



Fourth quarter 2018 Investor presentation

February 2019

Table of contents



Fourth quarter results 2018	3
Market	37
Business overview	54
Hydro - Group	55
Bauxite & Alumina	70
Energy	79
Primary Metal	86
Metal Markets	94
Rolled Products	99
Extruded Solutions	106
Additional information	113

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.

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Fourth quarter results 2018

Investor presentation, February 2019



Fourth quarter highlights

- Underlying EBIT of NOK 534 million
- Alunorte, Paragominas and Albras producing at 50%
- Significantly increased raw material costs
- Downstream results down on margin and volume
- Strong Energy result on high prices
- *Better* improvement program hit by the Alunorte situation – 2018 target not met, will not reach 2019 target
- Proposed dividend for 2018 of NOK 1.25 per share
- 2019 global primary market expected in deficit, continued macro uncertainty

Progressing towards normal operations

TAC/TC signed on September 5

- ✓ Technical TAC agreement
 - Audits, studies and monitoring of environmental situation, and improvements of the water treatment system, estimated at BRL 110 million
 - BRL 65 million for food cards to families living in close vicinity
 - Settlement of fines, totalling BRL 33 million
- ✓ Social TC agreement
 - Investment of BRL 150 million in projects supporting sustainable urban development in defined communities

IBAMA and SEMAS

- Press Filter
 - ✓ IBAMA lifted embargo on Oct 5, 2018
- DRS2
 - ✓ SEMAS issued technical note confirming validity of existing licence on Oct 19, 2018
 - SEMAS to grant authorization following Federal Court lifting embargo
 - ✓ IBAMA lifted its embargo on Oct 25, 2018
- Production
 - ✓ SEMAS issued technical note on January 15, attesting that Alunorte safely can resume normal operations – lifting SEMAS' restriction on production

Federal Court and Ministerio Público

- Alunorte continuously providing stakeholders with documentation on safety of operations
 - ✓ Independent opinions
 - ✓ Development on TAC/TC commitments on track
- Federal Court embargoes (civil and criminal) on DRS2 and production still outstanding

Alunorte's water basin capacity increased by 350%

50% expansion of water treatment capacity on track to be finalized by Q2 2019



Commissioning of press filters – best available technology

DRS2 with press filter technology only long-term sustainable solution for Alunorte

- Investments decision taken on DRS2 and press filter in 2014
- The most advanced technology improving geotechnical safety and reducing required storage area and environmental footprint

Press filters commissioning process

- Planned for parallel commissioning of press filter/DRS2 and scale down drum filter/DRS1
- Embargo halted commissioning, learning and optimization of press filters – combined with discontinued use of drum filters this may lead to delay in Alunorte ramp-up
- Current estimated capacity of 8 installed press filters are 75-85% of Alunorte nameplate, expected to be reached ~2 months after embargoes being lifted
- 9th press filter to further increase capacity to become operational Q2/Q3 2019

