjusted net debt > 40%
  - Adjusted net debt to equity < 55%</li>
- Strong liquidity:
  - NOK 8.0 billion in cash and cash equivalents, end-Q3 2016
  - USD 1.7 billion in multi-currency revolving credit facility maturing in 2020, currently undrawn

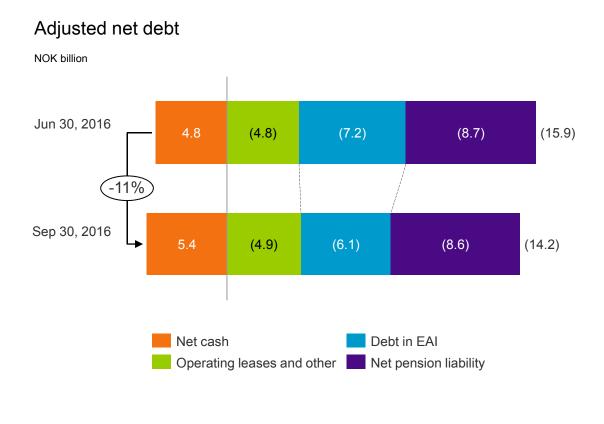
# Hedging policy

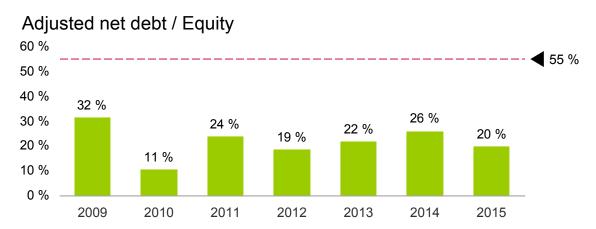
- Hedging strategy:
  - Fluctuating with the market: primarily exposed to LME and USD
  - Volatility mitigated by strong balance sheet
  - Improving relative position to ensure competitiveness
- Diversified business:
  - Upstream cyclicality balanced with more stable earnings downstream
  - Exposed to different markets and cycles
- Bauxite & Alumina
  - Currency exposure, mainly USD and BRL
  - Exposed to LME and Platts alumina index prices
- Primary Metal
  - Operational LME hedging one-month forward sales
  - Currency exposure, mainly USD, NOK and BRL
- Metal Markets. Rolled Products
  - Operational LME and currency hedging to secure margin
- Flexibility to hedge LME or currency in certain cases
- Maintaining long-term debt in the revenue currency (USD)

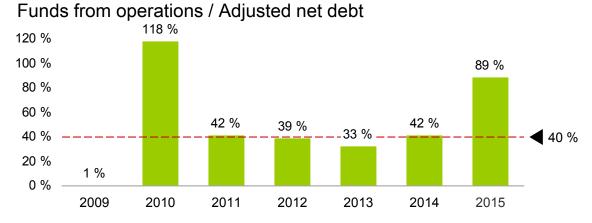


# Maintaining a solid balance sheet and investment-grade credit rating

Funds from operations determine the balance sheet structure



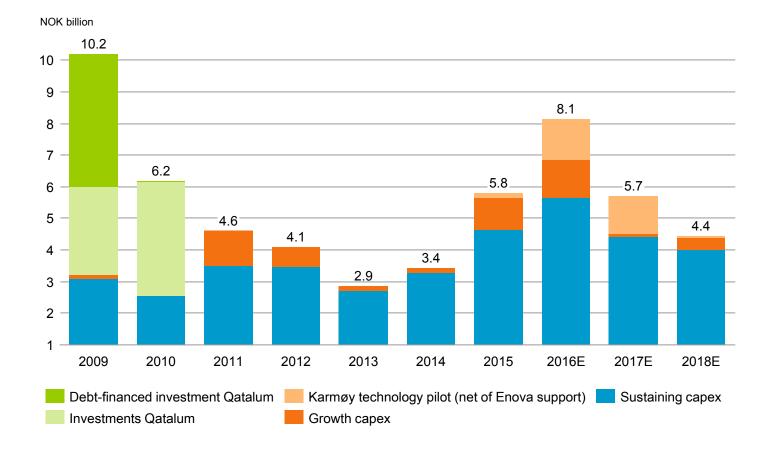






# Majority of sustaining capex allocated upstream

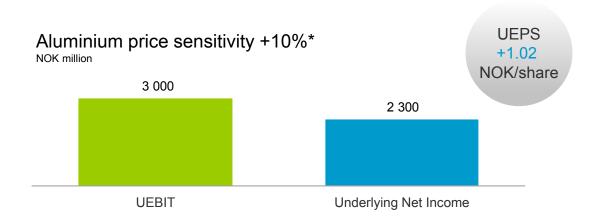
High-grading and technology growth investments



