



Second quarter results 2019

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", "planned", "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.

Second quarter highlights

- Underlying EBIT of NOK 875 million
- Ramp-up progressing successfully at Alunorte, Paragominas and Albras
- Bauxite & Alumina up on increased production and currency, mostly offset by lower realized alumina prices
- Primary Metal down on lower realized aluminium price
- Financial impact of cyber-attack estimated to NOK 250-300 million in Q2 – main impact in Extruded Solutions
- Downstream results down on margin and volume, reflecting softening demand
- Energy down on lower volumes
- 2019 global primary aluminium market expected in deficit, demand growth expectations for 2019 reduced to 1-2%

All result explanations versus same quarter previous year

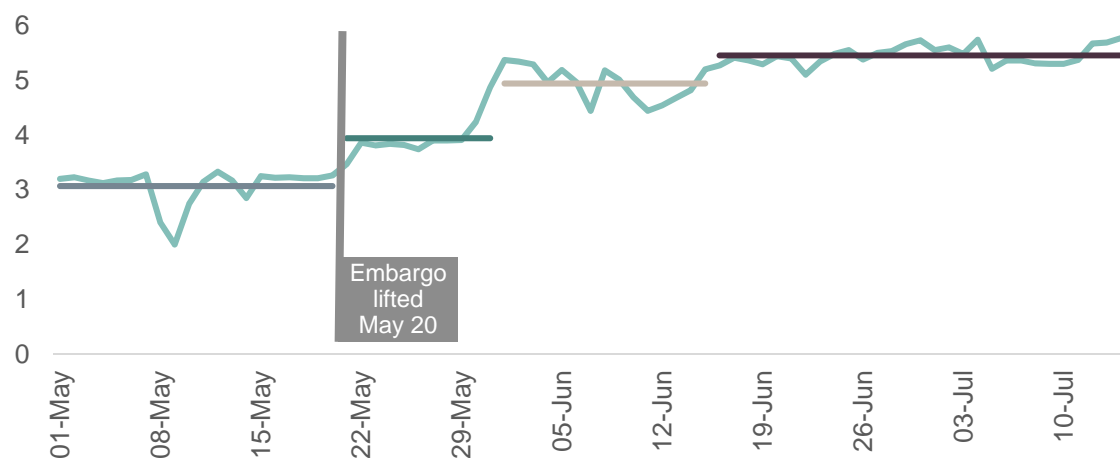


Ramp-up progressing successfully in Pará

Commissioning new press filter technology at Alunorte

Ramp-up process

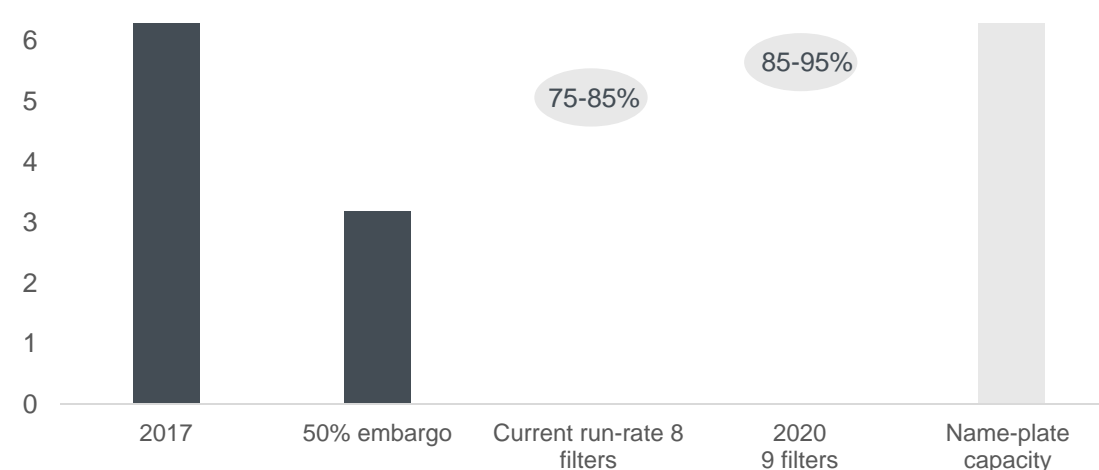
Alunorte production in ramp-up period, daily production annualized in million mt



- Successful ramp-up at Alunorte reaching targeted 75-85% production, steadily lifting and stabilizing at higher output
- Paragominas ramping up in line with ramp-up speed at Alunorte
- All electrolysis cells at Albras expected to be in operation by end-Q3 2019

Way forward Alunorte

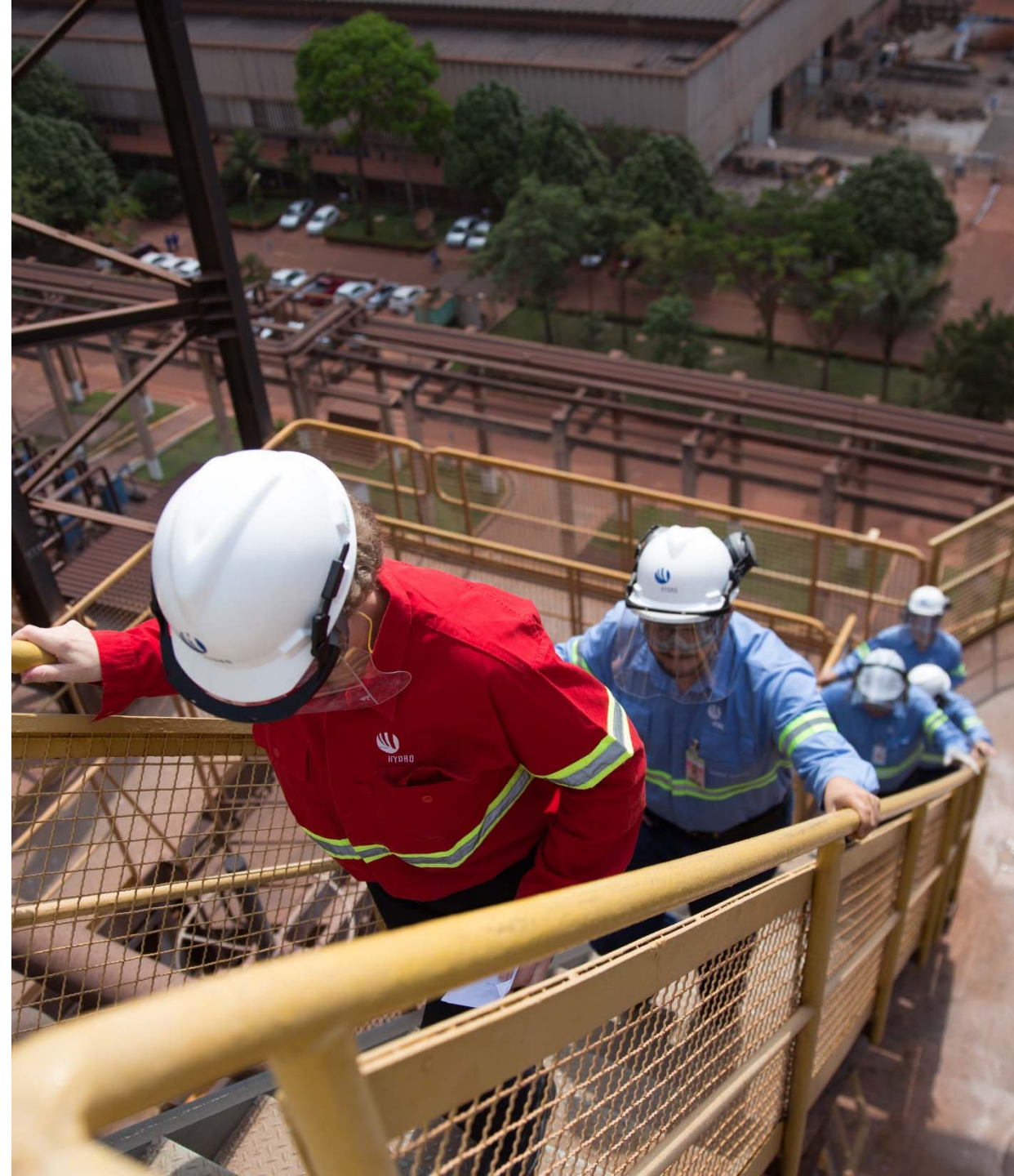
Alunorte production, annualized in million mt



- Commissioning of 9th press filter expected to start September/October 2019
- Current experience with press filters indicates capacity utilization of 85-95% with 9 press filters
- Further process optimization will continue, to reduce downtime and cycle time of press filters and further increase productivity

Key focus going forward

- Safe ramp-up of Alunorte, Albras and Paragominas key priority
- Fully committed to deliver on obligations under technical and social agreement (TAC and TC)
- Continued dialogue with state environmental agency SEMAS and Ministerio Público on creating common platform – timing for embargoes on DRS2 being lifted remains uncertain
 - Lifetime of DRS1 estimated to ~1 year



Status update cyber attack

Operational and financial impact

- Overall financial impact for Q2 NOK 250-300 million
 - Of which Extruded Solutions NOK 150-200 million
- Overall financial impact for Q1 NOK 300-350 million
 - Of which Extruded Solutions NOK 250-300 million
- At end-Q2 operations have largely returned to normal
- Limited financial impact estimated for Q3 2019
- Hydro has a robust cyber insurance policy in place with recognized insurers



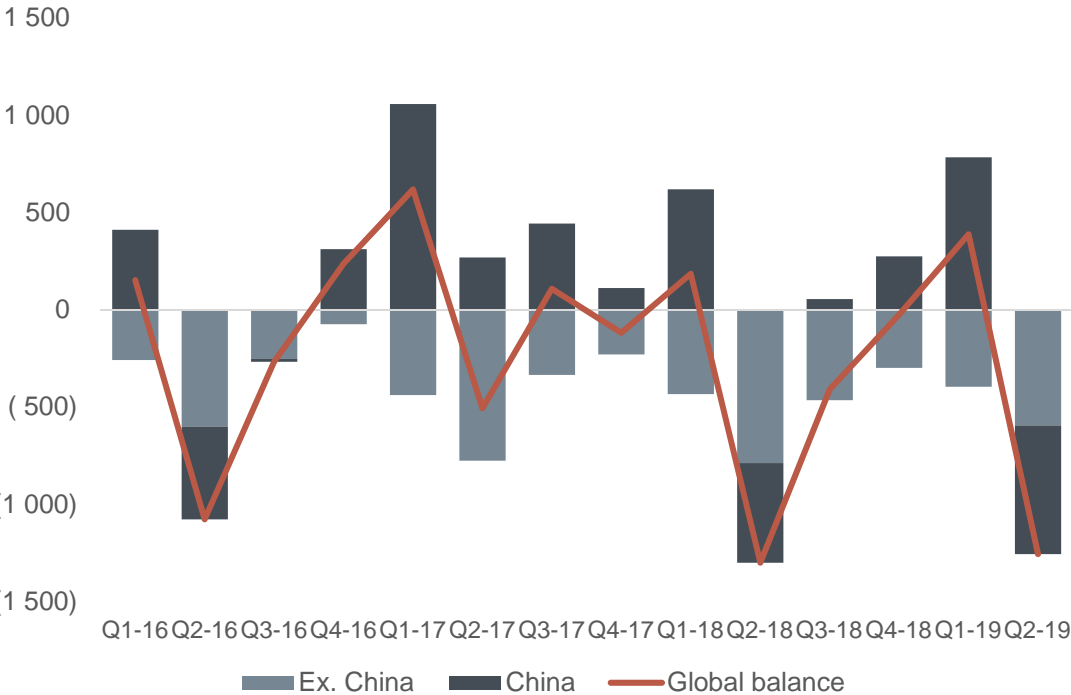
Global aluminium market in deficit in Q2 2019



Continued deficit in world outside China, Q2 deficit also in China

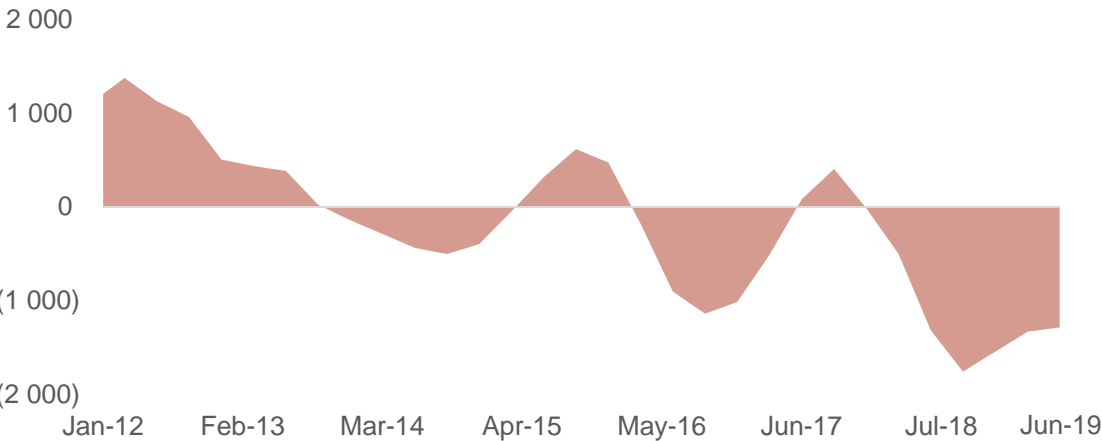
Quarterly market balances, world ex. China and China

1 000 mt primary aluminium



Production less demand*)

1 000 mt primary aluminium



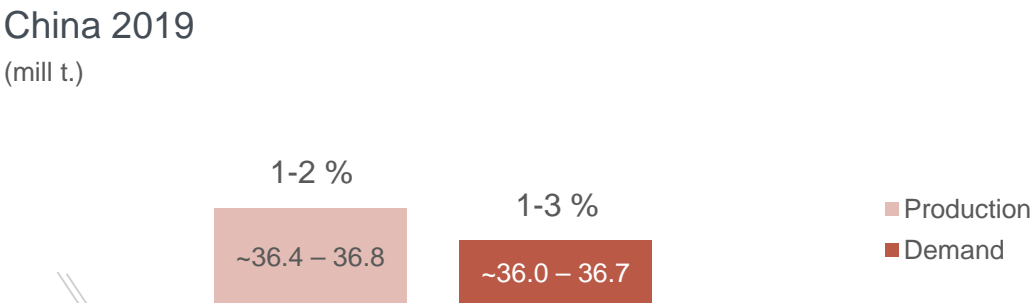
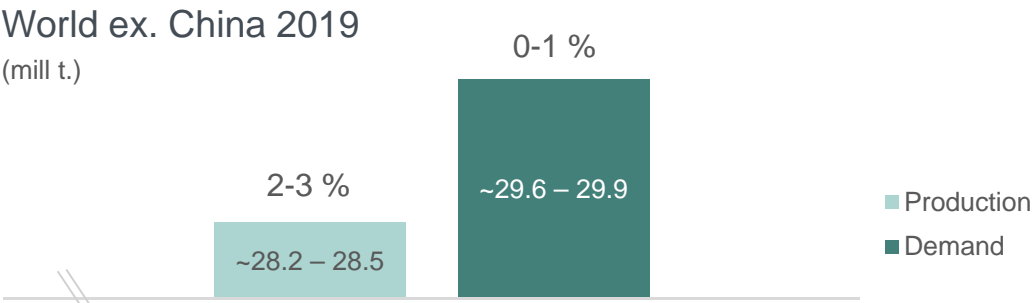
- ~0.8 % demand growth Q2-19 vs Q2-18
 - ~1.5 % China
 - ~0 % World ex. China
- 2019 demand growth expected at 1-2 %, downside risk

Source: CRU/Hydro
* Yearly rolling average of quarterly annualized production less demand