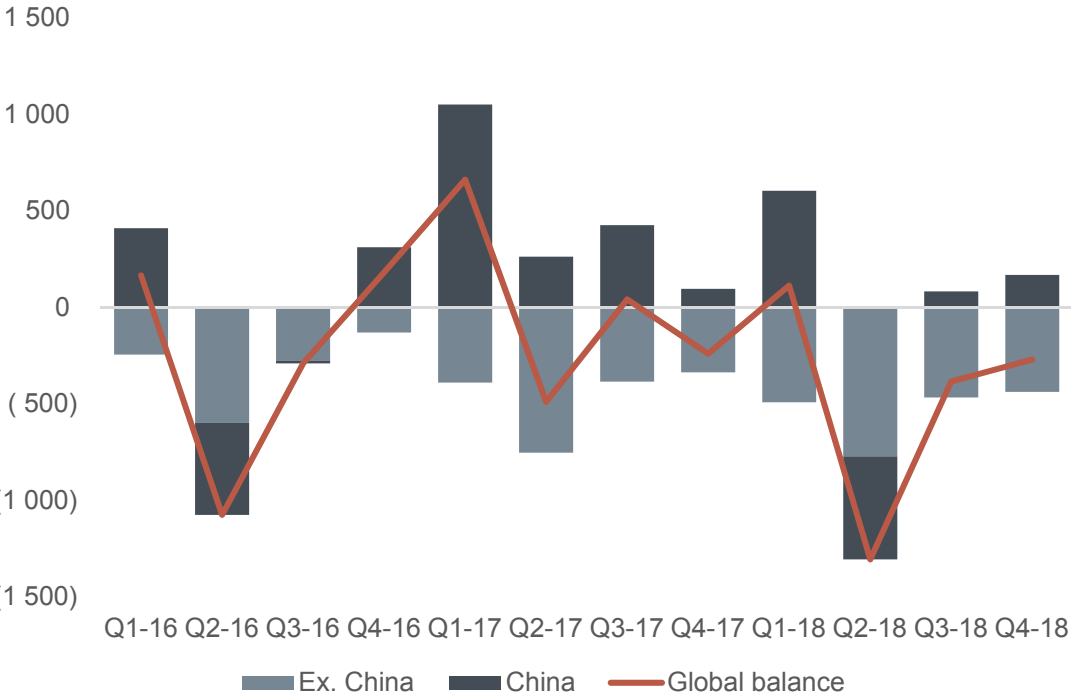


Global aluminium market in deficit in Q4 2018

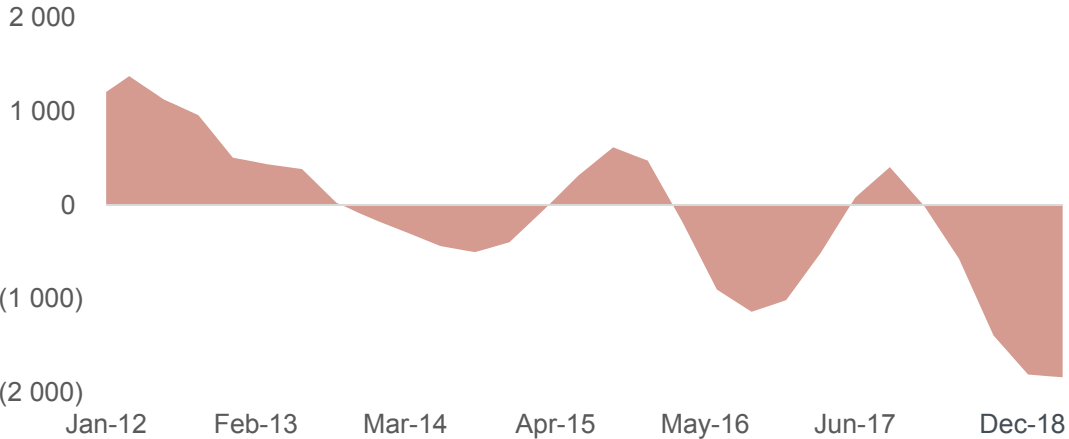


Continued deficit in world outside China, small surplus in China

Quarterly market balances, world ex. China and China
1 000 mt primary aluminium



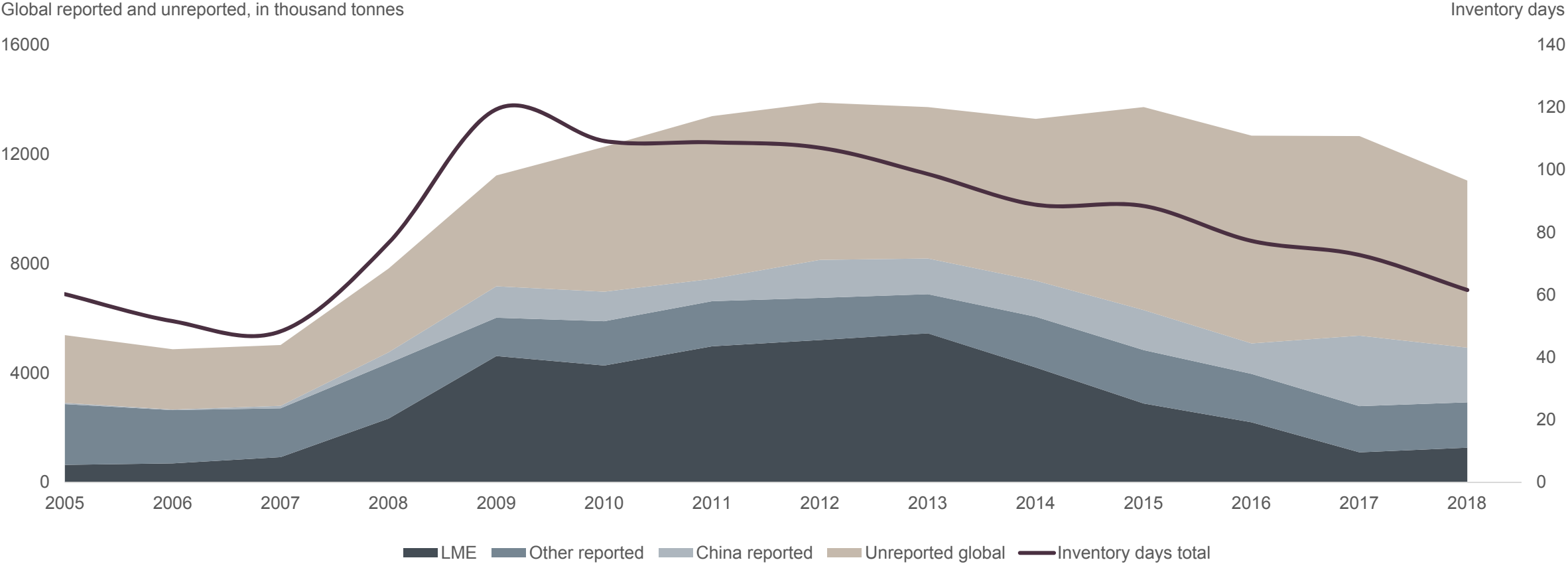
Production less demand*)
1 000 mt primary aluminium



- ~2.4% demand growth Q4-18 vs Q4-17
 - ~2.8% China
 - ~1.8% World ex. China
- 2019 demand growth expected at 2-3%