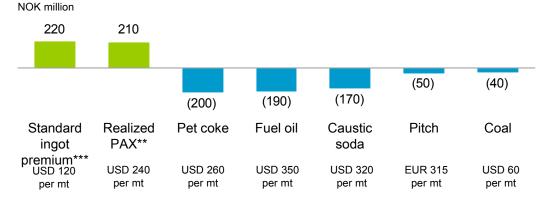
- Long-term annual sustaining capex BNOK 3.5-4.0
- Sustaining projects for 2014-2016:
  - Red mud disposal area
  - Bauxite tailing dam
  - Smelter relining
  - Energy rehabilitation
- Ongoing organic growth projects:
  - RP Automotive line
  - RP UBC recycling line
  - Clervaux recycling upgrade
  - Alunorf debottlenecking
  - Energy projects
  - AFM technology
- WMR technology acquisition in 2015
- Karmøy technology pilot 2015-2018:
  - Gross investment 4.3 BNOK
  - Of which Enova support ~1.6 BNOK
  - Net investment 2.7 BNOK



# Significant exposure to commodity and currency fluctuations



### Other commodity prices, sensitivity +10%\*



#### Currency sensitivities +10%\*

#### Sustainable effect:

NOK million	USD	BRL	EUR
UEBIT	2 680	(1 050)	(260)

#### One-off reevaluation effect:

Financial items (590) 510 (2 560)
-----------------------------------

- Annual sensitivities based on normal annual business volumes, LME USD 1 625 per mt, fuel oil USD 350 per mt, petroleum coke USD 260 per mt, caustic soda USD 320 per mt, coal USD 60 per mt, USD/NOK 8.30. BRL/NOK 2.60. EUR/NOK 9.30
- Aluminium price sensitivity is net of aluminium price indexed costs and excluding unrealized effects related to operational hedging
- BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated
- Excludes effects of priced contracts in currencies different from underlying currency exposure (transaction exposure)
- Currency sensitivity on financial items includes effects from intercompany positions
- 2016 Platts alumina index (PAX) exposure used



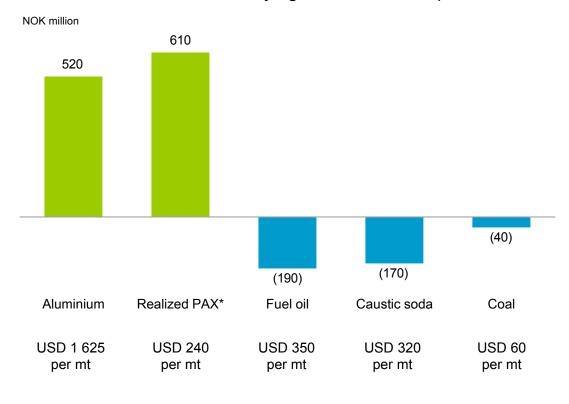
<sup>\*</sup> Excluding Sapa JV

<sup>\*\* 2016</sup> Platts alumina index exposure

<sup>\*\*\*</sup> Europe duty paid standard ingot premium

# Bauxite & Alumina sensitivities

#### Annual sensitivities on underlying EBIT if +10% in price



### Revenue impact

- ~14.5% of 3-month LME price per tonne alumina
  - ~One month lag
- Realized alumina price lags PAX by one month

### Cost impact

#### Bauxite

- ~2.45 tonnes bauxite per tonne alumina
- Pricing partly LME-linked for bauxite from MRN

#### Caustic soda

- ~0.1 tonnes per tonne alumina
- Prices based on IHS Chemical, pricing mainly monthly per shipment

#### Energy

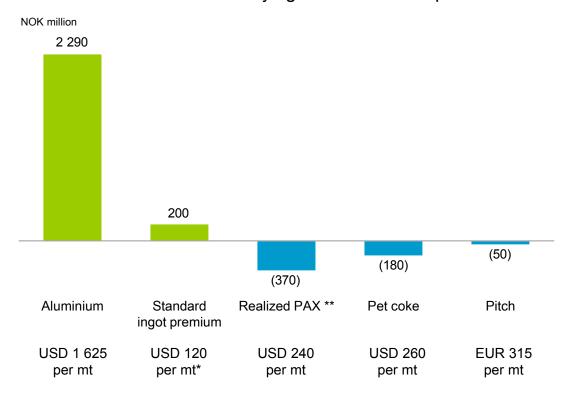
- ~0.11 tonnes coal per tonne alumina, Platts prices, one year volume contracts, weekly per shipment pricing
- ~0.11 tonnes heavy fuel oil per tonne alumina, prices set by ANP/Petrobras in Brazil, weekly pricing (ANP) or anytime (Petrobras)
- Increased use of coal as energy source in Alunorte



<sup>\* 2016</sup> Platts alumina index exposure Currency rates used: USD/NOK 8.30, BRL/NOK 2.60, EUR/NOK 9.30