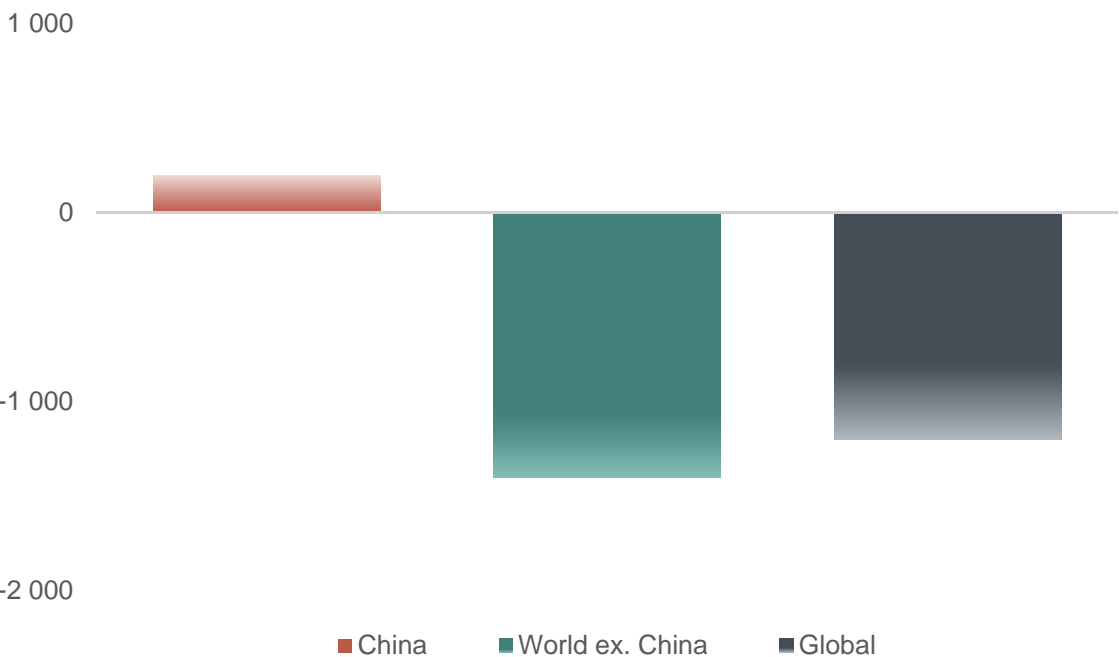
Global market expected in deficit for 2019



China largely balanced, world outside China in deficit

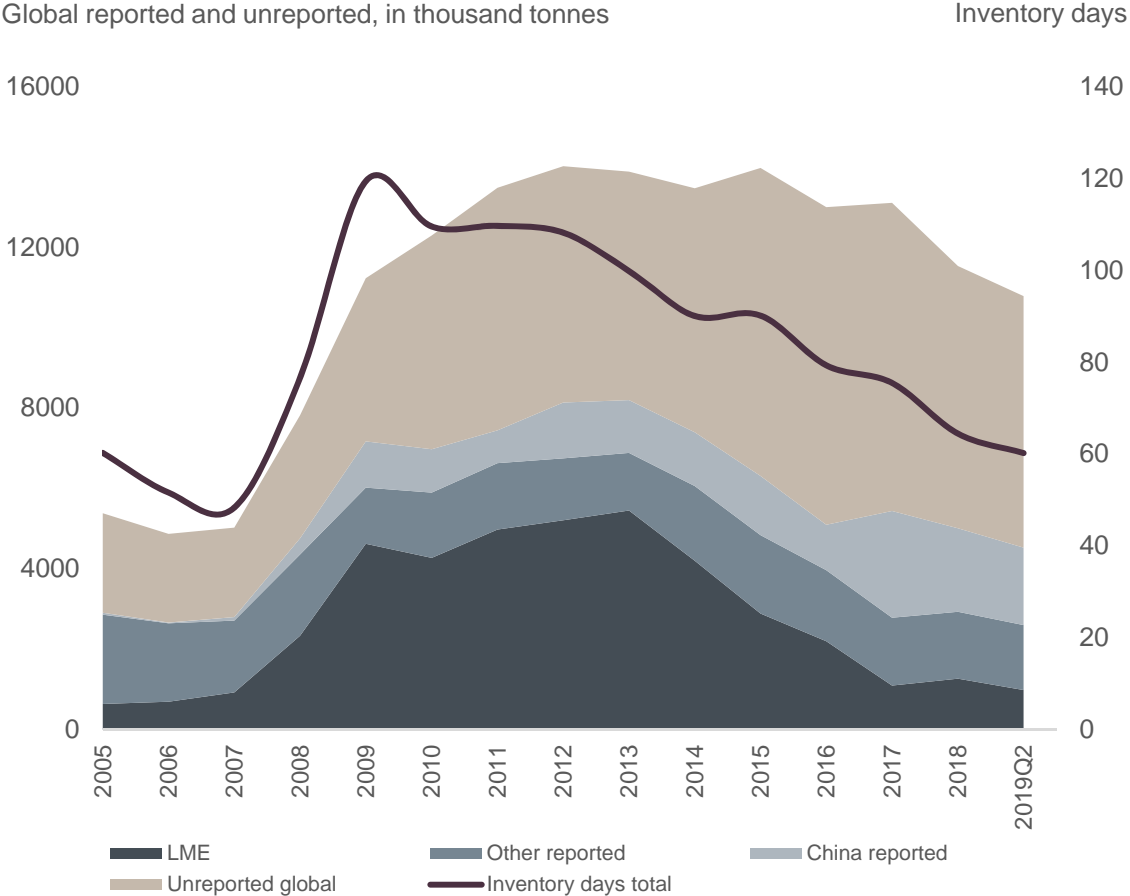


Estimated primary market balance 2019
(‘000t)

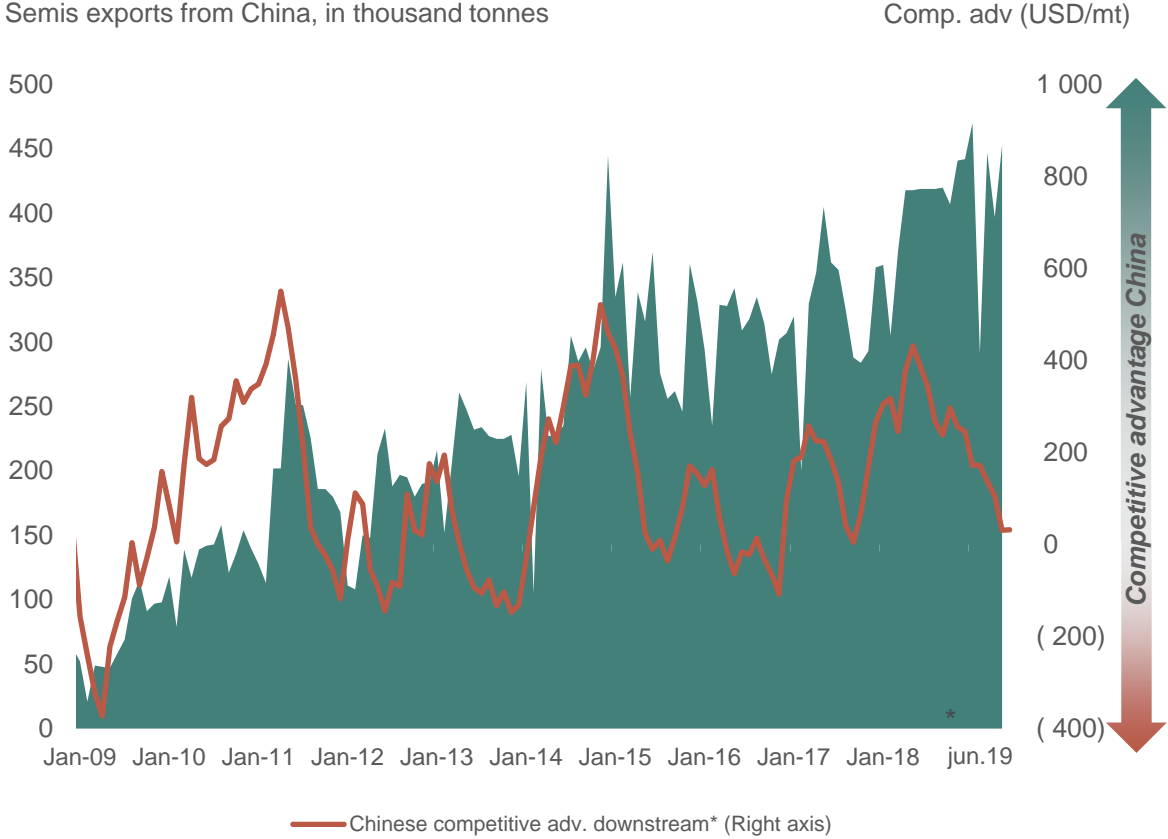


Source: CRU, Hydro analysis
%: Growth from 2018 to 2019

Inventories gradually trending downwards, increasing Chinese semis exports



*2019 Q2 inventory days estimated on 12-months rolling historic consumption
Source: Republished under license from CRU International Ltd, Hydro analysis



Source: CRU, Thomson Reuters
Estimated metal cost China versus Europe
Europe: LME cash + European duty-paid standard ingot premium
China: SHFE cash + avg. local premium + freight – export rebates (~13 %)
*No detailed data for April to September 2018, semis months for these months distributed flat

LME aluminium prices down in Q2



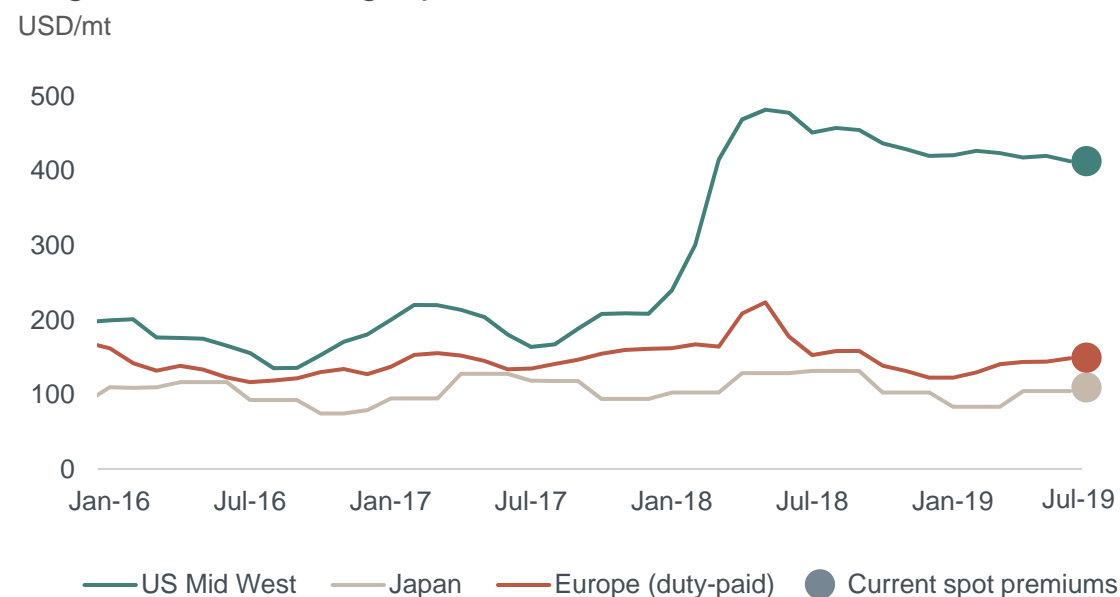
SHFE up in Q2, reducing competitiveness on metal from China

LME and SHFE aluminium prices



- LME averaged around 1 800 USD/t in Q2 2019, downward trend in quarter
- SHFE up in Q2, decreasing price differential between LME and SHFE

Regional standard ingot premiums

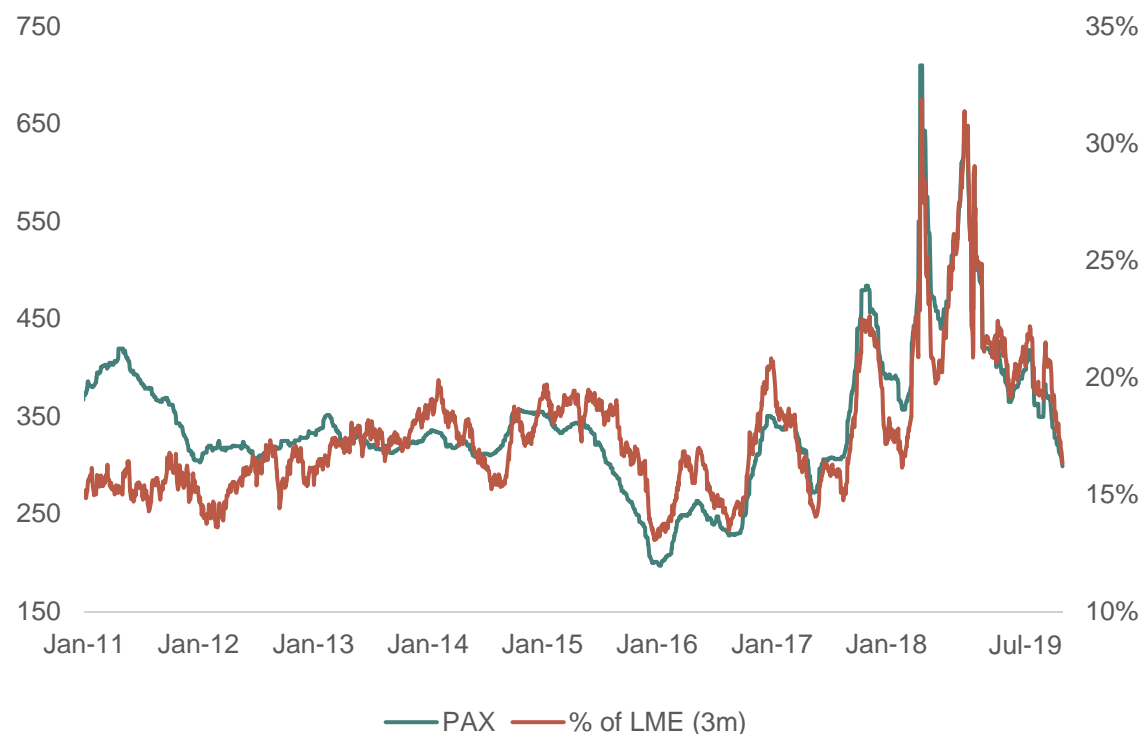


- US premium continuing its slow decline
- Slightly improving European and Japanese premiums during Q2

Alumina prices down in Q2, continued volatility

Platts alumina index (PAX)

USD/t



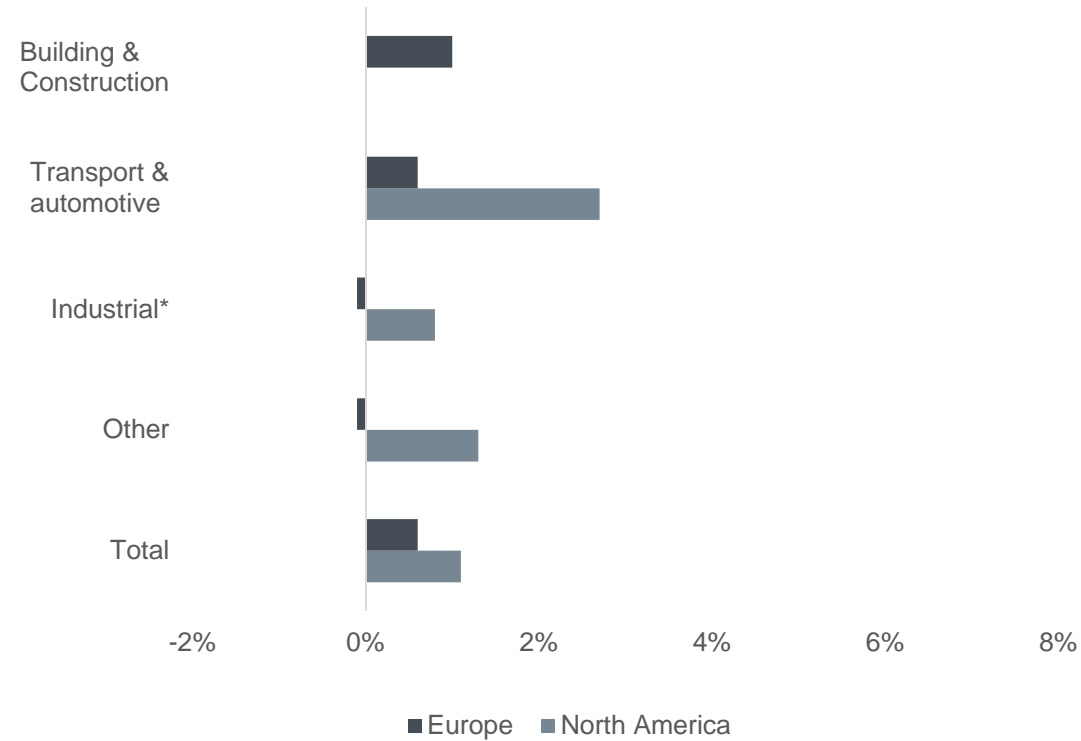
- Alumina prices trending downwards in 1H 2019 and into Q3
- Continued price volatility, impacted in Q2 by Chinese environmental curtailments and Alunorte restart
- Refinery cost in general trending downwards on lower input cost, primarily caustic soda
 - High Chinese domestic bauxite prices impacting competitiveness of inland Chinese refineries
- China moving from exporting alumina in 2018 and Q1 2019, to importing limited volumes in Q2 2019