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

Inventories gradually trending towards historic levels

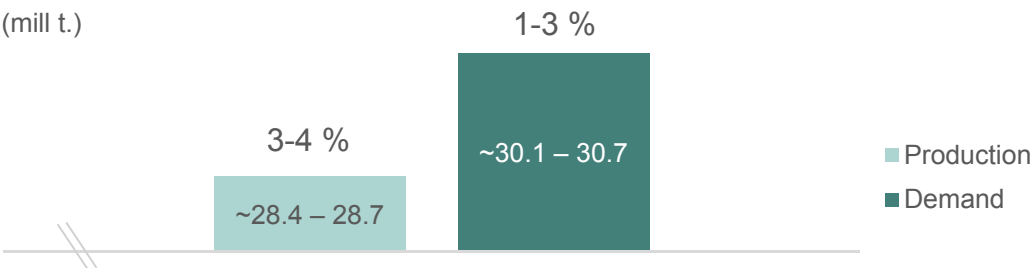


Global market expected in deficit for 2019

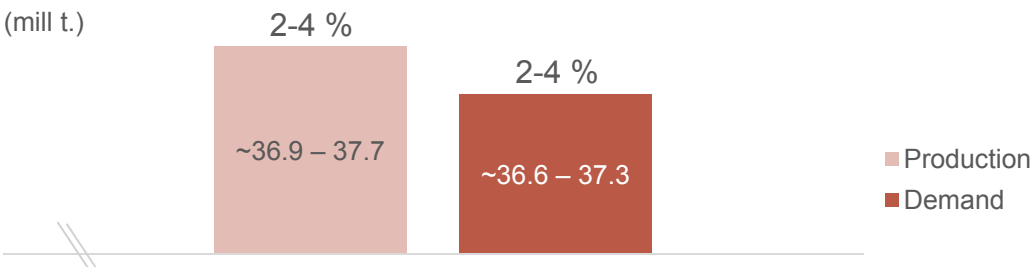


China largely balanced, world outside China in deficit

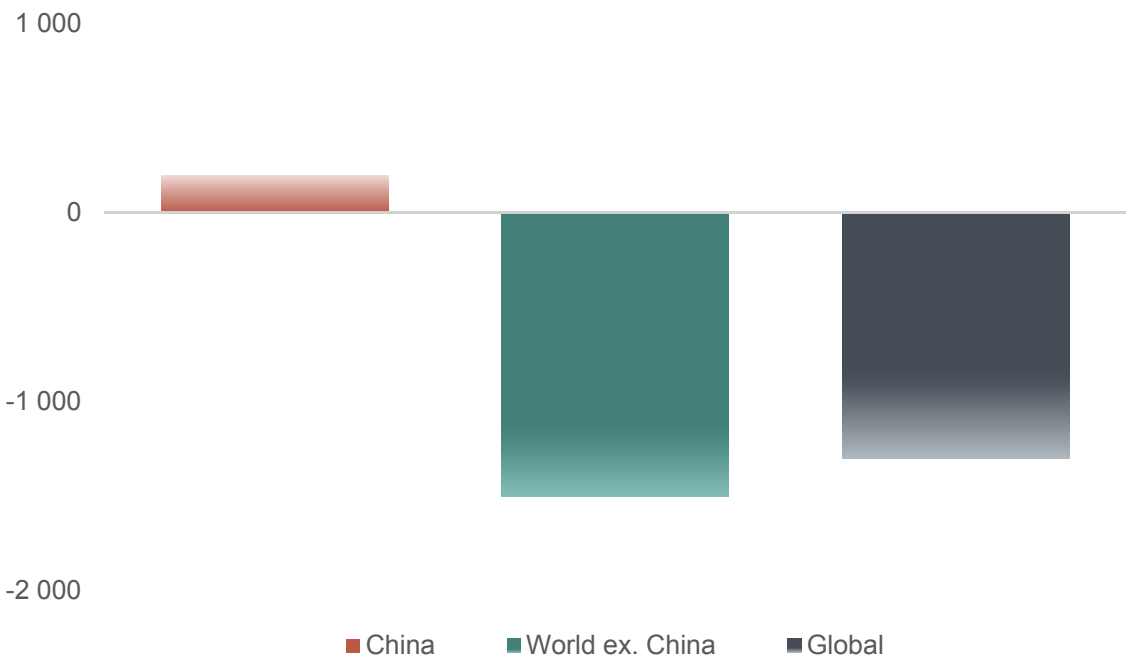
World ex. China 2019
(mill t.)



China 2019
(mill t.)