# Primary Metal sensitivities

#### Annual sensitivities on underlying EBIT if +10% in price



### Revenue impact

- Realized price lags LME spot by ~1-2 months
- Realized premium lags market premium by ~1-2 months

### Cost impact

#### Alumina

- ~1.9 tonnes per tonne aluminium
- ~14.5% of 3-month LME price per tonne alumina, increasing volumes priced on Platts index
- ~ 2-3 months lag

#### Carbon

- ~0.35 tonnes petroleum coke per tonne aluminium,
   Pace Jacobs Consultancy, 2-3 year volume contracts, half yearly pricing
- ~0.08 tonnes pitch per tonne aluminium, CRU, 2-3 year volume contracts, quarterly pricing

#### Power

- 13.7 MWh per tonne aluminium
- Long-term power contracts with indexations



<sup>\*</sup> Europe duty paid. Hydro Q3'16 realized premium USD 251 per mt

<sup>\*\*2016</sup> Platts alumina index exposure Currency rates used: USD/NOK 8.30, BRL/NOK 2.60, EUR/NOK 9.30

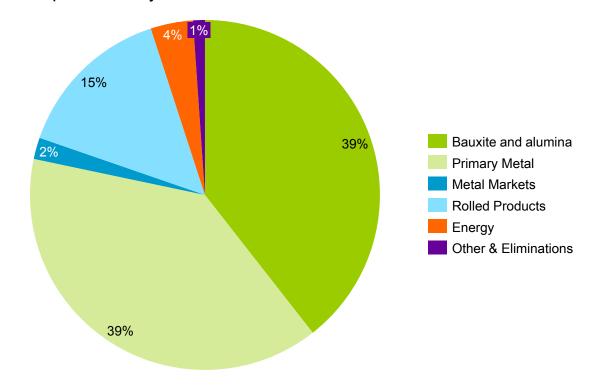
# Depreciation by currency and business area

# Total 2015 depreciation 5.0 BNOK

#### Depreciation currency exposure by business area

Percent	USD	EUR	BRL	NOK & Others
Bauxite & Alumina			100%	
Primary Metal	25%		25%	50%
Metal Markets	25%	45%		30%
Rolled Products		90%		10%
Energy				100%
Other & Eliminations				100%

#### Depreciation by business area 2015





# Items excluded from underlying results - 2016

NOK million (+=loss/()=gain)		Q1 2016	Q2 2016	Q3 2016
Unrealized derivative effects on LME related contracts	Bauxite & alumina	-	-	-
Total impact	Bauxite & alumina		-	-
Unrealized derivative effects on LME related contracts	Primary metal	(72)	38	(24)
Unrealized effects on power contracts	Primary metal	(18)	(71)	(54)
Significant rationalization charges and closure costs	Primary metal	-	67	124
Total impact	Primary metal	(90)	34	47
Unrealized derivative effects on LME related contracts	Metal markets	(68)	(16)	(14)
Total impact	Metal markets	(68)	(16)	(14)
Unrealized derivative effects on LME related contracts	Rolled products	12	(182)	4
Metal effect	Rolled products	43	(17)	(48)
(Gains)/losses on divestments	Rolled products	15	13	-
Total impact	Rolled products	69	(186)	(45)
Unrealized derivative effects on power contracts	Energy	4	10	(10)
Total impact	Energy	4	10	(10)
Unrealized derivative effects on power contracts	Other and eliminations	(73)	175	(4)
Unrealized derivative effects on LME related contracts	Other and eliminations	(8)	15	2
Impairment charges	Other and eliminations	-	-	140
(Gains)/losses on divestments	Other and eliminations	-	(342)	-
Termination of lease contract Vækerø Park	Other and eliminations	-	-	-
Unrealized derivative effects	Other and eliminations – Sapa (Hydro share)	(42)	(59)	(26)
Significant rationalization charges and closure costs	Other and eliminations – Sapa (Hydro share)	-	-	21
Other effects	Other and eliminations – Sapa (Hydro share)	-	-	-
Currency (gain) loss	Other and eliminations – Sapa (Hydro share)	4	(12)	(17)
Tax on items excluded	Other and eliminations – Sapa (Hydro share)	12	21	7
Total impact	Other and eliminations	(107)	(202)	123
Items excluded from underlying EBIT	Hydro	(192)	(360)	101
Net foreign exchange (gain)/loss	Hydro	(1 032)	(904)	(358)
Items excluded from underlying income (loss) before tax	Hydro	(1 224)	(1 264)	(256)
Calculated income tax effect	Hydro	365	313	95
Other adjustments to net income	Hydro	(700)	-	-
Items excluded from underlying net income (loss)	Hydro	(1 559)	(951)	(161)