Softening downstream demand growth

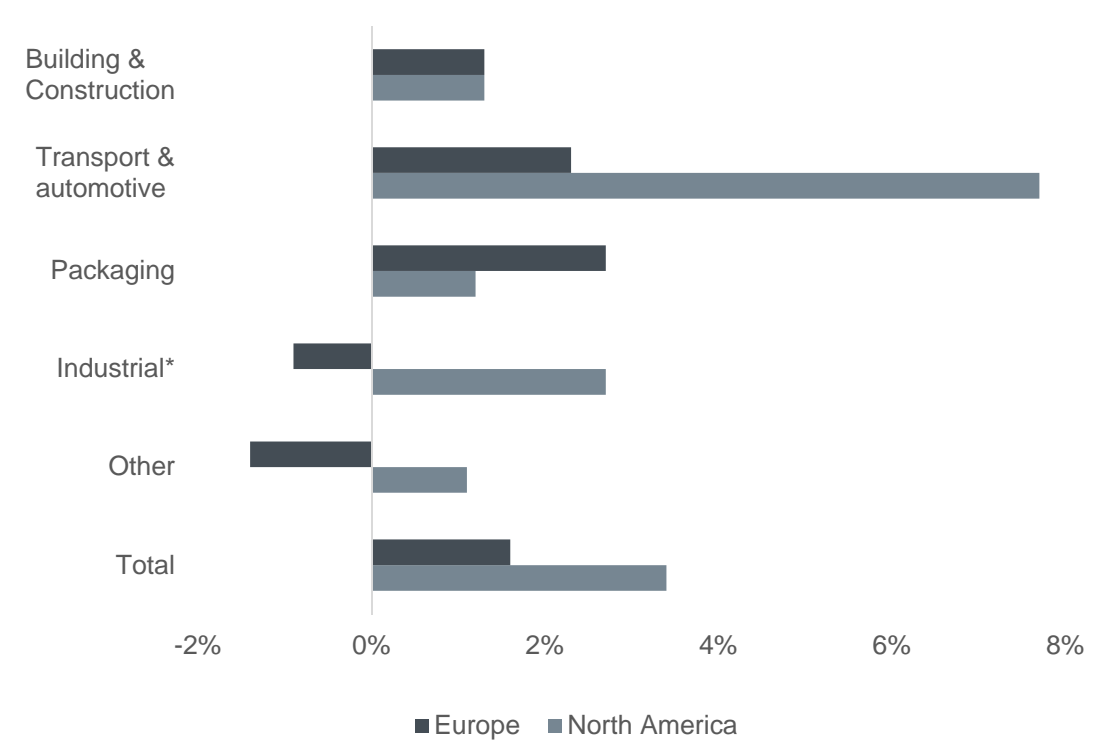


Weak demand in Europe, reduced extrusion growth in North America

Extrusions – estimated market growth 2019 vs 2018 (%)



Rolled products – estimated market growth 2019 vs 2018 (%)



Source: CRU / Hydro analysis

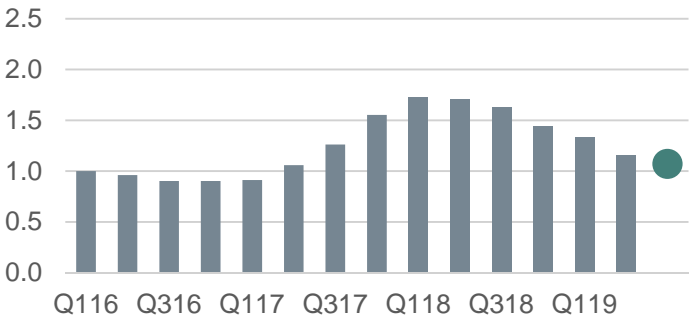
* Industrial includes consumer durables, electrical and machinery

Europe excluding Russia/Turkey

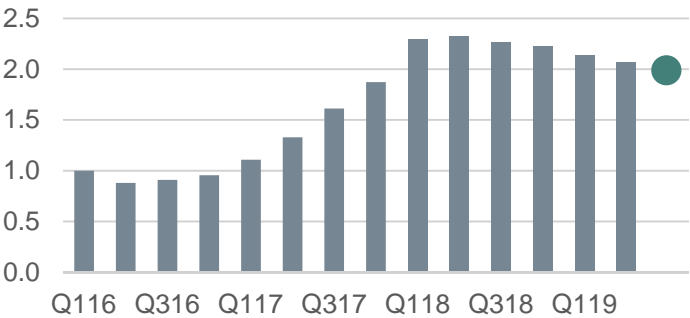
Raw material costs for the aluminium industry continue to trend downwards



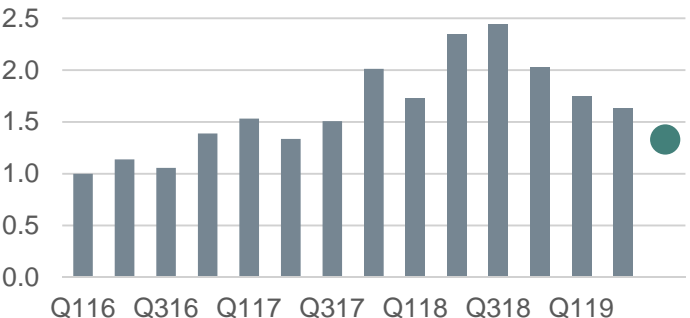
Petroleum coke FOB USG (indexed)



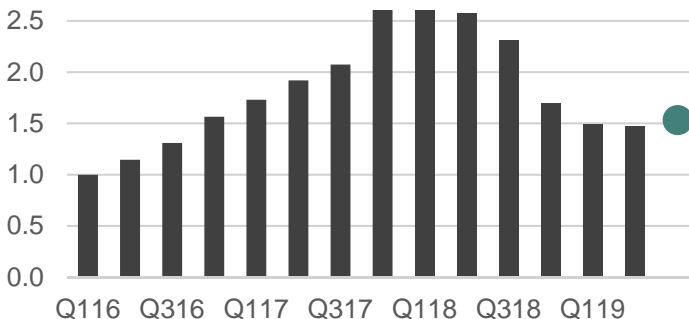
Pitch FOB USG (indexed)



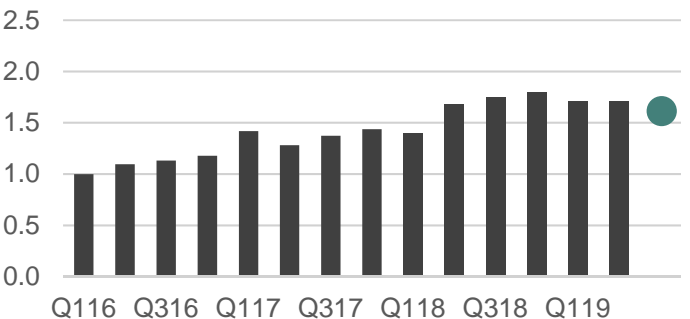
Alumina PAX index (indexed)



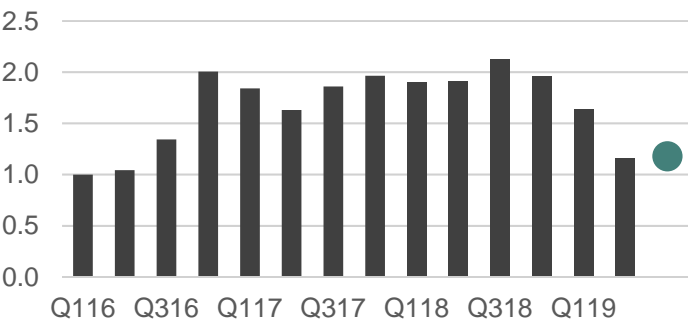
Caustic soda (indexed)



Fuel oil A1 (Indexed)



Steam coal (indexed)



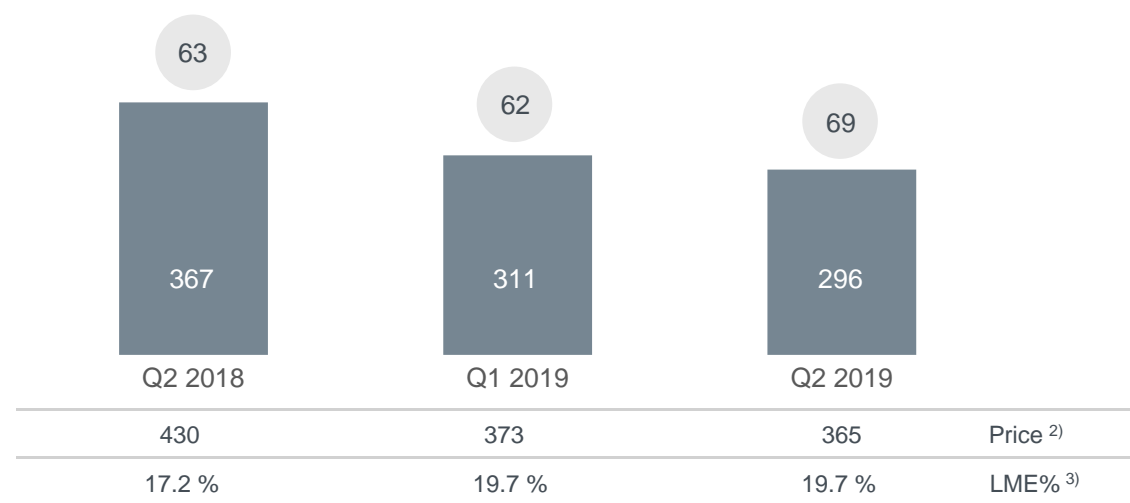
● Indication of current market prices

Upstream costs trending downwards



Implied alumina cost and margin

USD/mt ¹⁾



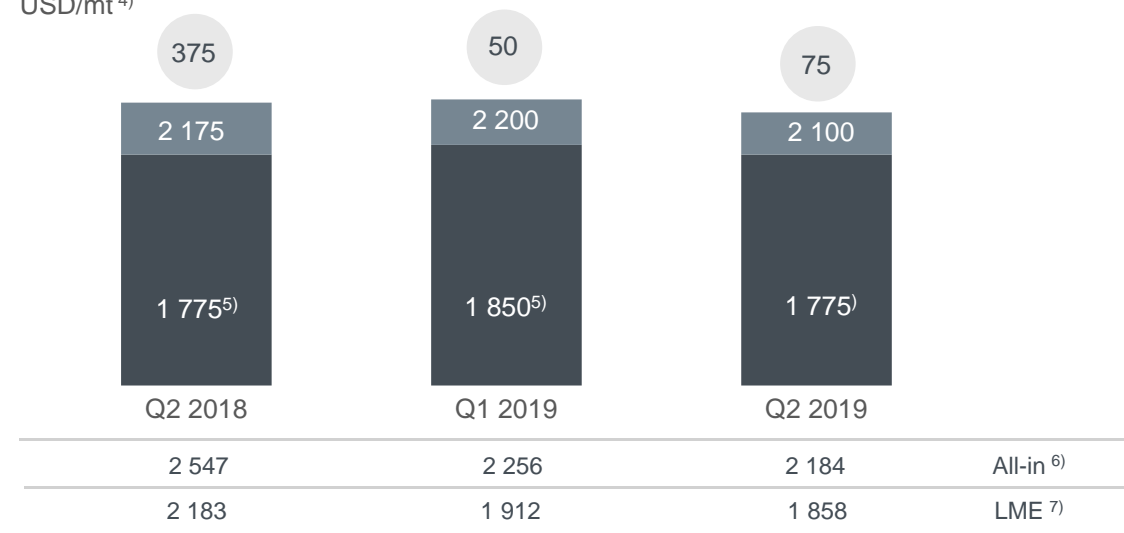
Implied alumina cost down in Q219 vs Q119, mainly increased production and lower raw material costs at Alunorte

■ Implied EBITDA cost per mt ● EBITDA margin per mt

- 1) Realized alumina price minus underlying EBITDA for B&A, per mt alumina sales
- 2) Realized alumina price
- 3) Realized alumina price as % of three-month LME price with one month lag
- 4) Realized all-in aluminium price less underlying EBITDA margin, incl Qatalum, per mt aluminium sold.
Implied primary cost and margin rounded to nearest USD 25

All-in implied primary cost and margin

USD/mt ⁴⁾



Implied primary cost down in Q219 vs Q119 on reduced costs, mainly related to alumina

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

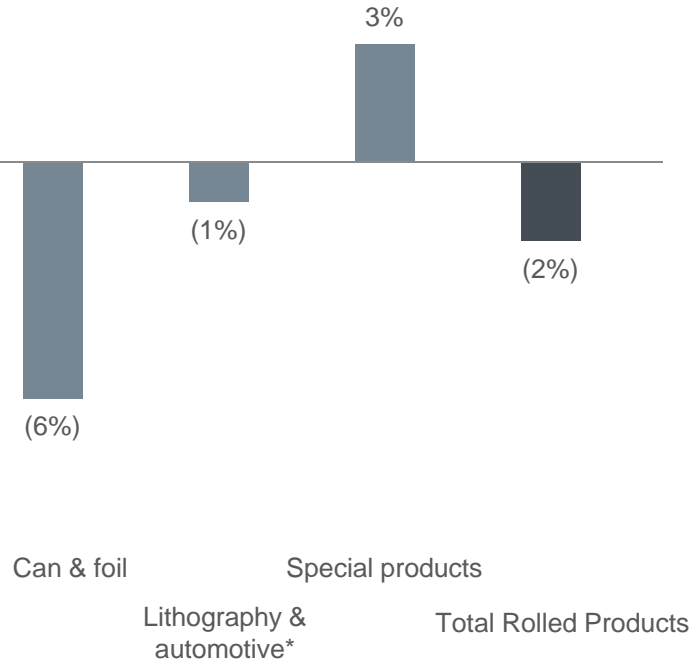
- 5) Realized LME aluminium price less underlying EBITDA margin, incl Qatalum, per mt primary aluminium produced
- 6) Realized LME plus realized premiums, including Qatalum
- 7) Realized LME, including Qatalum