Estimated primary market balance 2019
(‘000t)



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

Average aluminium prices down in Q4



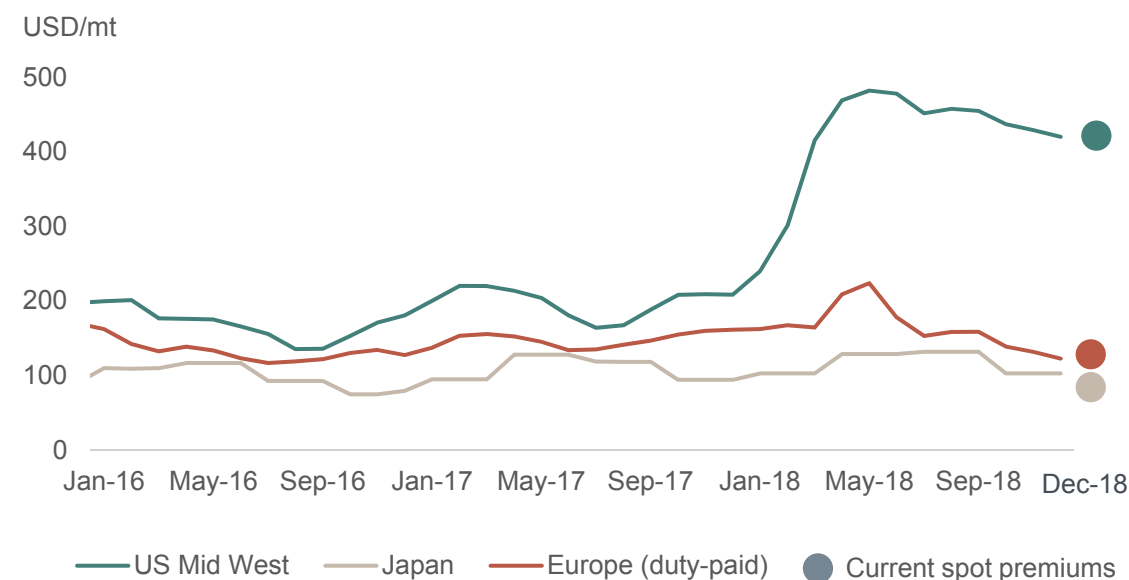
LME, SHFE and premiums trending down during Q4

LME and SHFE aluminium prices



- Continued wide price differential between LME and SHFE in Q4
- Trade data shows increase in semis exports from China in Q4

Regional standard ingot premiums



- Both US and European premiums trending down in Q4, down on average compared to Q3
- Japan quarterly premium lower than in Q3

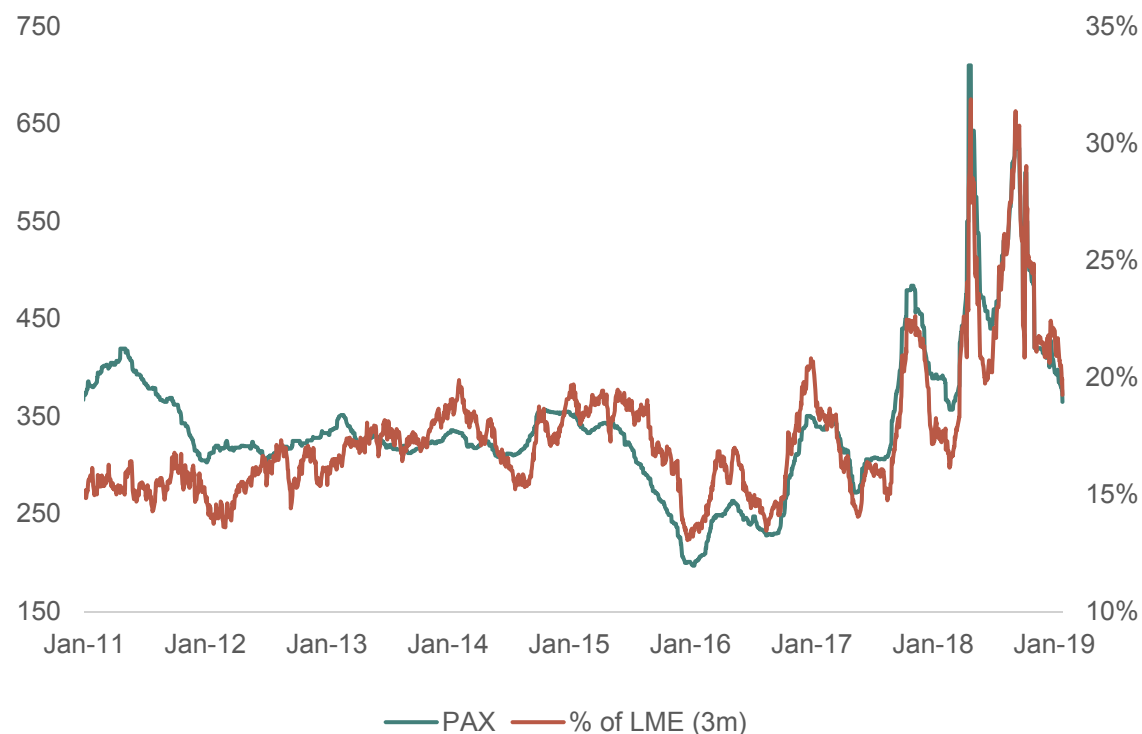
Average alumina prices down in Q4, continued volatility



Market remains tight outside China due to continued Alunorte 50% supply disruption

Platts alumina index (PAX)