# Items excluded from underlying results - 2015

NOK million (+=loss/()=gain)		Q1 2015	Q2 2015	Q3 2015	Q4 2015	2015
Unrealized derivative effects on LME related contracts	Bauxite & alumina	3	(6)	(6)	19	11
Total impact	Bauxite & alumina	3	(6)	(6)	19	11
Unrealized derivative effects on LME related contracts	Primary metal	54	(41)	75	7	95
Unrealized effects on power contracts	Primary metal	2	(2)	23	89	112
Insurance compensation (Qatalum)	Primary metal	-	(37)	-	-	(37)
Total impact	Primary metal	56	(81)	99	96	169
Unrealized derivative effects on LME related contracts	Metal markets	146	(45)	86	12	199
Total impact	Metal markets	146	(45)	86	12	199
Unrealized derivative effects on LME related contracts	Rolled products	(80)	143	82	(49)	95
Metal effect	Rolled products	(61)	(2)	344	177	458
(Gains)/losses on divestments	Rolled products	-	-	-	434	434
Total impact	Rolled products	(141)	141	426	562	988
Unrealized derivative effects on power contracts	Energy	1	(9)	10	1	3
Total impact	Energy	1	(9)	10	1	3
Unrealized derivative effects on power contracts	Other and eliminations	(154)	(150)	(106)	(122)	(533)
Unrealized derivative effects on LME related contracts	Other and eliminations	17	(20)	12	6	15
(Gains)/losses on divestments	Other and eliminations	-	-	-	(69)	(69)
Termination of lease contract Vækerø Park	Other and eliminations	-	-	-	285	285
Unrealized derivative effects	Other and eliminations – Sapa (Hydro share)	73	79	48	(105)	95
Significant rationalization charges and closure costs	Other and eliminations – Sapa (Hydro share)	22	152	68	125	366
Other effects	Other and eliminations – Sapa (Hydro share)	2	(22)	-	-	(20)
Currency (gain) loss	Other and eliminations – Sapa (Hydro share)	11	(11)	(22)	55	33
Tax on items excluded	Other and eliminations – Sapa (Hydro share)	(32)	(60)	(28)	(23)	(142)
Total impact	Other and eliminations	(63)	(32)	(29)	152	28
Items excluded from underlying EBIT	Hydro	2	(31)	586	841	1 398
Net foreign exchange (gain)/loss	Hydro	1 587	(346)	3 205	(48)	4 397
Items excluded from underlying income (loss) before tax	Hydro	1 589	(377)	3 790	793	5 795
Calculated income tax effect	Hydro	(454)	144	(1 069)	(38)	(1 418)
Items excluded from underlying net income (loss)	Hydro	1 134	(234)	2 721	755	4 377



### **Underlying EBIT**

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	(288)	(269)	(26)	528	780	482	628	532	189	174	153	(55)	2 421
Primary Metal	312	420	1 216	1 989	2 012	1 448	762	407	318	702	637	3 937	4 628
Metal Markets	141	100	171	221	24	(89)	291	152	167	75	117	634	379
Rolled Products	181	177	243	96	292	315	331	204	248	242	211	698	1 142
Energy	435	169	234	360	382	179	191	353	398	301	285	1 197	1 105
Other and Eliminations	(8)	(52)	(349)	(308)	(281)	333	12	(83)	181	125	75	(717)	(19)
Total	772	544	1 490	2 886	3 208	2 667	2 215	1 566	1 501	1 618	1 477	5 692	9 656

## Underlying EBITDA

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	122	162	417	1 046	1 240	951	1 048	1 165	640	659	664	1 747	4 404
Primary Metal	753	852	1 651	2 489	2 522	1 931	1 245	883	792	1 186	1 125	5 745	6 581
Metal Markets	157	120	192	243	47	(64)	317	180	191	98	141	712	480
Rolled Products	351	350	417	280	465	488	517	404	446	432	407	1 398	1 873
Energy	474	209	275	402	429	227	241	403	453	352	336	1 360	1 300
Other and Eliminations	4	(40)	(336)	(290)	(267)	347	26	(64)	194	136	81	(662)	42
Total	1 861	1 653	2 615	4 170	4 437	3 880	3 394	2 969	2 716	2 862	2 753	10 299	14 680



### **EBIT**

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	(284)	(269)	(23)	537	776	487	634	513	189	174	153	(39)	2 411
Primary Metal	303	434	1 278	1 912	1 956	1 528	664	311	408	668	591	3 928	4 459
Metal Markets	73	93	265	285	(122)	(44)	205	141	235	91	131	717	180
Rolled Products	197	336	525	64	433	174	(95)	(358)	179	428	255	1 121	154
Energy	431	165	235	362	381	187	182	353	394	291	295	1 193	1 103
Other and Eliminations	102	(140)	(342)	(866)	(218)	364	41	(235)	288	327	(48)	(1 245)	(48)
Total	822	620	1 937	2 295	3 206	2 698	1 630	725	1 693	1 978	1 376	5 674	8 258