Rolled Products: Sales reduction driven by softening markets

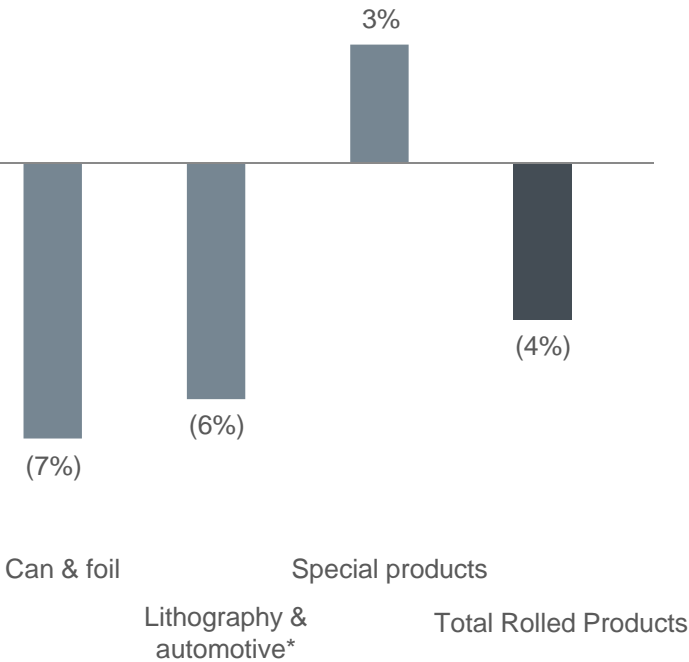


YTD 2019 vs YTD 2018

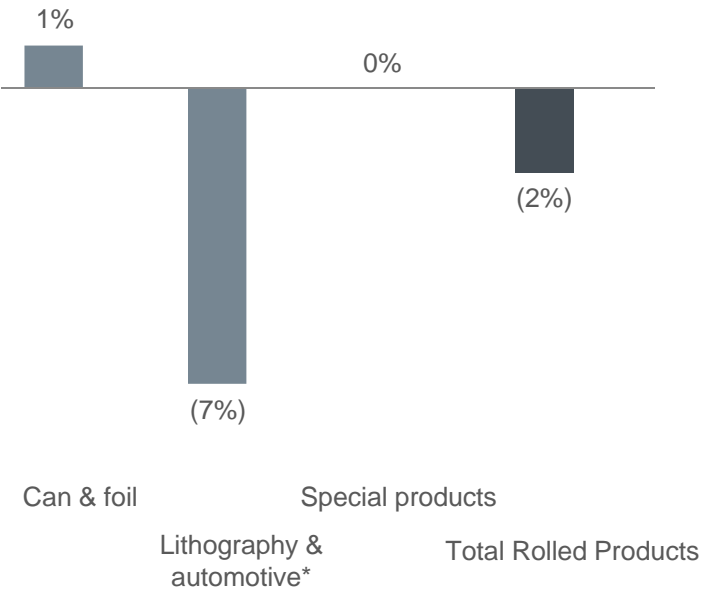
Sales volume
Growth in %



Q2 2019 vs Q2 2018

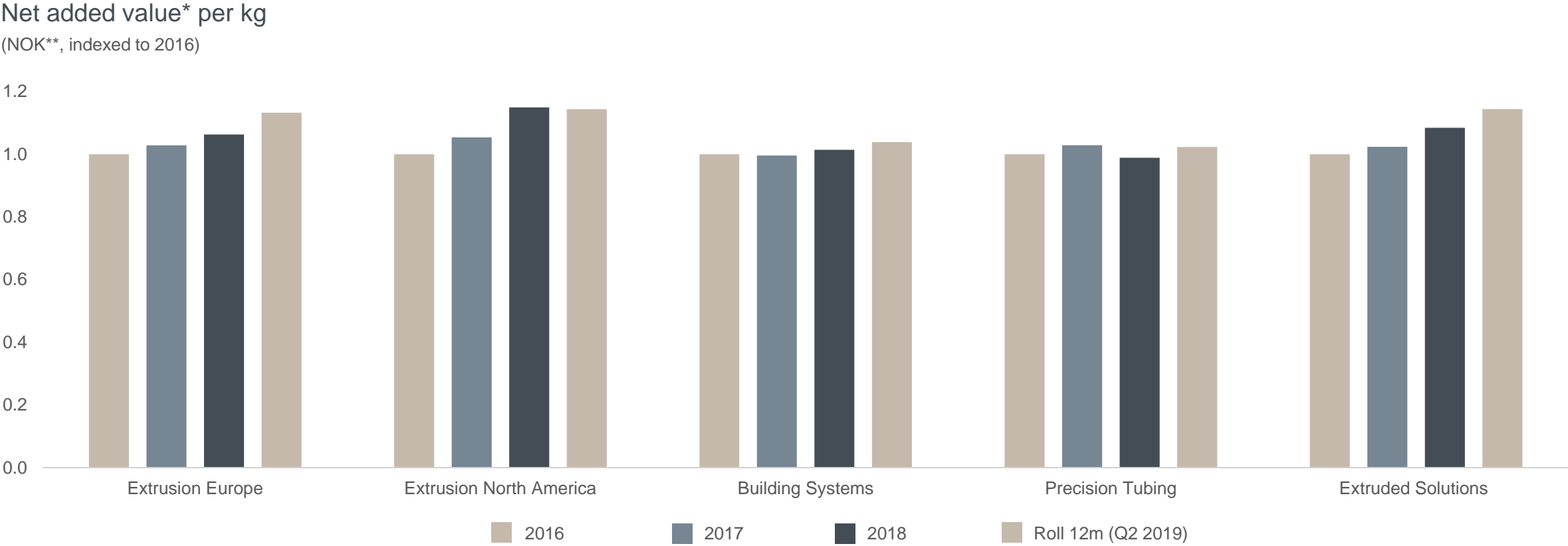


Q2 2019 vs Q1 2019



* Include Body-in-White sales growth of 21% YTD 2019 vs YTD 2018, 9% Q2 2019 vs Q2 2018, -5% Q2 2019 vs Q1 2019

Extruded Solutions: Continued improvements in net added value



* Net Added Value: calculated as operating revenues less cost of material, including freight costs out
** Translated to NOK based on 2016 currency rates

Portfolio optimization in Extruded Solutions

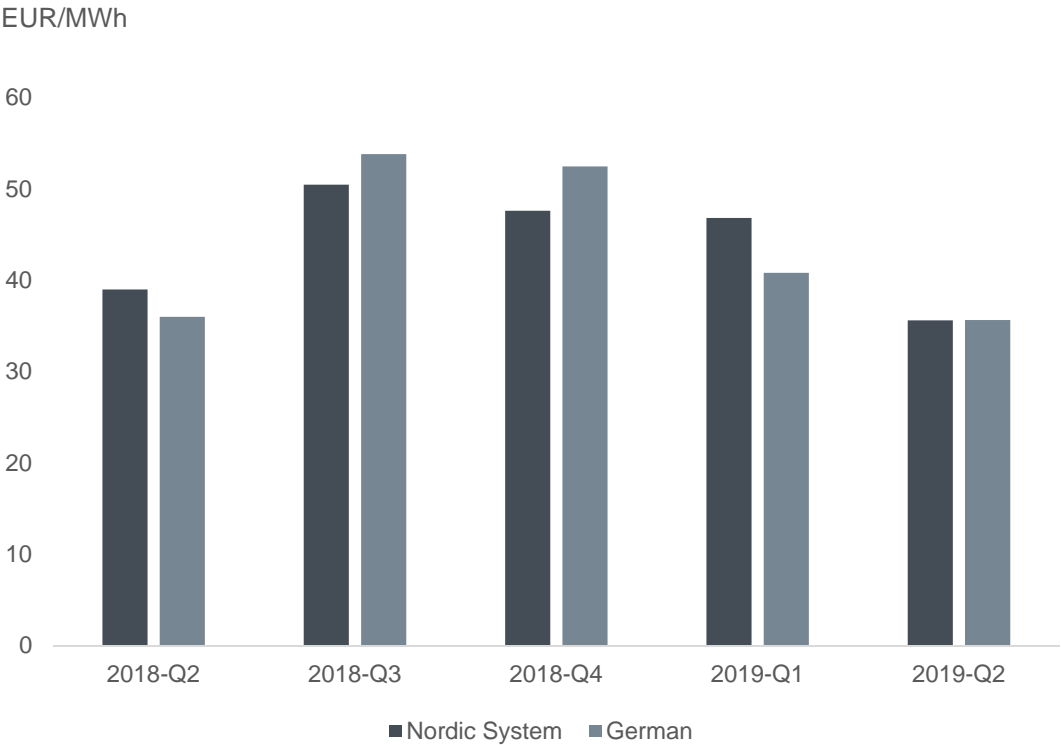
- Constantly reviewing overall portfolio, aiming to optimize and streamline
- Several smaller restructuring efforts ongoing in Europe – simplifying footprint and addressing softening demand in several markets
- The following restructuring efforts are ongoing:
 - **Closure of UK fabrication and automotive site** – transfer of business to other plants in UK
 - **Closure of UK Building Systems warehouse** – transfer of business to other warehouse in UK
 - **Closure of Spanish extrusion plant** – transfer of business to other plants in Iberia
- Positive business case on simplification and reduced costs – business largely kept through other sites
 - Restructuring and impairment cost of MNOK 228 booked in Q2 2019 (items excluded)



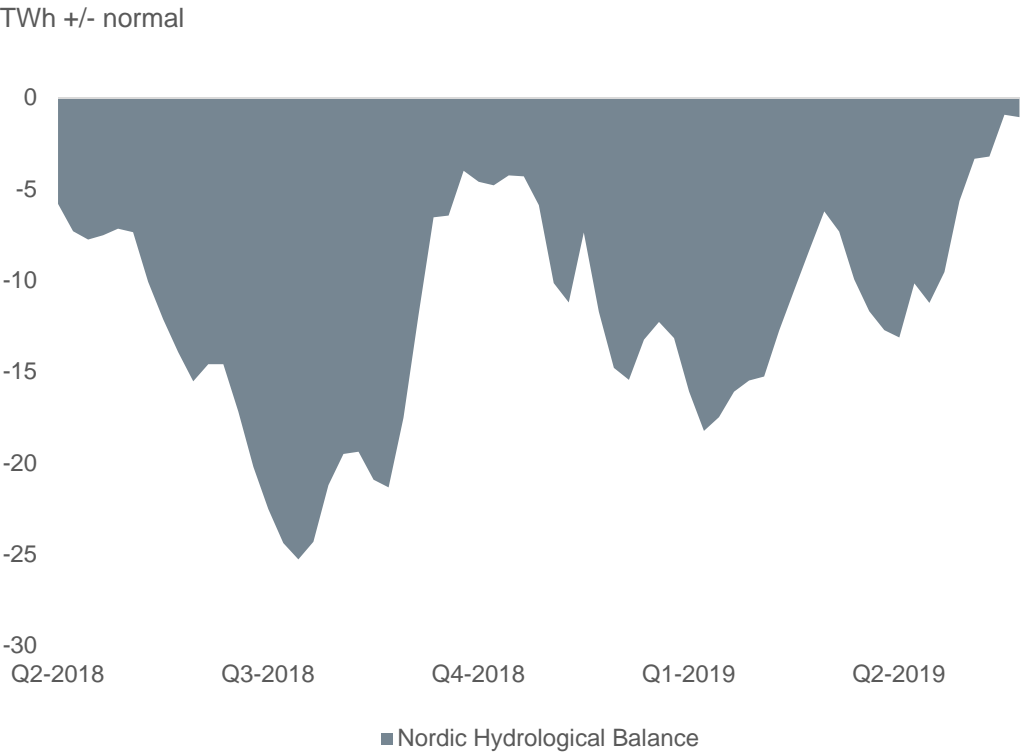
Nordic power prices down on improved hydrological balance and lower coal and gas prices



Nordic System and German Power Prices (EUR/MWh)



Nordic Hydrological Balance



Source Nordic Hydrological Balance: Wattsight, Hydrological normal based on historical data from 1967-2011 and covers Norway and Sweden (the Nordic countries with significant hydrology resources)
Source Prices: NordPool (Nordic system price), Phelix (German price) The system price is the Nordic reference price for trading and clearing of most financial contracts.

Økern Portal in Oslo chooses aluminium with low carbon footprint

Hydro's Circal75R enabling
builders and architects to meet
demanding sustainability targets



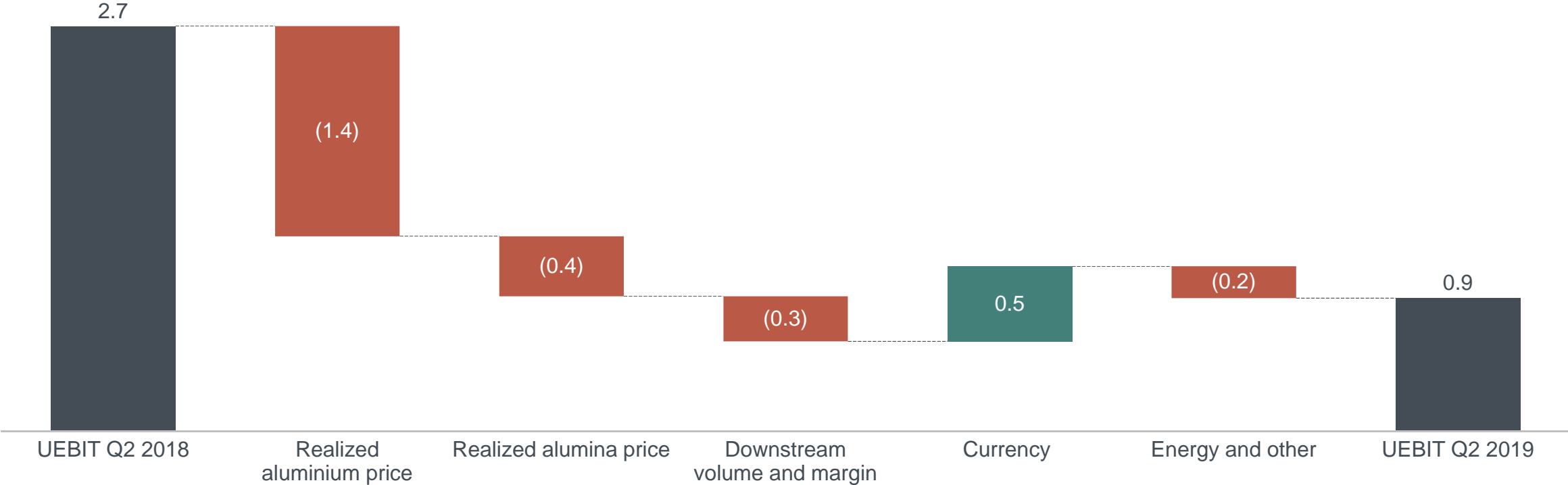
Financial update

Eivind Kallevik,
Executive Vice President and CFO

Results down on lower realized prices



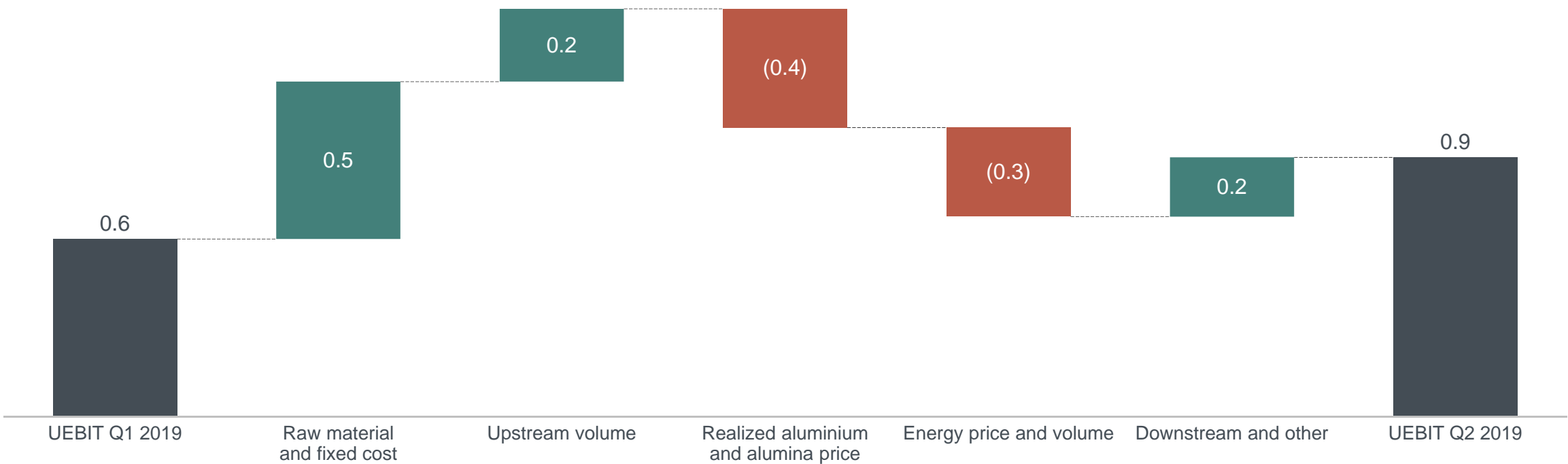
Q2 2019 vs Q2 2018
NOK billion



Improved results on lower costs and higher volumes



Q2 2019 vs Q1 2019
NOK billion



Key financials



NOK million	Q2 2019	Q2 2018	Q1 2019	Year 2018
Revenue	39 176	41 254	37 583	159 377
Underlying EBIT	875	2 713	559	9 069
Items excluded from underlying EBIT	219	(274)	539	547
Reported EBIT	656	2 986	20	8 522
Financial income (expense)	(664)	(441)	6	(2 060)
Income (loss) before tax	(8)	2 545	26	6 462
Income taxes	(183)	(473)	(150)	(2 139)
Net income (loss)	(190)	2 073	(124)	4 323
Underlying net income (loss)	281	2 096	124	5 819
Reported EPS, NOK	(0.04)	1.03	0	2.08
Underlying EPS, NOK	0.19	1.02	0.13	2.75