USD/t



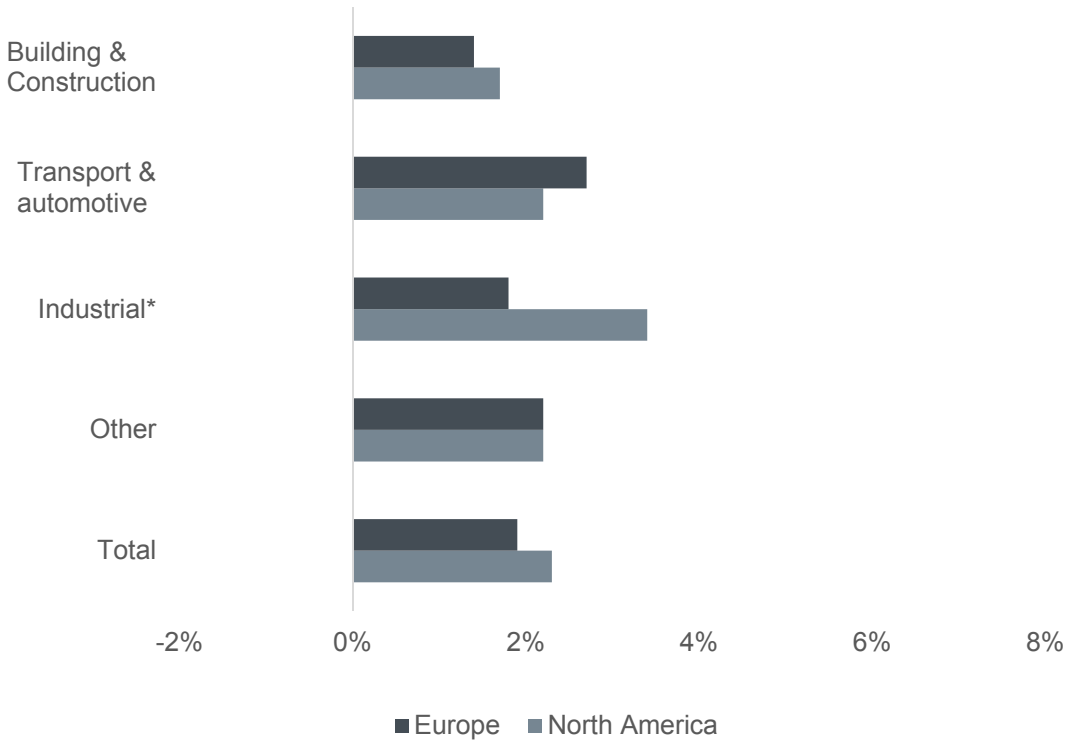
- High price volatility following uncertainty on alumina availability due to Alunorte curtailment
- Alumina market outside China in deficit due to Alunorte curtailment
- Surge in alumina exports from China during Q4 on price arbitrage during Q2 and Q3
- Alumina secured through Q2 2019 for Hydro's current primary production, significant third-party sourcing in Q4

Continued demand growth in downstream segments

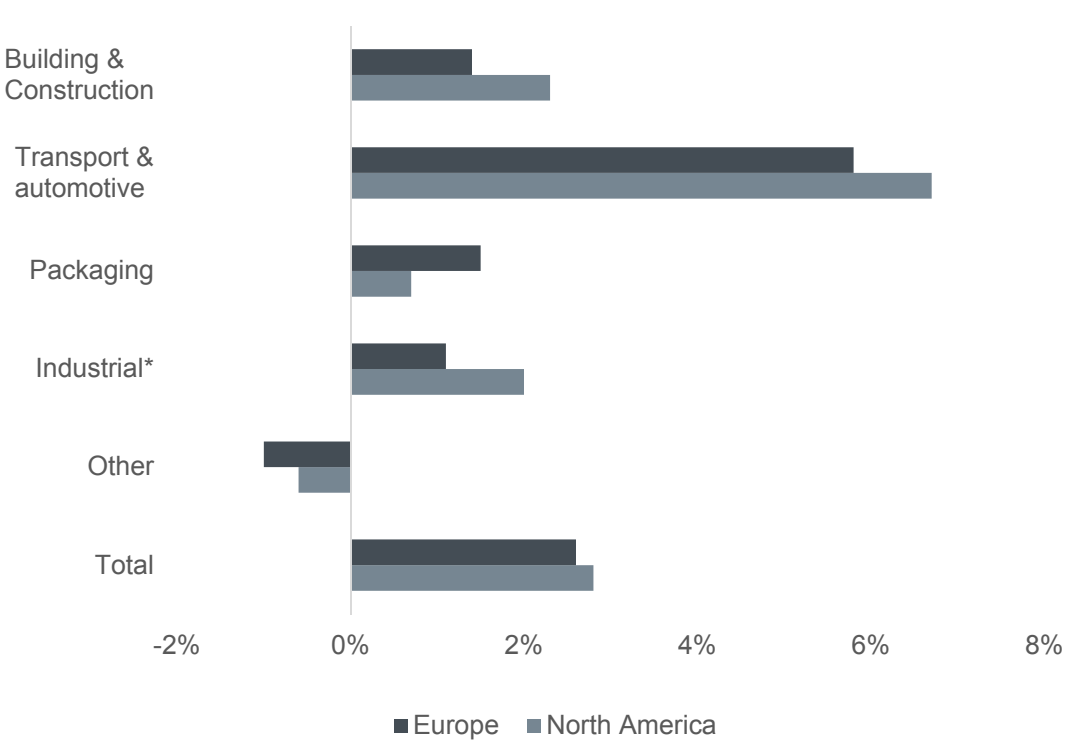


Softening demand growth from 2018-levels

Extrusions – estimated market growth 2019 vs 2018 (%)