#### **EBITDA**

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	125	163	419	1 056	1 237	957	1 054	1 146	640	659	664	1 763	4 393
Primary Metal	745	866	1 713	2 413	2 467	2 012	1 146	786	882	1 152	1 079	5 736	6 411
Metal Markets	122	114	286	307	(99)	(19)	231	168	259	114	154	829	281
Rolled Products	367	508	698	393	607	347	91	(158)	376	618	451	1 966	886
Energy	471	205	276	404	428	236	231	402	450	341	346	1 355	1 297
Other and Eliminations	115	(127)	(329)	(848)	(204)	379	55	(216)	301	338	98	(1 190)	14
Total	1 944	1 728	3 062	3 725	4 436	3 911	2 808	2 128	2 908	3 222	2 792	10 460	13 282



#### Total revenue

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	3 511	3 828	3 737	4 770	5 461	5 127	5 758	5 542	4 212	4 572	4 925	15 847	21 889
Primary Metal	6 618	6 384	6 986	8 075	9 096	8 154	7 951	7 138	7 694	8 006	7 900	28 064	32 340
Metal Markets	10 292	10 109	10 919	11 709	12 181	13 127	11 173	10 428	11 248	11 239	10 649	43 029	46 909
Rolled Products	5 238	5 275	5 618	5 324	6 170	6 173	6 225	5 592	5 737	5 985	5 648	21 455	24 160
Energy	1 539	1 381	1 492	1 891	1 553	1 140	1 152	1 481	1 620	1 670	1 576	6 303	5 326
Other and Eliminations	(8 917)	(8 706)	(9 055)	(10 112)	(11 171)	(11 286)	(10 666)	(9 808)	(10 373)	(11 080)	(10 525)	(36 790)	(42 931)
Total	18 282	18 272	19 698	21 656	23 290	22 436	21 594	20 374	20 138	20 391	20 174	77 907	87 694

#### External revenue

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	2 208	2 404	2 257	2 699	3 387	2 978	3 656	3 513	2 443	2 699	2 997	9 568	13 534
Primary Metal	1 227	1 337	1 590	2 242	1 789	1 059	1 311	1 214	1 175	1 312	1 459	6 397	5 373
Metal Markets	8 719	8 853	9 784	10 625	11 315	11 862	10 100	9 518	10 133	10 169	9 678	37 981	42 795
Rolled Products	5 290	5 212	5 498	5 345	6 079	6 254	6 334	5 625	5 795	5 831	5 637	21 345	24 293
Energy	807	436	540	710	698	264	176	485	575	364	394	2 492	1 623
Other and Eliminations	31	29	28	35	21	19	17	19	17	15	8	124	77
Total	18 282	18 272	19 698	21 656	23 290	22 436	21 594	20 374	20 138	20 391	20 174	77 907	87 694



#### Internal revenue

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	1 304	1 424	1 480	2 071	2 074	2 150	2 103	2 030	1 769	1 873	1 929	6 279	8 356
Primary Metal	5 391	5 047	5 396	5 833	7 307	7 095	6 641	5 925	6 519	6 693	6 441	21 667	26 967
Metal Markets	1 573	1 256	1 136	1 084	866	1 265	1 073	910	1 116	1 070	971	5 048	4 114
Rolled Products	(52)	63	120	(22)	91	(81)	(109)	(33)	(58)	153	11	109	(132)
Energy	732	945	952	1 181	854	877	976	996	1 044	1 306	1 182	3 810	3 703
Other and Eliminations	(8 948)	(8 735)	(9 084)	(10 147)	(11 192)	(11 306)	(10 683)	(9 827)	(10 390)	(11 095)	(10 533)	(36 914)	(43 008)
Total	-	-	-	-	-	-	-	-	-	-	-	-	-

### Share of profit /(loss) in equity accounted investments

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	-	-	-	-	-	-	-	-	-	-		-	-
Primary Metal	92	77	234	325	250	282	25	(168)	(37)	10	74	728	389
Metal Markets	-	-	-	-	-	-	-	-	-	-		-	-
Rolled Products	-	-	-	-	-	-	-	-	-	-		-	-
Energy	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and Eliminations	(51)	45	53	(359)	16	(6)	90	23	206	313	182	(313)	123
Total	40	122	287	(34)	265	276	115	(144)	170	323	256	415	512



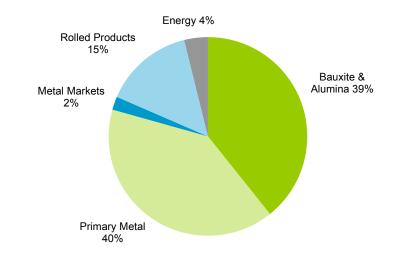
### Depreciation, amortization and impairment