Items excluded from Underlying EBIT

Excluded a loss of 219 MNOK from Underlying EBIT

NOK million	Q2 2019	Q2 2018	Q1 2019	Year 2018
Underlying EBIT	875	2 713	559	9 069
Unrealized derivative effects on LME related contracts	(11)	306	(200)	(39)
Unrealized derivative effects on power and raw material contracts	72	(92)	(12)	260
Metal effect, Rolled Products	(3)	60	(267)	73
Significant rationalization charges and closure costs	(200)	-	-	(79)
Impairment charges	(28)	-	-	-
Alunorte agreements – provisions	(14)	-	(35)	(519)
Transaction related effects	(35)	-	-	-
Other effects	-	-	(26)	(203)
Pension	-	-	-	(40)
Reported EBIT	656	2 986	20	8 522

Bauxite & Alumina

Results up on ramping-up production and currency tailwinds

Key figures	Q2 2019	Q2 2018	Q1 2019
Alumina production, kmt	932	829	805
Total alumina sales, kmt	1 668	1 842	1 423
Realized alumina price, USD/mt	365	430	373
Implied alumina cost, USD/mt	296	367	311
Bauxite production, kmt	1 624	1 348	1 361
Underlying EBITDA, NOK million	1 004	937	758
Underlying EBIT, NOK million	415	364	153

Underlying EBIT

NOK million



Results Q2 19 vs Q2 18

- Higher production reflecting ongoing ramp-up
- Positive currency effect
- Lower realized alumina price

Outlook Q3 19

- Higher production on the continued ramp-up
- Positive scale effects on costs per tonne

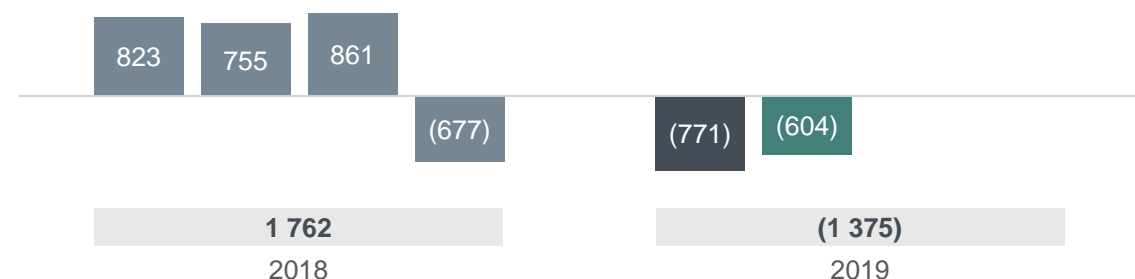
Primary Metal

Results down on lower realized prices

Key figures	Q2 2019	Q2 2018	Q1 2019
Primary aluminium production, kmt	486	492	485
Total sales, kmt	527	549	534
Realized LME price, USD/mt	1 858	2 183	1 912
Realized LME price, NOK/mt	15 959	17 292	16 291
Realized premium, USD/mt	326	364	344
Implied all-in primary cost, USD/mt ¹⁾	2 100	2 175	2 200
Underlying EBITDA, NOK million	(27)	1 309	(180)
Underlying EBIT, NOK million	(604)	755	(771)

Underlying EBIT

NOK million



1) Realized all-in aluminium price minus underlying EBITDA margin, including Qatalum, per mt aluminium sold. Including Qatalum volumes.



Results Q2 19 vs Q2 18

- Lower realized all-in price
- Lower margins on excess power sales in Brazil
- Positive currency effects

Outlook Q3 19

- ~ 55% of primary production for Q3 priced at USD ~1 785 per mt ²⁾
- ~ 55% of premiums affecting Q3 booked at USD ~350 per mt ²⁾
 - Q3 realized premium expected in the range of USD 300-325 per mt
- Raw material costs trending downwards
- Albras ramping up, all electrolysis cells to be restarted by end-Q3

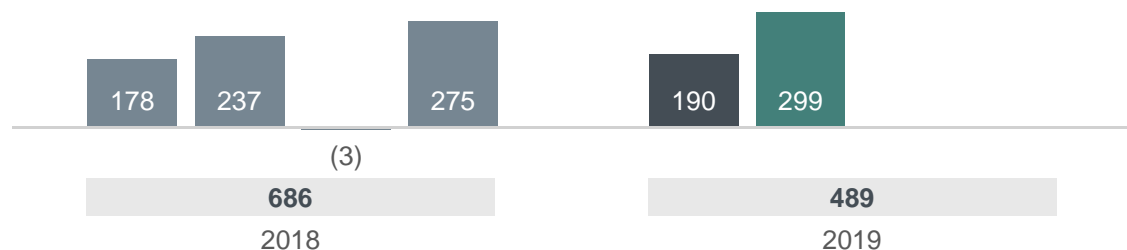
Metal Markets

Results up on stronger performance from remelters and commercial activities

Key figures	Q2 2019	Q2 2018	Q1 2019
Remelt production, kmt	139	153	131
Metal products sales, kmt ¹⁾	707	746	683
Underlying EBITDA, NOK million	328	262	219
Underlying EBIT excl currency and inventory valuation effects, NOK million	352	224	230
Underlying EBIT, NOK million	299	237	190

Underlying EBIT

NOK million



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



Results Q2 19 vs Q2 18

- Improved results from remelters on higher margins
- Improved contribution from sourcing and trading activities
- Currency and inventory valuation effects negative NOK 52 million in Q2 19 vs NOK 14 million positive in Q2 18

Outlook Q3 19

- Continued positive market conditions for remelters
- Volatile trading and currency effects

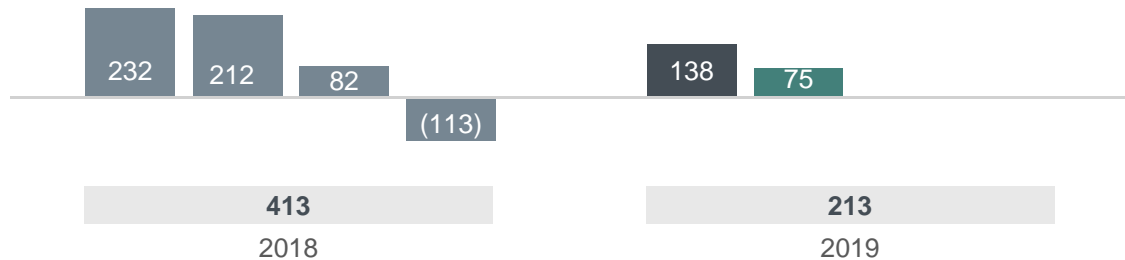
Rolled Products

Results down on lower volumes and margins, weaker results from Neuss smelter

Key figures	Q2 2019	Q2 2018	Q1 2019
External sales volumes, kmt	242	251	246
Underlying EBITDA, NOK million	326	438	384
Underlying EBIT, NOK million	75	212	138

Underlying EBIT

NOK million



Results Q2 19 vs Q2 18

- Lower results from the rolling mills
 - Lower volumes and margins
 - Higher personnel costs
 - Positive currency effect
- Weaker results from Neuss smelter on lower realized aluminium prices

Outlook Q3 19

- Softening demand growth in some market segments
- Neuss results driven by all-in metal and raw material price development

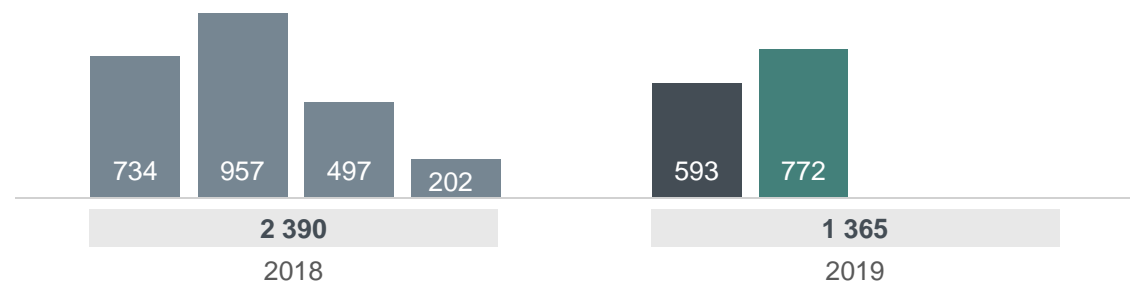
Extruded Solutions

Results negatively affected by the cyber attack and softer markets

Key figures	Q2 2019	Q2 2018	Q1 2019
External sales volumes, kmt	348	373	333
Underlying EBITDA, NOK million	1 279	1 383	1 099
Underlying EBIT, NOK million	772	957	593

Underlying EBIT

NOK million



- 1) Net added value calculated as operating revenues less cost of material, incl. freight costs out.



Results Q2 19 vs Q2 18

- ~ MNOK 150-200 in negative effect from the cyber attack
 - Lower sales volumes, also affected by softer markets
 - Higher costs
- Improved Net added value (NAV) ¹⁾

Outlook Q3 19

- Softening demand growth in some market segments
- Limited effects expected from the cyber attack

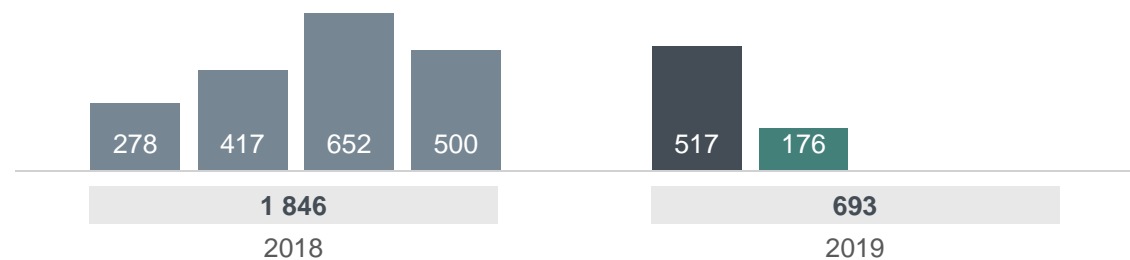
Energy

Results down on lower volumes

Key figures	Q2 2019	Q2 2018	Q1 2019
Power production, GWh	1 993	2 550	2 553
Net spot sales, GWh	289	961	770
Southwest Norway spot price (NO2), NOK/MWh	360	369	468
Underlying EBITDA, NOK million	242	479	583
Underlying EBIT, NOK million	176	417	517

Underlying EBIT

NOK million



Results Q2 19 vs Q2 18

- Significantly lower volumes
- Lower results from commercial activities

Outlook Q3 19

- Continued low production levels



Other and Eliminations

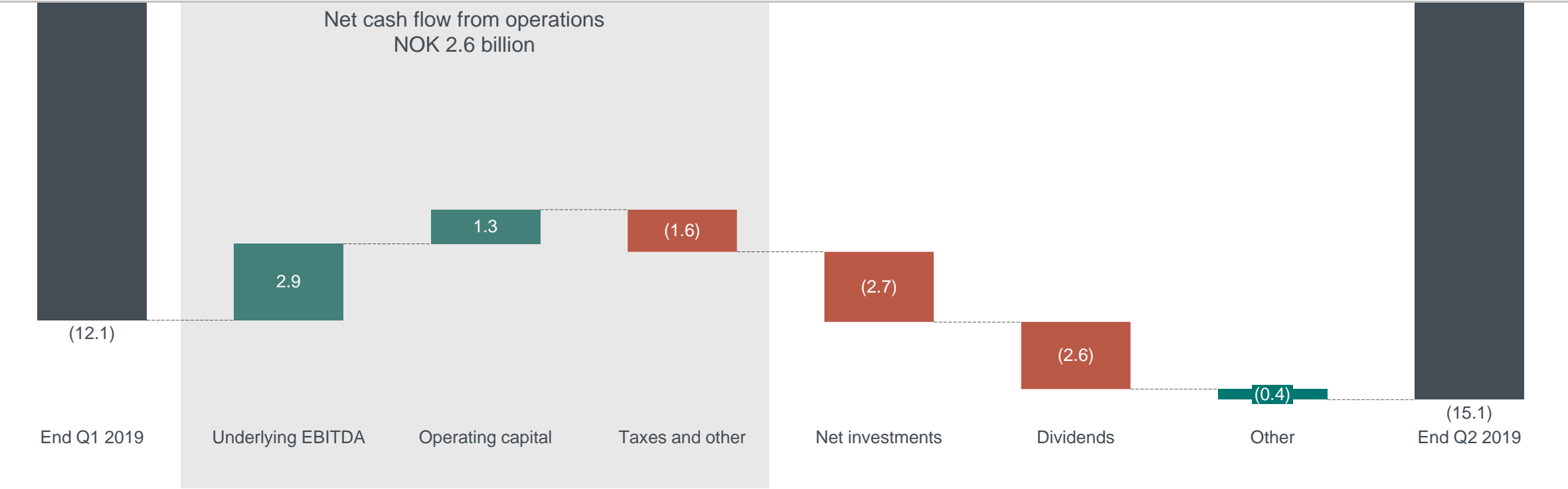
Underlying EBIT, NOK million	Q2 2019	Q2 2018	Q1 2019
Other	(253)	(156)	(307)
Eliminations	(5)	(74)	46
Other and Eliminations	(258)	(229)	(261)

Net debt increased in Q2 2019



Reflecting dividend payment to shareholders

NOK billion



Adjusted net debt up in Q2

Driven by increased net debt position

NOK billion	Jun 30, 2019	Mar 31 2019	Dec 31 2018 Restated ¹⁾
Cash and cash equivalents	10.6	6.1	6.0
Short-term investments	1.1	1.3	1.0
Short-term debt	(8.2)	(8.9)	(9.4)
Long-term debt	(18.6)	(10.6)	(9.3)
Net cash/(debt)	(15.1)	(12.1)	(11.7)
Net pension liability at fair value, net of expected tax benefit	(8.8)	(8.4)	(8.8)
Other adjustments ²⁾	(4.0)	(3.9)	(4.0)
Adjusted net debt ex. EAI	(27.9)	(24.4)	(24.5)
Net debt in EAI	(5.4)	(5.7)	(5.6)
Adjusted net debt incl. EAI	(33.3)	(30.1)	(30.1)

1) Restated with implementation of IFRS16 - Leases

2) "Other adjustments" include, e.g., asset retirement obligations, cash and short-term investments in Industriforsikring.