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

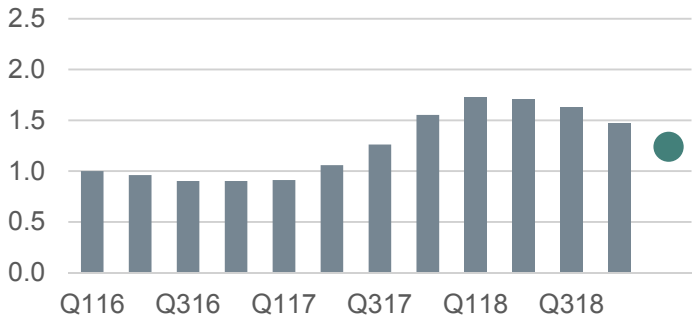


Source: CRU / Hydro analysis
* Industrial includes consumer durables, electrical and machinery
Europe excluding Russia/Turkey

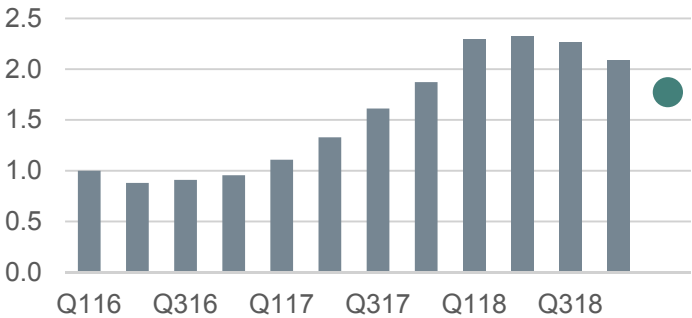
Raw material cost for the aluminium industry trending downwards



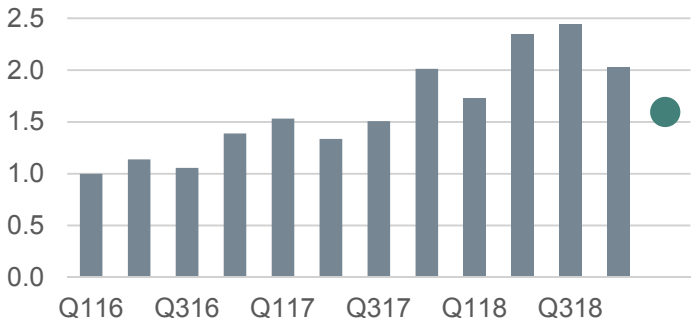
Petroleum coke FOB USG (indexed)



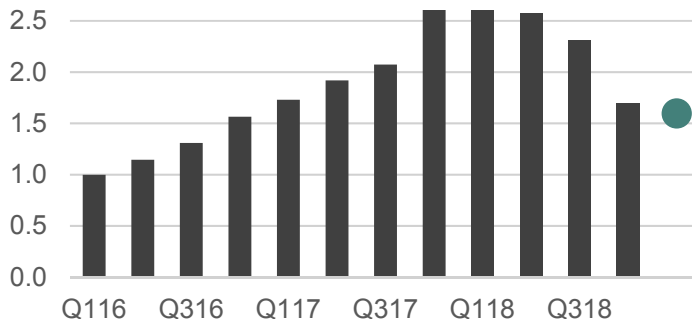
Pitch FOB USG (indexed)



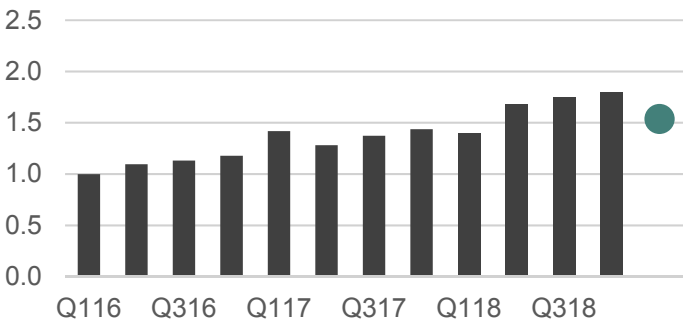
Alumina PAX index (indexed)



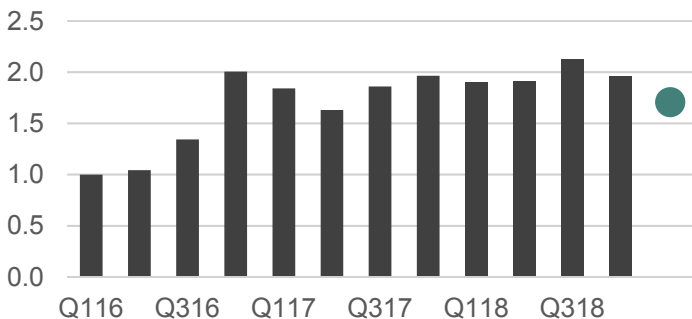
Caustic soda (indexed)



Fuel oil A1 (Indexed)



Steam coal (indexed)