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Bauxite & Alumina	410	431	442	519	460	470	420	633	451	485	511	1 802	1 983
Primary Metal	437	427	431	499	511	483	483	475	474	484	488	1 794	1 952
Metal Markets	49	21	21	22	23	25	26	27	24	24	24	112	101
Rolled Products	170	172	174	329	173	173	186	200	197	189	196	845	732
Energy	39	40	41	42	47	48	50	49	55	51	51	162	195
Other and Eliminations	13	13	13	17	15	14	14	18	13	11	146	55	61
Total	1 117	1 104	1 121	1 428	1 229	1 213	1 178	1 403	1 215	1 244	1 416	4 771	5 023

### Capital employed – upstream focus

NOK million	Sep 30, 2016
Bauxite & Alumina	30 506
Primary Metal	31 125
Metal Markets	1 688
Rolled Products	11 361
Energy	2 995
Other and Eliminations	(1 699)
Total	75 975

Graph excludes BNOK (1.7) in capital employed in Other and Eliminations





# Income statements

NOK million	Q3 2016	Q2 2016	Q3 2015	First 9 months 2016	First 9 months 2015	Year 2015
Revenue Share of the profit (loss) in equity accounted investments Other income, net	20 174	20 391	21 594	60 703	67 320	87 694
	256	323	115	749	657	512
	96	481	167	688	633	461
Total revenue and income	20 526	21 195	21 875	62 140	68 610	88 667
Raw material and energy expense  Employee benefit expense  Depreciation, amortization and impairment  Other expenses	12 886	13 145	14 361	38 760	43 397	56 330
	2 281	2 442	2 172	7 103	6 738	9 048
	1 416	1 244	1 178	3 874	3 620	5 023
	2 568	2 386	2 535	7 355	7 321	10 008
Earnings before financial items and tax (EBIT)	1 376	1 978	1 630	5 047	7 533	8 258
Financial income Financial expense	102	179	47	437	193	297
	216	769	(3 388)	1 829	(4 956)	(5 130)
Income (loss) before tax Income taxes	1 693	2 926	(1 711)	7 313	2 770	3 425
	(574)	(849)	367	(1 736)	(979)	(1 092)
Net income (loss)	1 119	2 077	(1 345)	5 578	1 791	2 333
Net income (loss) attributable to non-controlling interests Net income (loss) attributable to Hydro shareholders	34	129	(21)	249	249	313
	1 085	1 948	(1 324)	5 328	1 542	2 020
Earnings per share attributable to Hydro shareholders	0.53	0.95	(0.65)	2.61	0.76	0.99

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year2014	Year2015
Net income (loss)	462	269	665	(168)	1 072	2 064	(1 345)	541	2 382	2 077	1 119	1 228	2 333
Underlying net income (loss)	388	318	1 043	1 979	2 206	1 830	1 377	1 296	822	1 126	958	3 728	6 709
Earnings per share	0.19	0.09	0.29	(0.18)	0.46	0.94	(0.65)	0.23	1.12	0.95	0.53	0.39	0.99
Underlying earnings per share	0.16	0.13	0.43	0.83	0.95	0.83	0.61	0.59	0.39	0.52	0.46	1.55	2.98



# **Balance sheets**

NOK million	Sep 30 2016	Jun 30 2016	Mar 31 2016	Dec 31 2015	Sep 30 2015
Cash and cash equivalents Short-term investments Accounts receivable Inventories Other current assets	7 952	9 220	5 946	6 917	9 372
	4 438	2 629	5 479	5 752	1 860
	11 495	12 085	12 699	10 797	14 417
	11 517	11 820	11 684	12 192	11 996
	204	158	128	502	390
Property, plant and equipment Intangible assets Investments accounted for using the equity method Prepaid pension Other non-current assets	54 476	55 378	51 828	51 174	47 850
	5 469	5 622	5 132	5 121	4 773
	19 333	19 841	19 455	20 150	19 414
	3 227	3 198	3 319	3 382	4 116
	6 563	6 798	6 845	6 557	5 476
Total assets	124 672	126 749	122 515	122 544	119 665
Bank-loans and other interest-bearing short-term debt Trade and other payables Other current liabilities	3 562	3 593	3 753	3 562	3 509
	9 131	9 719	8 857	9 375	10 727
	4 193	3 822	3 864	4 462	3 825
Long-term debt Provisions Pension liabilities Deferred tax liabilities Other non-current liabilities	3 409	3 474	3 735	3 969	4 408
	3 764	3 630	3 443	3 264	2 850
	13 771	13 837	13 457	12 782	12 358
	2 480	2 477	2 222	1 999	2 078
	2 969	3 154	3 436	3 801	3 821
Equity attributable to Hydro shareholders Non-controlling interests	75 877	77 285	74 524	74 169	71 284
	5 518	5 757	5 224	5 159	4 806
Total liabilities and equity	124 672	126 749	122 515	122 544	119 665