**Lifting
profitability**



**Driving
sustainability**

Measures to improve performance and cash generation

- Safe and efficient operations - always key priority
- Return Alunorte, Paragominas and Albras to full production and operational excellence
- Rolled Products restructuring and strategic review
- New improvement efforts across all business areas and staffs
- Strict capital discipline and capital allocation
- Differentiate through low-carbon position
- Hydro will host Investor Day in Oslo on September 24



Additional information

Prudent financial framework

Managing industry cyclicalities, driving long-term shareholder value

Lifting cash flow potential

Improving efficiency, strengthening margins

Improvement efforts

- 4.5 BNOK 2009-2015
- 3.0 BNOK target 2016-2019¹⁾
- 1.8 BNOK 2016-2017
- (0.6) BNOK 2016-2018²⁾

Optimizing Net operating capital

Financial strength and flexibility

Investment grade credit rating

Financial ratio targets over the cycle

- FFO/aND ³⁾ > 40%
- aND/E ⁴⁾ < 55%

Strong liquidity

Disciplined capital allocation

Long-term sustaining capex below depreciation

- ~6.5-7.0 BNOK average 2019E-2021E

Total capex incl. growth

- 2018 ~7.8 BNOK⁵⁾

Selective value-add growth

Attractive organic growth prospects and M&A optionality

Predictable dividend policy

Sector competitive TSR

1.25 NOK/share dividend for 2018

Dividend policy

- 40% payout ratio of Net income over the cycle
- Dividend 1.25 NOK/share to be considered as floor

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

Diversified business

1) Real 2015 terms

2) The Better improvement ambition in 2018 was 2.9 BNOK behind the 2018 cumulative target of 2.3 BNOK due to the Alunorte situation. 3 BNOK 2019 target will not be reached.

3) Funds from operations / adjusted net debt

4) Adjusted net debt / Equity

5) In the fourth quarter of 2018, investments were reduced with certain indirect tax charges in Brazil not completely deducted and claimed at the time of investment. A review of deductibility resulted in reduction of asset costs for Bauxite & Alumina and Primary Metal of ~0.8 BNOK. Including the adjustment, 2018 capex amounted to BNOK 7.0

Hydro's aspiration underpinned by firm financial targets



Medium and long-term

	Ambition	Timeframe	2018 status
<i>Better</i> improvement ambition	3.0 BNOK	2016-2019	(0.6) BNOK 2018
Dividend payout ratio	40% of net income	Over the cycle	~57% ¹⁾ 2014-2018
FFO/adjusted net debt ²⁾	> 40%	Over the cycle	44% 2018 ⁵⁾
Adjusted net debt/Equity	< 55%	Over the cycle	33% 2018 ⁵⁾
URoACE	Competitive ³⁾	Over the cycle	6.4 % ^{3,4)} 2018

Better Bigger Greener

1) Payout ratio 5 year average – dividend per share divided by earnings per share from continuing operations for the last 5 years

2) FFO – funds from operations

3) Measured against a relevant peer group

4) Underlying return on average capital employed after tax (URoACE)

5) The figures per December 31, 2018 were restated due to the implementation of IFRS16.

Shareholder and financial policy

- Hydro aims to give its shareholders competitive returns compared to alternative investments in comparable companies
- Dividend policy
 - Average ordinary payout ratio: 40% of reported net income over the cycle
 - 1.25 NOK/share to be considered as a floor, as of Q4 2016
 - Share buybacks and extraordinary dividends as supplement in periods with strong financials and outlook
 - 2018 dividend 1.25 NOK/share, vs. 1.75 NOK/share in 2017
 - Five-year average ordinary pay-out ratio 2014-2018 of ~57%
- Maintain investment-grade credit rating
 - Currently: BBB stable (S&P) & Baa2 stable (Moody's)
 - Competitive access to capital is 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%
- Strong liquidity
 - NOK 10.6 billion in cash and cash equivalents, end-Q2 2019
 - USD 1.7 billion in multi-currency revolving credit facility maturing in 2020

Hedging policy



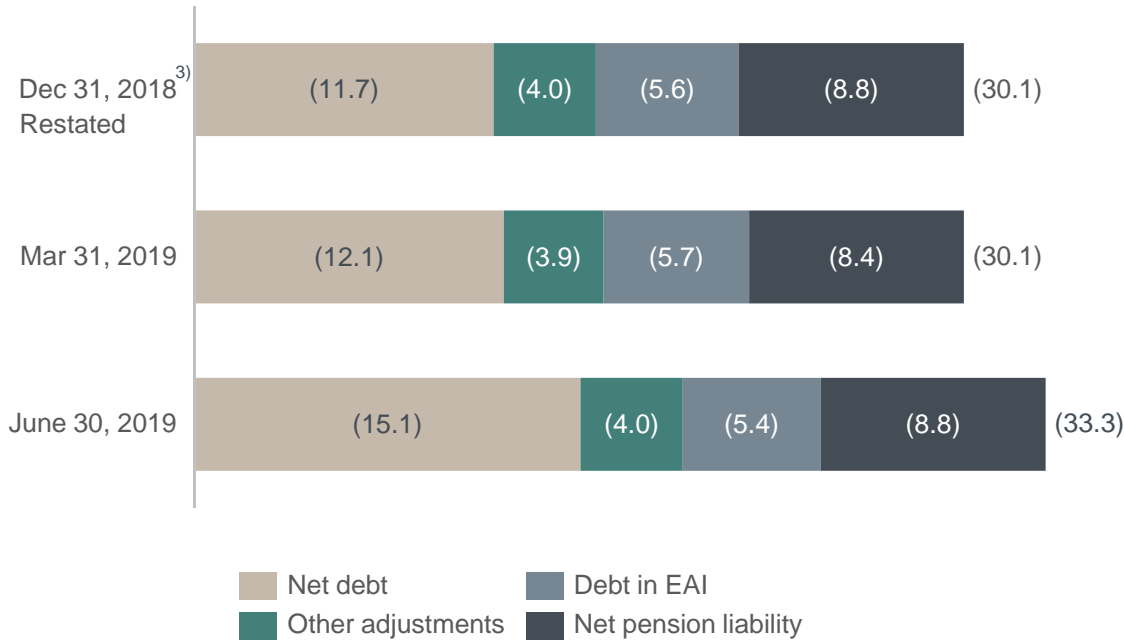
- Hedging strategy
 - Fluctuating with the market: primarily exposed to LME and USD
 - Volatility mitigated by strong balance sheet
 - Strengthening relative position to ensure competitiveness
- Diversified business
 - Upstream cyclicalities balanced with more stable earnings downstream
 - Exposed to 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 a solid balance sheet and investment-grade credit rating

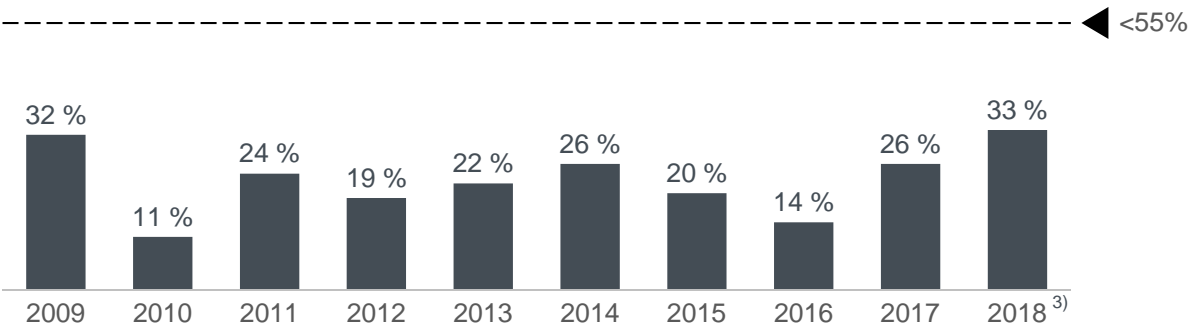


Funds from operations determine the balance sheet structure

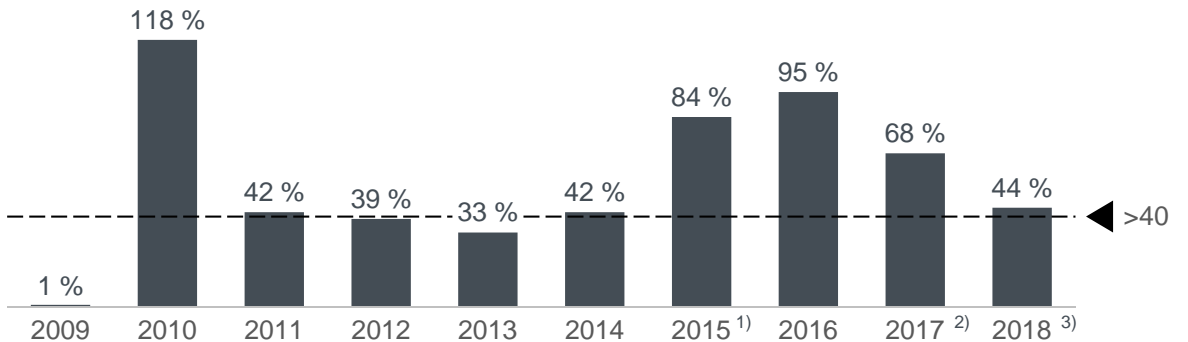
Adjusted net debt
BNOK



Adjusted net debt / Equity



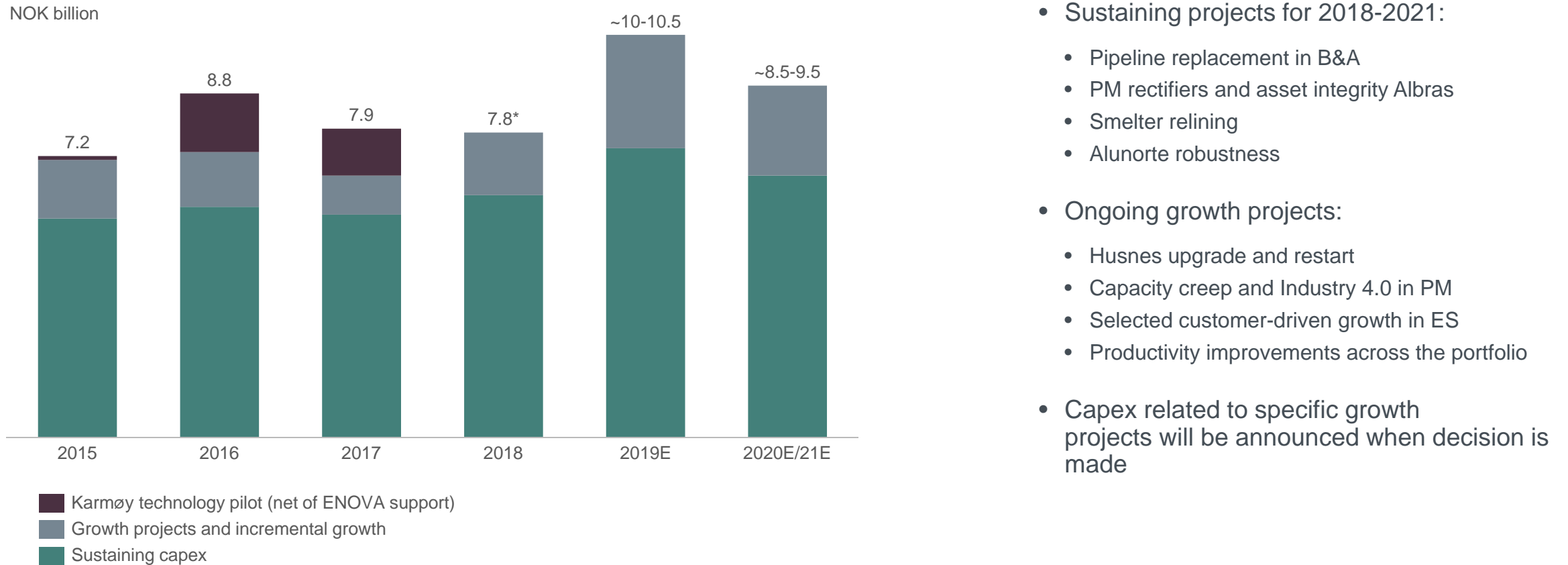
Funds from operations / Adjusted net debt



1) 2015 FFO/aND ratio has been restated due to change of definition
 2) Extruded Solutions reflected as 50% equity accounted investment Q1-Q3 2017 and fully consolidated in Q4 2017
 3) The figures per December 31, 2018 were restated due to the implementation of IFRS16.

Growth capex focused on incremental growth and productivity improvements

Majority of sustaining capex allocated upstream



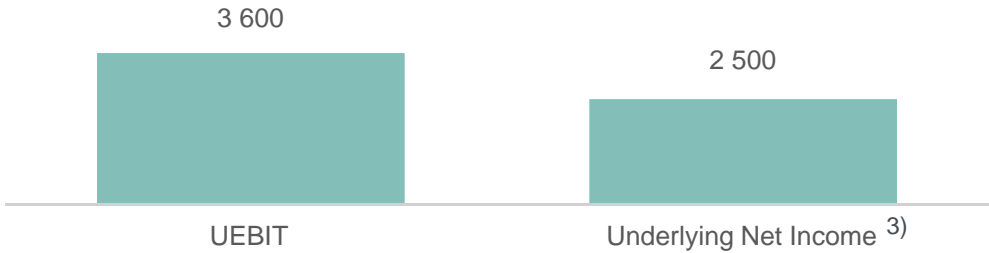
*In the fourth quarter of 2018, investments were reduced with certain indirect tax charges in Brazil not completely deducted and claimed at the time of investment. A review of deductibility resulted in reduction of asset costs for Bauxite & Alumina and Primary Metal of ~0.8 BNOK. Including the adjustment, 2018 capex amounted to BNOK 7.0
Capex including Extruded Solutions

Significant exposure to commodity and currency fluctuations



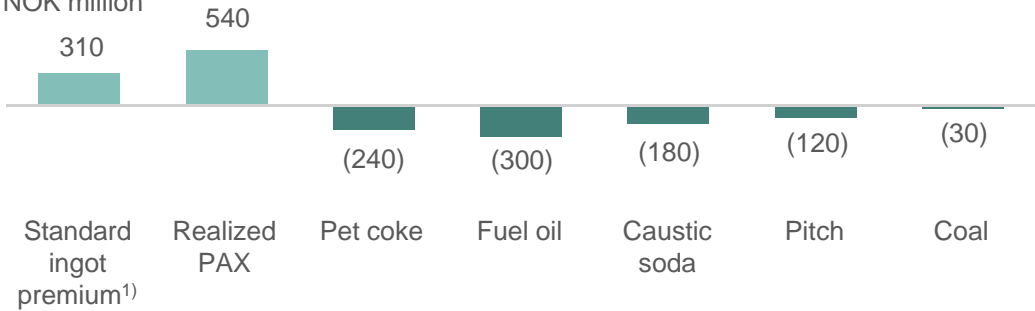
Aluminium price sensitivity +10%

NOK million



Other commodity prices, sensitivity +10% ¹⁾

NOK million



1) Europe duty paid

Currency sensitivities +10%

Sustainable effect:

NOK million	USD	BRL	EUR
UEBIT	3 680	(1 110)	(240)

One-off reevaluation effect:

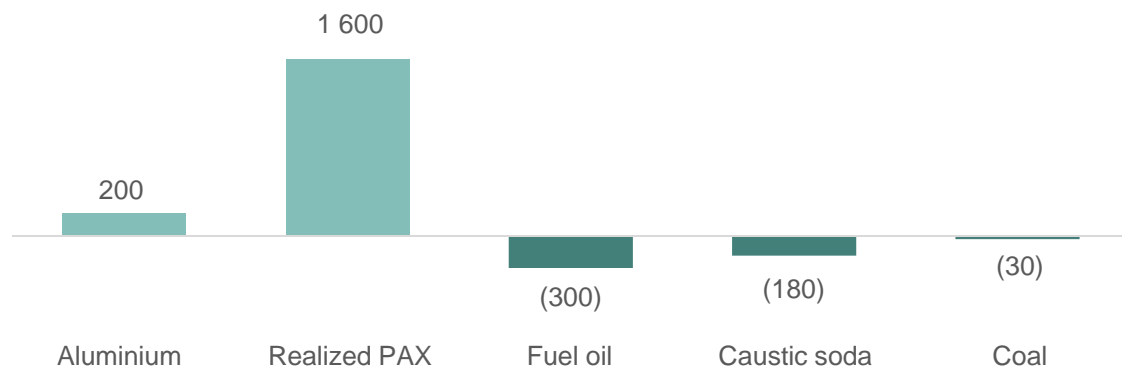
Financial items	40	800	(3 200)
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- Annual sensitivities based on normal annual business volumes (incl. 100% production at Alunorte, Paragominas and Albras) and Q219 realized prices as a starting point LME USD 1 860 per mt, standard ingot premium 150 USD/mt, PAX 380 USD/mt, fuel oil USD 530 per mt, petroleum coke USD 300 per mt, pitch 700 USD/t, caustic soda USD 360 per mt, coal USD 50 per mt, USD/NOK 8.6, BRL/NOK 2.3, EUR/NOK 9.7
- 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
- 2018 Platts alumina index (PAX) exposure used
- U NI sensitivity calculated as U EBIT sensitivity after 30% tax