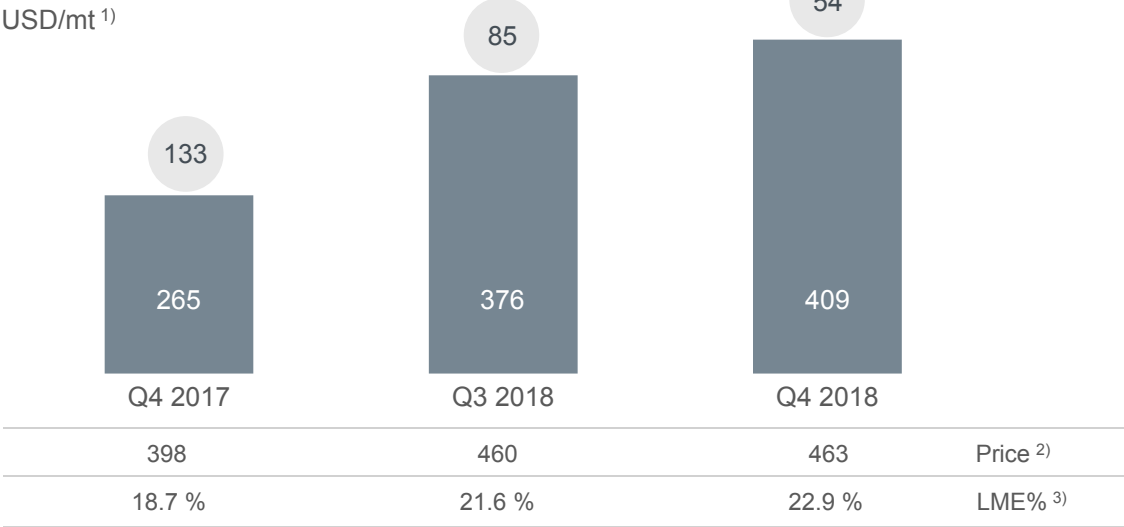
● Indication of current market prices

Q4 vs Q3: higher upstream costs and decreasing margins



Elevated cost per mt in Bauxite & Alumina following Alunorte production cut

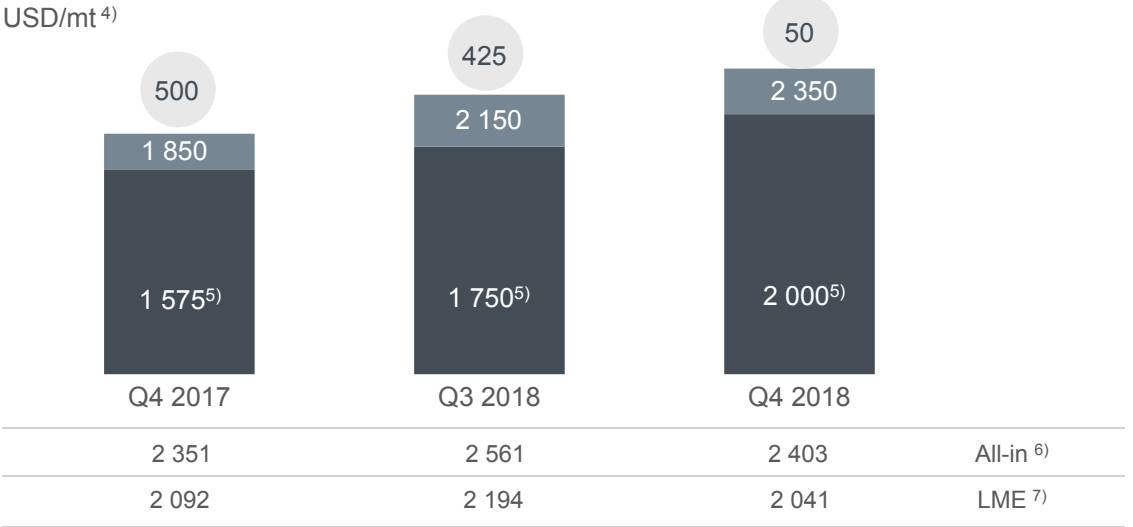
Implied alumina cost and margin



Implied alumina cost in Q4 affected by:

- High external alumina sourcing volume and costs
- Increased raw material and fixed costs