# Operational data

Bauxite & Alumina	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Alumina production (kmt)	1 361	1 248	1 316	1 452	1 428	1 526	1 478	1 501	1 451	1 437	1 498	1 577	1 517	1 554	1 635	5 933	5 962
Sourced alumina (kmt)	476	427	711	395	550	431	532	503	666	725	806	590	531	615	512	2 016	2 787
Total alumina sales (kmt)	1 874	1 696	1 879	1 959	1 906	2 071	1 922	2 043	2 136	2 099	2 268	2 368	2 073	2 078	2 221	7 942	8 871
Realized alumina price (USD) 1)	296	275	267	263	269	276	287	303	300	292	273	245	219	240	240	284	276
Implied alumina cost (USD) 2)	261	254	263	259	259	263	252	229	225	233	217	187	183	201	204	250	215
Bauxite production (kmt) 3)	2 210	1 765	1 513	2 080	2 242	2 370	2 287	2 582	2 135	2 232	2 735	2 959	2 682	2 609	2 777	9 481	10 060
Sourced bauxite (kmt) 4)	1 265	2 431	2 353	2 474	1 874	2 204	2 305	2 433	1 806	2 103	2 377	2 398	1 924	2 233	2 108	8 815	8 684
Underlying EBITDA margin <sup>12)</sup>	11.1%	6.5%	1.4%	1.3%	3.5%	4.2%	11.2%	21.9%	22.7%	18.5%	18.2%	21.0%	15.2%	14.4%	13.5%	11.0%	20.1%

Primary Metal <sup>5)</sup>	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Realized aluminium price LME, USD/mt	2 043	1 926	1 822	1 802	1 749	1 762	1 906	1 997	1 897	1 803	1 685	1 555	1 497	1 546	1 612	1 850	1 737
Realized aluminium price LME, NOK/mt <sup>7)</sup>	11 533	11 217	10 938	10 916	10 702	10 660	11 909	13 355	14 383	13 923	13 779	13 125	12 950	12 826	13 375	11 624	13 813
Realized premium above LME, USD/mt <sup>6)</sup>	345	358	374	371	422	476	537	575	614	509	342	291	288	270	251	500	439
Realized premium above LME, NOK/mt <sup>6)7)</sup>	1 945	2 087	2 247	2 246	2 583	2 883	3 355	3 845	4 660	3 927	2 796	2 460	2 488	2 243	2 082	3 140	3 492
Realized NOK/USD exchange rate 7)	5.64	5.82	6.00	6.06	6.12	6.05	6.25	6.69	7.58	7.72	8.18	8.44	8.65	8.30	8.30	6.28	7.95
Realized NOK/USD exchange rate excluding hedge	5.64	5.82	6.01	6.06	6.12	5.98	6.21	6.76	7.58	7.72	8.18	8.44	8.65	8.30	8.30	6.27	7.95
Implied primary cost (USD) 8)	1 625	1 575	1 450	1 375	1 400	1 375	1 275	1 150	1 150	1 225	1 325	1 275	1 225	1 175	1 275	1 300	1 250
Implied all-in primary cost (USD) 9)	2 025	1 975	1 850	1 775	1 900	1 925	1 875	1 775	1 800	1 775	1 675	1 575	1 550	1 500	1 550	1 875	1 725
Primary aluminium production, kmt	478	483	491	492	484	488	487	499	497	509	520	521	514	518	526	1 958	2 046
Casthouse production, kmt <sup>10)</sup>	495	513	516	522	525	529	521	515	495	516	524	525	534	547	541	2 088	2 059
Total sales, kmt <sup>11)</sup>	541	531	540	515	593	559	542	527	534	544	550	531	552	596	573	2 220	2 159
Underlying EBITDA margin <sup>12)</sup>	14.1%	12.1%	13.6%	16.9%	11.4%	13.3%	23.6%	30.8%	27.7%	23.7%	15.7%	12.4%	10.3%	14.8%	14.2%	20.5%	20.3%

<sup>1)</sup> Weighted average of own production and third party contracts, excluding hedge results. The majority of the alumina is sold linked to the LME prices with a one month delay.



<sup>2)</sup> Implied alumina cost (based on EBITDA and sales volume) replaces previous apparent alumina cash cost

<sup>3)</sup> Paragominas on wet basis

<sup>4) 40</sup> percent MRN offtake from Vale and 5 percent Hydro share on wet basis

<sup>5)</sup> Operating and financial information includes Hydro's proportionate share of production and sales volumes in equity accounted investments. Realized prices, premiums and exchange rates exclude equity accounted investments

<sup>6)</sup> Average realized premium above LME for casthouse sales from Primary Metal. Historical premiums for 2013 have been revised due to change of definition

<sup>7)</sup> Including strategic hedges /hedge accounting applied
8) Realized LME price minus Underlying EBITDA margin (incl. Qatalum) per mt primary aluminium produced. Includes net earnings from primary casthouses.