Bauxite & Alumina sensitivities

Annual sensitivities on underlying EBIT if +10% in price

NOK million



Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	1 380	(750)	-

Revenue impact

- ~14% of 3-month LME price per tonne alumina with 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

Caustic soda

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

Energy

- ~0.12 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

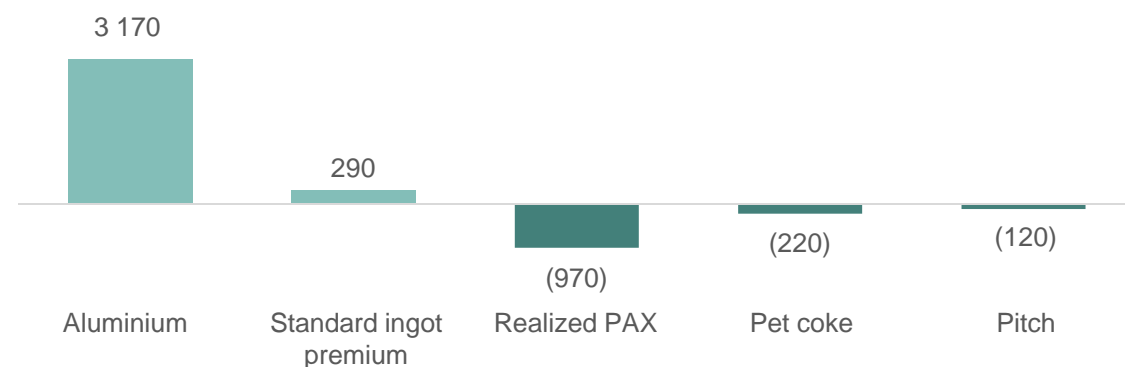
Annual sensitivities based on normal annual business volumes (incl. 100% production at Alunorte, Paragominas and Albras) and Q219 realized prices as a starting point LME USD 1 860 per mt, standard ingot premium 150 USD/mt, PAX 380 USD/mt, fuel oil USD 530 per mt, petroleum coke USD 300 per mt, pitch 700 USD/t, caustic soda USD 360 per mt, coal USD 50 per mt, USD/NOK 8.6, BRL/NOK 2.3, EUR/NOK 9.7
BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated. 2018 Platts alumina index (PAX) exposure used

Primary Metal sensitivities



Annual sensitivities on underlying EBIT if +10% in price

NOK million



Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	1 900	(360)	(250)

Revenue impact

- Realized price lags LME spot by ~1-2 months
- Realized premium lags market premium by ~2-3 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

- ~0.40 tonnes petroleum coke per tonne aluminium, Pace Jacobs Consultancy, 2-3 year volume contracts, quarterly or half yearly pricing
- ~0.08 tonnes pitch per tonne aluminium, CRU, 2-3 year volume contracts, quarterly pricing

Power

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

Items excluded from underlying results - 2019



NOK million (+=loss/)=gain)		Q1 2019	Q2 2019
Alunorte agreements - provision	Bauxite & Alumina	35	14
Total impact	Bauxite & Alumina	35	14
Unrealized derivative effects on LME related contracts	Primary Metal	122	(15)
Unrealized effects on power contracts	Primary Metal	27	(35)
Total impact	Primary Metal	149	(50)
Unrealized derivative effects on LME related contracts	Metal Markets	222	(62)
Total impact	Metal Markets	222	(62)
Unrealized derivative effects on LME related contracts	Rolled Products	(77)	60
Metal effect	Rolled Products	267	3
Total impact	Rolled Products	191	63
Unrealized derivative effects on LME related contracts	Extruded Solutions	(77)	27
Impairment charges	Extruded Solutions	-	28
Significant rationalization charges and closure costs	Extruded Solutions	-	200
Transaction related effects	Extruded Solutions	-	35
Other effects	Extruded Solutions	26	-
Total impact	Extruded Solutions	(51)	289
Unrealized derivative effects on power contracts	Energy	6	2
Total impact	Energy	6	2
Unrealized derivative effects on power contracts	Other and eliminations	(21)	(39)
Unrealized derivative effects on LME related contracts	Other and eliminations	10	1
Total impact	Other and eliminations	(11)	(39)
Items excluded from underlying EBIT	Hydro	539	219
Net foreign exchange (gain)/loss	Hydro	(208)	451
Items excluded from underlying income (loss) before tax	Hydro	331	670
Calculated income tax effect	Hydro	(83)	(198)
Items excluded from underlying net income (loss)	Hydro	248	472

Items excluded from underlying results - 2018



NOK million (+=loss/)=gain)		Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2018
Alunorte agreements - provision	Bauxite & Alumina	-	-	519	-	519
Total impact	Bauxite & Alumina	-	-	519	-	519
Unrealized derivative effects on LME related contracts	Primary Metal	(114)	(41)	101	(89)	(143)
Unrealized effects on power contracts	Primary Metal	20	20	(194)	(64)	(218)
Total impact	Primary Metal	(94)	(21)	(93)	(153)	(361)
Unrealized derivative effects on LME related contracts	Metal Markets	(128)	(32)	104	(144)	(200)
Total impact	Metal Markets	(128)	(32)	104	(144)	(200)
Unrealized derivative effects on LME related contracts	Rolled Products	108	(82)	11	74	111
Metal effect	Rolled Products	47	(60)	(153)	93	(73)
Significant rationalization charges and closure costs	Rolled Products	-	-	-	39	39
Total impact	Rolled Products	154	(142)	(141)	206	77
Unrealized derivative effects on LME related contracts	Extruded Solutions	47	(151)	211	192	299
Significant rationalization charges and closure costs	Extruded Solutions	-	-	-	40	40
Pension	Extruded Solutions	-	-	-	40	40
Other effects	Extruded Solutions	-	-	-	237	237
Total impact	Extruded Solutions	47	(151)	211	509	616
Unrealized derivative effects on power contracts	Energy	-	-	-	(7)	(7)
Total impact	Energy	-	-	-	(7)	(7)
Unrealized derivative effects on power contracts	Other and eliminations	(107)	72	11	(11)	(36)
Unrealized derivative effects on LME related contracts	Other and eliminations	(26)	1	8	(11)	(27)
Other effects	Other and eliminations	-	-	-	(34)	(34)
Total impact	Other and eliminations	(134)	73	19	(56)	(97)
Items excluded from underlying EBIT	Hydro	(155)	(274)	620	356	547
Net foreign exchange (gain)/loss	Hydro	333	306	257	408	1 303
Items excluded from underlying income (loss) before tax	Hydro	178	32	877	764	1 851
Calculated income tax effect	Hydro	(54)	(8)	(105)	(188)	(355)
Items excluded from underlying net income (loss)	Hydro	125	24	772	575	1 495

Operating segment information



Underlying EBIT

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	756	662	413	1 872	741	364	685	493	153	415	3 704	2 282
Primary Metal	900	1 486	1 298	1 377	823	755	861	(677)	(771)	(604)	5 061	1 762
Metal Markets	24	244	91	185	178	237	(3)	275	190	299	544	686
Rolled Products	106	84	95	95	232	212	82	(113)	138	75	380	413
Extruded Solutions	281	329	209	284	734	957	497	202	593	772	1 103	2 390
Energy	423	284	368	457	278	417	652	500	517	176	1 531	1 846
Other and Eliminations	(207)	(159)	(28)	(715)	161	(229)	(97)	(145)	(261)	(258)	(1 108)	(310)
Total	2 284	2 930	2 446	3 555	3 147	2 713	2 676	534	559	875	11 215	9 069

Underlying EBITDA

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	1 334	1 248	1 057	2 551	1 370	937	1 193	877	758	1 004	6 190	4 377
Primary Metal	1 392	1 991	1 795	1 900	1 349	1 309	1 424	(176)	(180)	(27)	7 078	3 906
Metal Markets	47	268	114	209	201	262	22	301	219	328	638	786
Rolled Products	307	297	312	325	456	438	314	133	384	326	1 240	1 340
Extruded Solutions	281	329	209	728	1 155	1 383	931	645	1 099	1 279	1 547	4 114
Energy	476	337	424	519	339	479	716	566	583	242	1 757	2 100
Other and Eliminations	(200)	(151)	(21)	(708)	169	(223)	(90)	(135)	(231)	(224)	(1 081)	(280)
Total	3 637	4 319	3 889	5 524	5 038	4 586	4 510	2 210	2 633	2 928	17 369	16 344

Operating segment information



EBIT

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	756	662	413	1 872	741	364	166	493	118	401	3 704	1 763
Primary Metal	797	1 538	1 282	1 112	917	776	954	(524)	(919)	(554)	4 729	2 123
Metal Markets	(13)	282	59	158	305	270	(107)	419	(31)	361	485	886
Rolled Products	450	84	(22)	-	78	353	223	(319)	(53)	12	512	336
Extruded Solutions	313	273	215	1 722	687	1 109	286	(307)	644	483	2 522	1 774
Energy	423	284	368	457	278	417	652	507	510	174	1 531	1 853
Other and Eliminations	(316)	(176)	7	(810)	295	(303)	(117)	(89)	(249)	(220)	(1 295)	(214)
Total	2 410	2 946	2 323	4 511	3 301	2 986	2 057	178	20	656	12 189	8 522

EBITDA

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	1 334	1 248	1 057	2 551	1 370	937	674	877	724	989	6 190	3 858
Primary Metal	1 289	2 043	1 779	1 635	1 443	1 330	1 517	(23)	(328)	23	6 747	4 267
Metal Markets	9	306	82	182	329	295	(82)	445	(2)	390	579	986
Rolled Products	651	296	196	230	302	580	455	(73)	194	263	1 372	1 263
Extruded Solutions	313	273	215	2 166	1 108	1 534	720	136	1 150	1 017	2 966	3 498
Energy	476	337	424	519	339	479	716	573	576	240	1 757	2 107
Other and Eliminations	(310)	(168)	13	(803)	302	(296)	(110)	(80)	(219)	(186)	(1 268)	(183)
Total	3 762	4 335	3 766	6 481	5 193	4 860	3 890	1 854	2 094	2 737	18 344	15 796

Operating segment information



Total revenue

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	5 911	5 858	5 612	8 040	6 309	6 877	6 749	8 613	4 866	5 745	25 421	28 548
Primary Metal	8 641	9 575	8 958	9 291	10 170	10 083	9 984	9 196	9 023	8 937	36 466	39 434
Metal Markets	12 149	13 604	11 862	12 991	13 898	14 205	13 230	12 903	12 959	13 301	50 606	54 237
Rolled Products	6 277	6 569	6 435	6 434	6 797	7 145	6 791	6 223	6 844	6 623	25 715	26 955
Extruded Solutions				14 153	15 911	16 980	15 976	15 218	16 013	17 270	14 153	64 085
Energy	1 955	1 750	1 831	2 169	1 762	2 163	2 488	2 267	2 261	1 815	7 705	8 681
Other and Eliminations	(11 906)	(12 765)	(11 900)	(14 276)	(14 877)	(16 198)	(15 452)	(16 034)	(14 382)	(14 515)	(50 847)	(62 562)
Total	23 026	24 591	22 799	38 803	39 971	41 254	39 766	38 386	37 583	39 176	109 220	159 377

External revenue

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	3 382	3 417	3 293	5 095	3 509	3 640	3 016	4 232	2 370	2 692	15 188	14 396
Primary Metal	1 700	1 944	1 865	2 068	2 018	1 993	2 312	1 505	1 390	1 457	7 578	7 829
Metal Markets	11 094	12 080	10 675	10 414	10 901	10 905	10 575	10 121	10 139	10 577	44 264	42 502
Rolled Products	6 153	6 629	6 380	6 375	6 870	7 011	6 773	6 287	6 777	6 654	25 538	26 940
Extruded Solutions				14 083	15 932	16 877	15 934	15 280	15 924	17 271	14 083	64 023
Energy	687	514	582	767	738	823	1 151	961	983	519	2 550	3 673
Other and Eliminations	9	6	3	-	4	6	5	(1)	-	5	18	14
Total	23 026	24 591	22 799	38 803	39 971	41 254	39 766	38 386	37 583	39 176	109 220	159 377

Operating segment information



Internal revenue

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	2 528	2 441	2 320	2 944	2 800	3 237	3 733	4 381	2 496	3 052	10 234	14 152
Primary Metal	6 941	7 631	7 093	7 223	8 152	8 090	7 672	7 691	7 633	7 480	28 888	31 605
Metal Markets	1 054	1 523	1 187	2 577	2 997	3 301	2 656	2 781	2 820	2 724	6 341	11 735
Rolled Products	124	(61)	55	59	(72)	134	18	(64)	66	(31)	178	15
Extruded Solutions				70	(21)	103	42	(62)	89	(1)	70	61
Energy	1 267	1 236	1 249	1 403	1 024	1 340	1 337	1 306	1 278	1 296	5 155	5 007
Other and Eliminations	(11 915)	(12 772)	(11 903)	(14 276)	(14 881)	(16 204)	(15 457)	(16 033)	(14 382)	(14 520)	(50 865)	(62 576)
Total	-	-	-	-	-	-	-	-	-	-	-	-

Share of profit /(loss) in equity accounted investments

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	-	-	-	-	-	-	-	-	-	-	-	-
Primary Metal	98	231	159	258	210	280	238	(5)	32	24	745	722
Metal Markets	-	-	-	-	-	-	-	-	-	-	-	-
Rolled Products	-	-	-	-	-	-	-	-	-	-	-	-
Extruded Solutions	313	273	215	12	17	11	14	10	12	5	812	53
Energy	-	-	-	(7)	(10)	(11)	(4)	(11)	(9)	(9)	(7)	(35)
Other and Eliminations	(1)	(13)	(3)	(7)	3	5	(20)	35	(32)	27	(24)	24
Total	409	491	371	256	221	286	229	30	3	47	1 527	765

Operating segment information

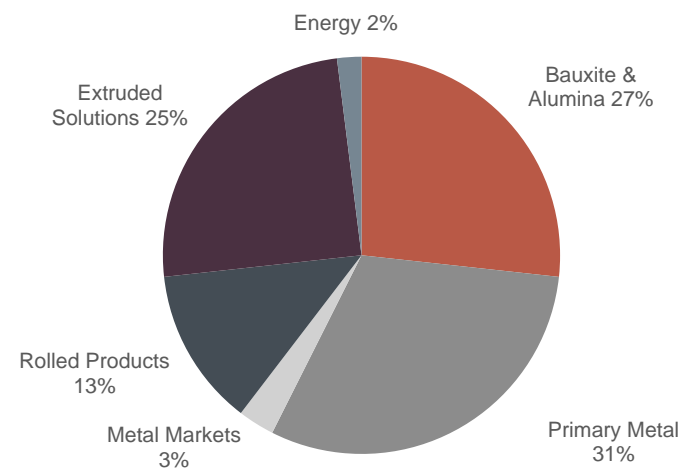


Return on average capital employed ¹⁾ (RoaCE)

	Reported RoaCE							Underlying RoaCE						
	2018	2017	2016	2015	2014	2013	2012	2018	2017	2016	2015	2014	2013	2012
Bauxite & Alumina	4.3%	8.5%	2.7 %	5.3 %	(0.1) %	(2.5) %	(1.5) %	5.5%	8.5%	2.8 %	5.3 %	(0.1) %	(2.2) %	(1.6) %
Primary Metal	5.4%	11.8%	5.2 %	10.7 %	10.4 %	2.3 %	(3.1) %	4.6%	12.6%	5.2 %	11.0 %	10.4 %	3.9 %	0.4 %
Metal Markets	26.6%	18.6%	19.6 %	5.4 %	21.9 %	22.3 %	4.3 %	20.6%	20.9%	15.9 %	11.4 %	19.4 %	19.9 %	6.6 %
Rolled Products	1.9%	3.2%	6.2 %	1.1 %	8.6 %	0.7 %	6.7 %	2.4%	2.4%	4.6 %	7.8 %	5.3 %	5.2 %	5.3 %
Extruded Solutions ²⁾	5.4%	13.4%						7.2%	6.6%					
Energy	20.6%	17.5%	18.1 %	17.2 %	17.4 %	36.1 %	23.0 %	20.5%	17.5%	18.1 %	17.3 %	17.4 %	36.1 %	23.2 %
Hydro Group	5.8%	11.2%	6.5 %	7.5 %	4.9 %	1.1 %	(0.5) %	6.4%	9.6%	5.1 %	9.2 %	5.2 %	2.3 %	0.9 %

Capital employed – upstream focus

NOK million	Jun 30, 2019
Bauxite & Alumina	29 006
Primary Metal	33 049
Metal Markets	2 720
Rolled Products	13 484
Extruded Solutions	27 016
Energy	1 981
Other and Eliminations	(6 544)
Total	100 713



Graph excludes BNOK (6.5) in capital employed in Other and Eliminations

1) RoaCE at business area level is calculated using 25% tax rate (30% tax rate applied for years prior to 2017). For Energy, 70% tax rate is used for 2018, 65% for 2017, 60% for 2016 and 55% for prior years. 2018 RoaCE has been restated due to the implementation of IFRS16 Leases.

2) Extruded Solutions reflected as 50% equity accounted investment Q1-Q3 2017 and fully consolidated from Q4 2017

Operating segment information



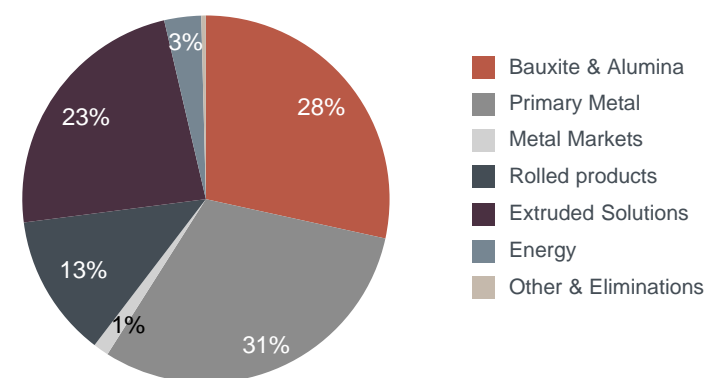
Depreciation, amortization and impairment

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Bauxite & Alumina	577	586	644	679	630	573	509	384	605	589	2 486	2 095
Primary Metal	492	505	504	526	546	575	583	548	619	605	2 026	2 253
Metal Markets	23	24	24	24	24	25	25	26	29	29	95	101
Rolled Products	201	212	217	230	223	227	231	246	247	251	860	927
Extruded Solutions				444	421	425	434	443	506	535	444	1 723
Energy	53	54	56	60	58	59	61	63	62	62	223	239
Other and Eliminations	6	7	7	7	7	7	7	10	30	34	28	30
Total	1 352	1 389	1 450	1 970	1 909	1 891	1 851	1 719	2 098	2105	6 162	7 369

Indicative depreciation currency exposure by business area

Percent	USD	EUR	BRL	NOK & Other
Bauxite & Alumina			100%	
Primary Metal	20%		20%	60%
Metal Markets	30%	50%		20%
Rolled Products		90%		10%
Extruded Solutions	30%	40%		30%
Energy				100%
Other & Eliminations		10%		90%

Depreciation by business area 2018, 7.4 BNOK



Income statements



NOK million	Q2 2019	Q2 2018	Q1 2019	First half 2019	First Half 2018	Year 2018
Revenue	39 176	41 254	37 583	76 759	81 225	159 377
Share of the profit (loss) in equity accounted investments	47	286	3	50	506	765
Other income, net	139	184	183	322	339	772
Total revenue and income	39 362	41 724	37 769	77 132	82 070	160 913
Raw material and energy expense	25 920	26 496	25 136	51 056	51 692	102 523
Employee benefit expense	6 192	5 828	6 023	12 215	11 600	23 176
Depreciation, amortization and impairment	2 105	1 891	2 098	4 204	3 799	7 369
Other expenses	4 488	4 524	4 493	8 981	8 692	19 324
Earnings before financial items and tax (EBIT)	656	2 986	20	676	6 287	8 522
Financial income	90	89	63	153	147	255
Financial expense	(754)	(530)	(57)	(811)	(1 063)	(2 315)
Income (loss) before tax	(8)	2 545	26	18	5 371	6 462
Income taxes	(183)	(473)	(150)	(333)	(1 222)	(2 139)
Net income (loss)	(190)	2 073	(124)	(315)	4 149	4 323
Net income (loss) attributable to non-controlling interests	(105)	(35)	(134)	(239)	(49)	67
Net income (loss) attributable to Hydro shareholders	(85)	2 108	9	(76)	4 199	4 256
Earnings per share attributable to Hydro shareholders	(0.04)	1.03	0	(0.04)	2.05	2.08

NOK million	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Net income (loss)	1 838	1 562	2 184	3 600	2 076	2 073	925	(750)	(124)	(190)	9 184	4 323
Underlying net income (loss)	1 580	2 214	1 785	2 816	2 201	2 096	1 696	(175)	124	281	8 396	5 819
Earnings per share	0.86	0.73	1.00	1.71	1.02	1.03	0.37	(0.34)	0	(0.04)	4.30	2.08
Underlying earnings per share	0.75	1.04	0.82	1.33	1.06	1.02	0.74	(0.06)	0.13	0.19	3.95	2.75

Balance sheets



NOK million	Jun 30, 2019	Mar 31, 2019	Dec 31 2018 ¹⁾	Sep 30 2018	Jun 30 2018	Mar 31 2018
Cash and cash equivalents	10 590	6 099	5 995	6 846	5 682	9 371
Short-term investments	1 090	1 274	975	1 176	1 136	1 031
Accounts receivable	23 186	23 542	20 744	21 727	23 442	22 785
Inventories	22 718	25 004	26 483	23 916	22 337	20 626
Other current assets	471	349	801	738	978	818
Property, plant and equipment	73 193	72 882	74 369	66 251	66 683	69 945
Intangible assets	11 485	11 133	11 443	10 695	11 660	12 133
Investments accounted for using the equity method	10 936	11 349	11 570	11 094	11 140	10 551
Prepaid pension	5 986	5 854	5 162	6 857	6 322	5 933
Other non-current assets	7 322	7 157	7 385	5 962	5 780	5 588
Total assets	166 978	164 644	164 928	155 261	155 159	158 781
Bank-loans and other interest-bearing short-term debt	8 177	8 913	9 373	6 607	4 969	5 269
Trade and other payables	21 014	22 146	20 381	19 906	21 351	20 621
Other current liabilities	3 688	4 674	6 062	5 897	4 976	4 852
Long-term debt	18 620	10 559	9 342	7 886	9 377	8 746
Provisions	5 577	5 673	5 588	5 358	5 532	5 652
Pension liabilities	16 646	15 981	15 648	14 416	14 665	14 911
Deferred tax liabilities	3 123	3 052	3 031	3 952	3 456	3 522
Other non-current liabilities	4 536	4 252	4 746	3 756	3 673	4 084
Equity attributable to Hydro shareholders	81 143	84 692	85 820	83 012	82 676	86 233
Non-controlling interests	4 452	4 703	4 936	4 472	4 486	4 891
Total liabilities and equity	166 978	164 644	164 928	155 261	155 159	158 781

1) Restated

Operational data



Bauxite & Alumina	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Alumina production (kmt)	1 523	1 576	1 605	1 693	1 277	829	821	786	805	932	6 397	3 712
Sourced alumina (kmt)	600	645	667	610	900	985	907	1 163	711	704	2 522	3 954
Total alumina sales (kmt)	2 129	2 196	2 251	2 344	2 071	1 842	1 711	1 983	1 423	1 668	8 920	7 607
Realized alumina price (USD) ¹⁾	309	295	297	398	371	430	460	463	373	365	326	429
Implied alumina cost (USD) ²⁾	235	228	237	265	287	367	376	409	311	296	242	358
Bauxite production (kmt) ³⁾	2 400	2 943	3 043	3 049	2 326	1 348	1 286	1 254	1 361	1 624	11 435	6 214
Sourced bauxite (kmt) ⁴⁾	1 675	1 809	2 013	2 103	1 317	1 250	905	1 730	1 029	1 315	7 601	5 202
Underlying EBITDA margin ¹¹⁾	22.6%	21.3%	18.8%	31.7%	21.7%	13.6%	17.7%	10.2%	15.6%	17.5%	24.3%	15.3%

Primary Metal ⁵⁾	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Realized aluminium price LME, USD/mt	1 757	1 902	1 921	2 092	2 140	2 183	2 194	2 041	1 912	1 858	1 915	2 140
Realized aluminium price LME, NOK/mt ⁷⁾	14 798	16 265	15 496	17 066	16 929	17 292	17 905	17 038	16 291	15 959	15 888	17 282
Realized premium above LME, USD/mt ⁶⁾	266	273	261	259	295	364	367	362	344	326	265	346
Realized premium above LME, NOK/mt ⁶⁾⁷⁾	2 236	2 330	2 106	2 116	2 335	2 881	2 999	3 025	2 935	2 802	2 197	2 791
Realized NOK/USD exchange rate ⁷⁾	8.42	8.55	8.07	8.16	7.91	7.92	8.16	8.35	8.52	8.59	8.30	8.08
Implied primary cost (USD) ⁸⁾	1 350	1 375	1 425	1 575	1 725	1 775	1 750	2 000	1 850	1 775	1 425	1 825
Implied all-in primary cost (USD) ⁹⁾	1 675	1 700	1 725	1 850	2 075	2 175	2 150	2 350	2 200	2 100	1 725	2 175
Primary aluminium production, kmt	516	523	527	528	514	492	497	490	485	486	2 094	1 993
Casthouse production, kmt	521	551	548	550	531	523	507	496	473	477	2 169	2 058
Total sales, kmt ¹⁰⁾	577	579	568	554	578	549	516	503	534	527	2 278	2 145
Underlying EBITDA margin ¹¹⁾	16.1%	20.8%	20.0%	20.4%	13.3%	13.0%	14.3%	(1.9)%	(2.0)%	(0.3)%	19.4%	9.9%

1) Weighted average of own production and third party contracts, excluding hedge results. The majority of the alumina is sold linked to either the LME prices or alumina index with a one month delay. Sourced alumina volumes have been re-calculated, with Q1 2018 being adjusted accordingly.

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

3) Paragominas production, on wet basis

4) 40 percent MRN offtake from Vale and 5 percent Hydro share on wet basis

5) 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

6) Average realized premium above LME for casthouse sales from Primary Metal.

7) 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

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

10) Total sales replaces previous casthouse sales due to change of definition

11) Underlying EBITDA divided by total revenues

Operational data



Metal Markets	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Remelt production (1 000 mt)	143	152	136	137	150	153	126	135	131	139	568	563
Third-party Metal Products sales (1 000 mt)	79	80	74	86	70	77	83	73	70	83	319	304
Metal Products sales excl. ingot trading (1 000 mt) ¹⁾	735	759	707	720	745	746	685	682	683	707	2 921	2 859
Hereof external sales excl. ingot trading (1 000 mt)	672	675	639	589	580	563	543	532	539	556	2 575	2 217
External revenue (NOK million)	11 094	12 080	10 675	10 414	10 901	10 905	10 575	10 121	10 139	10 577	44 264	42 502
Rolled Products	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Rolled Products external shipments (1 000 mt)	241	239	236	224	245	251	235	220	246	242	940	951
Rolled Products – Underlying EBIT per mt, NOK	442	351	400	424	949	844	349	(512)	560	309	404	435
Underlying EBITDA margin ²⁾	4.9%	4.5%	4.8%	5.0%	6.7%	6.1%	4.6%	2.1%	5.6%	4.9%	4.8 %	5.0%
Extruded Solutions ³⁾	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Extruded Solutions external shipments (1 000 mt)	355	359	339	318	362	373	343	318	333	348	1 372	1 396
Extruded Solutions – Pro-forma underlying EBIT per mt, NOK	1 973	2 328	1 505	893	2 028	2 566	1 449	635	1 781	2 219	1 699	1 712
Underlying EBITDA margin ²⁾	7.7%	8.2%	6.5%	5.2%	7.3%	8.1%	5.8%	4.2%	6.9%	7.4%	6.9%	6.4%
Energy	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Year 2017	Year 2018
Power production, GWh	2 869	2 369	2 509	3 089	2 433	2 550	2 888	2 822	2 553	1 993	10 835	10 693
Net spot sales, GWh	1 409	996	1 168	1 633	763	961	1 315	1 166	770	289	5 206	4 204
Nordic spot electricity price, NOK/MWh	280	257	266	294	372	373	484	460	457	346	274	423
Southern Norway spot electricity price (NO2), NOK/MWh	278	252	258	287	361	369	475	455	468	360	269	415
Underlying EBITDA margin ²⁾	24.4%	19.3%	23.1%	23.9 %	19.2%	22.2%	28.8%	24.9%	25.8%	13.4%	22.8%	24.2%

1) Includes external and internal sales from primary casthouse operations, remelters and third party Metal sources

2) Underlying EBITDA divided by total revenues

3) FY 2017 and historical operational data based on pro forma figures

Extruded Solutions, information by business area



Historical Sapa information (100% basis) Q1 2017 – Q3 2017

Extruded Solutions, fully consolidated in Hydro since Q4 2017 ¹⁾

Precision Tubing	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018	Q1 2019	Q2 2019
Volume (kmt)	36	38	36	35	37	41	41	38	157	34	36
Operating revenues (NOKm)	1 651	1 734	1 601	1 645	1 700	1 910	1 873	1 722	7 205	1 623	1 788
Underlying EBITDA (NOKm)	180	193	157	138	168	120	121	98	507	86	146
Underlying EBIT (NOKm)	123	136	97	66	103	55	50	30	237	18	87

Building Systems	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018	Q1 2019	Q2 2019
Volume (kmt)	20	21	19	19	20	21	18	19	78	18	22
Operating revenues (NOKm)	1 830	2 044	1 765	1 960	2 057	2 124	1 919	2 045	8 145	1 973	2 328
Underlying EBITDA (NOKm)	155	219	118	137	167	198	130	155	650	104	233
Underlying EBIT (NOKm)	119	183	85	85	116	146	70	99	430	22	143

Other and eliminations	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018	Q1 2019	Q2 2019
Underlying EBITDA (NOKm)	(63)	(43)	(41)	(35)	(45)	(46)	(21)	(118)	(230)	(56)	(96)
Underlying EBIT (NOKm)	(69)	(49)	(42)	(45)	(55)	(58)	(35)	(130)	(278)	(58)	(99)

Extrusion Europe	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018	Q1 2019	Q2 2019
Volume (kmt)	154	155	142	134	159	160	138	129	586	139	142
Operating revenues (NOKm)	5 553	5 999	5 460	5 541	6 600	6 664	5 867	5 719	24 850	6 328	6 461
Underlying EBITDA (NOKm)	390	416	290	240	417	504	263	201	1 385	346	348
Underlying EBIT (NOKm)	274	292	164	59	246	333	98	27	705	141	144

Extrusion North America	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018	Q1 2019	Q2 2019
Volume (kmt)	150	151	148	134	152	157	152	137	598	146	148
Operating revenues (NOKm)	5 514	5 753	5 369	5 211	5 882	6 519	6 541	6 091	25 033	6 306	7 053
Underlying EBITDA (NOKm)	437	466	390	248	448	606	439	310	1 802	619	648
Underlying EBIT (NOKm)	330	353	284	119	325	481	314	176	1 295	469	498

1) Includes certain effects of the acquisition such as increased depreciation and amortization following fair value adjustments related to long-lived assets. Estimate increased depreciation of around MNOK 300 per annum for Extruded Solutions vs “old Sapa”.

Next events

Investor Day
September 24, 2019

Third quarter results
October 23, 2019

For more information see
www.hydro.com/ir

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