<sup>9)</sup> Realized all-in price minus Underlying EBITDA margin (incl. Qatalum) per mt primary aluminium sold. Includes net earnings from primary casthouses.

<sup>10)</sup> Production volumes for 2013 have been revised, due to change of definition

<sup>11)</sup> Total sales replaces previous casthouse sales due to change of definition

<sup>12)</sup> Underlying EBITDA divided by total revenues

# Operational data

Metal Markets	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year2014	Year2015
Remelt production (1 000 mt)	139	141	128	130	145	141	117	130	144	146	125	538	533
Third-party Metal Products sales (1 000 mt)	84	81	80	79	74	80	81	84	72	74	78	324	319
Metal Products sales excl. ingot trading (1 000 mt) 1)	776	726	696	654	626	750	676	670	736	777	720	2 852	2 722
Hereof external sales excl. ingot trading (1 000 mt)	654	619	609	596	571	674	616	613	664	694	652	2 478	2 474
External revenue (NOK million)	8 719	8 853	9 784	10 625	11 315	11 862	10 100	9 518	10 133	10 169	9 678	37 981	42 795
Rolled Products	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year2014	Year2015
Rolled Products external shipments (1 000 mt)	243	245	244	213	227	243	248	229	229	238	231	946	948
Rolled Products – Underlying EBIT per mt, NOK	744	723	996	452	1 284	1 294	1 332	888	1 086	1 017	914	738	1 204
Underlying EBITDA margin 2)	6.7%	6.6%	7.4%	5.3%	7.5%	7.9%	8.3%	7.2%	7.8%	7.2%	7.2%	6.5%	7.8%
Energy	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year2014	Year2015
Power production, GWh	2 964	2 248	2 170	2 823	3 071	2 103	2 839	2 882	3 160	2 674	2 946	10 206	10 894
Net spot sales, GWh	1 581	1 028	873	1 339	1 610	724	1 363	1 292	1 795	1 393	1 699	4 820	4 989
Nordic spot electricity price, NOK/MWh	252	211	263	264	246	177	122	204	229	223	235	248	187
Southern Norway spot electricity price (NO2), NOK/MWh	249	168	247	248	238	171	102	197	212	213	212	228	177
Underlying EBITDA margin <sup>2)</sup>	30.8%	15.1%	18.4%	21.3%	27.6%	19.9%	20.9%	27.2%	28.0%	21.1%	21.3%	21.6%	24.4%



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<sup>1)</sup> Includes external and internal sales from primary casthouse operations, remelters and third party Metal sources 2) Underlying EBITDA divided by total revenues

# Sapa joint venture information

#### Sapa JV (100 % basis), underlying (unaudited)

NOK million, except sales volumes	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Sales volume (1000 mt)	346	360	346	314	359	367	350	322	353	358	341	312	349	366	340	1 399	1 364
Revenues*	10 367	10 974	10 798	10 132	11 311	11 496	11 561	11 842	14 051	14 484	13 895	12 821	13 905	14 071	13 140	46 210	55 252
Underlying EBITDA	304	508	328	(43)	440	641	492	343	705	799	734	491	901	1 132	812	1 916	2 729
Underlying EBIT	16	213	24	(339)	155	350	201	(55)	392	483	404	128	571	804	488	652	1 407
Underlying net income (loss)				(281)	69	263	110	(44)	238	291	240	139	365	540	315	398	907

### Sapa JV (100 % basis), reported (unaudited)

NOK million	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Reported EBIT	(148)	(1 096)	(1 985)	(787)	(3)	168	198	(679)	201	65	174	88	655	920	497	(316)	528
Reported net income (loss)				(620)	(103)	89	107	(719)	89	14	109	34	418	639	344	(626)	246

#### Sapa JV (100 % basis), reconciliation between reported and underlying EBIT (unaudited)

NOK million, except sales volumes	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Year 2014	Year 2015
Reported EBIT	(3)	168	198	(679)	201	65	174	88	655	920	497	(316)	528
Items excluded from EBIT:													
Unrealized derivative effects	73	36	66	(79)	(145)	(158)	(95)	208	83	116	51	96	(189)
Restructuring cost and other items	(231)	(218)	(70)	(546)	(47)	(260)	(135)	(249)	-	-	(42)	(1 065)	(690)
Total items excluded from EBIT**	(159)	(182)	(4)	(624)	(191)	(418)	(230)	(41)	83	116	9	(969)	(879)
Underlying EBIT	155	350	201	(55)	392	483	404	128	571	804	488	652	1 407

Pro forma figures before Q4 2013



<sup>\*</sup> Historical revenues have been reclassified

<sup>\*\*</sup> Negative figures represent a net cost to be added to get from reported EBIT to Underlying EBIT

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Next events

Sapa investor briefing

November 3, 2016

Capital markets day December 1-2, 2016

Fourth quarter results February 9, 2017

For more information see www.hydro.com/ir