All-in implied primary cost and margin



Implied primary cost in Q4 affected by increased raw material costs

■ Implied EBITDA cost per mt ● EBITDA margin per mt

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

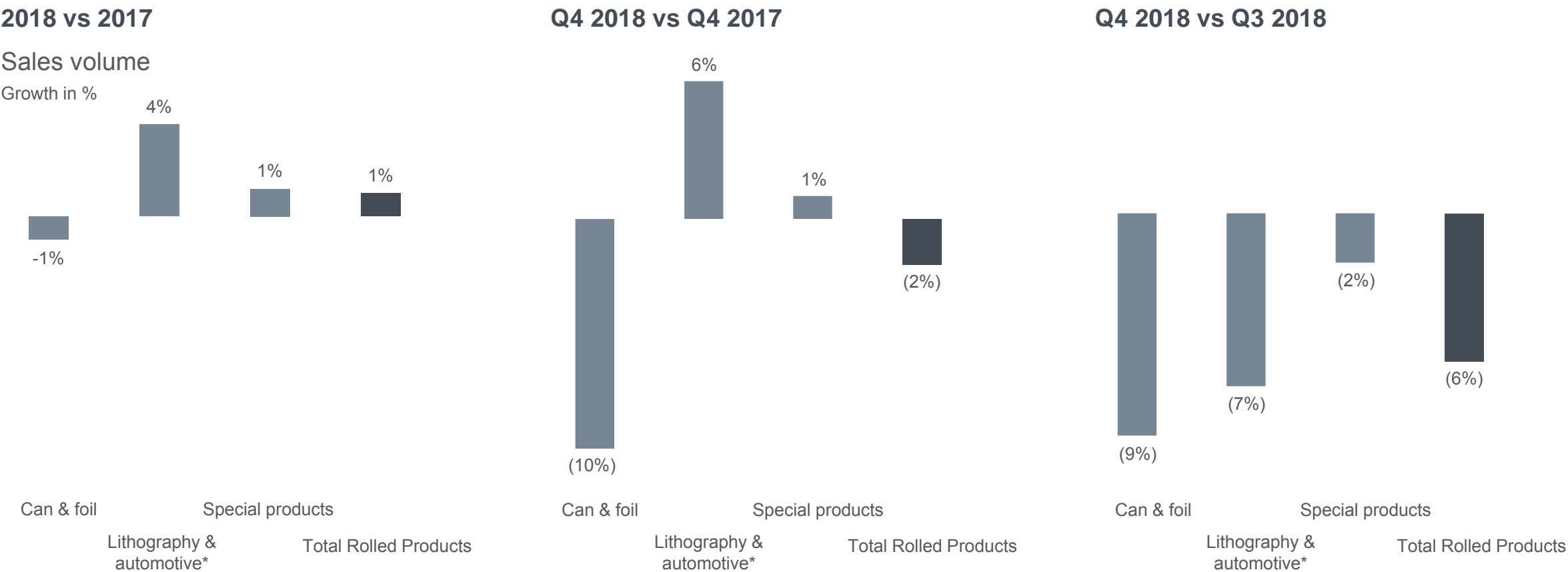
1) Realized alumina price minus underlying EBITDA for B&A, per mt alumina sales
2) Realized alumina price
3) Realized alumina price as % of three-month LME price with one month lag
4) Realized all-in aluminium price less underlying EBITDA margin, incl Qatalum, per mt aluminium sold.
Implied primary cost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

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: Stable sales volumes 2018 vs 2017



Operational issues and softening of some market segments in Q4 2018

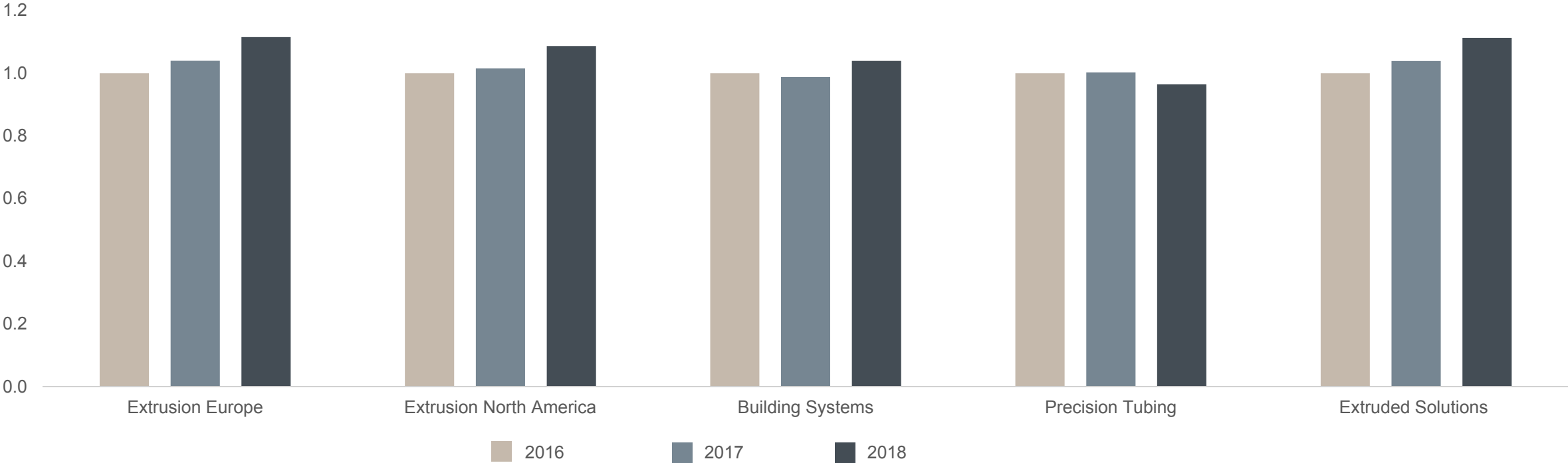


* Include Body-in-White sales growth of 30% 2018 vs 2017, 40% Q4 2018 vs Q4 2017, 10% Q4 2018 vs Q3 2018

Extruded Solutions: Continued improvements in net added value



Net added value* per kg 12 month rolling
(NOK**, indexed to Q4 2015-Q3 2016)

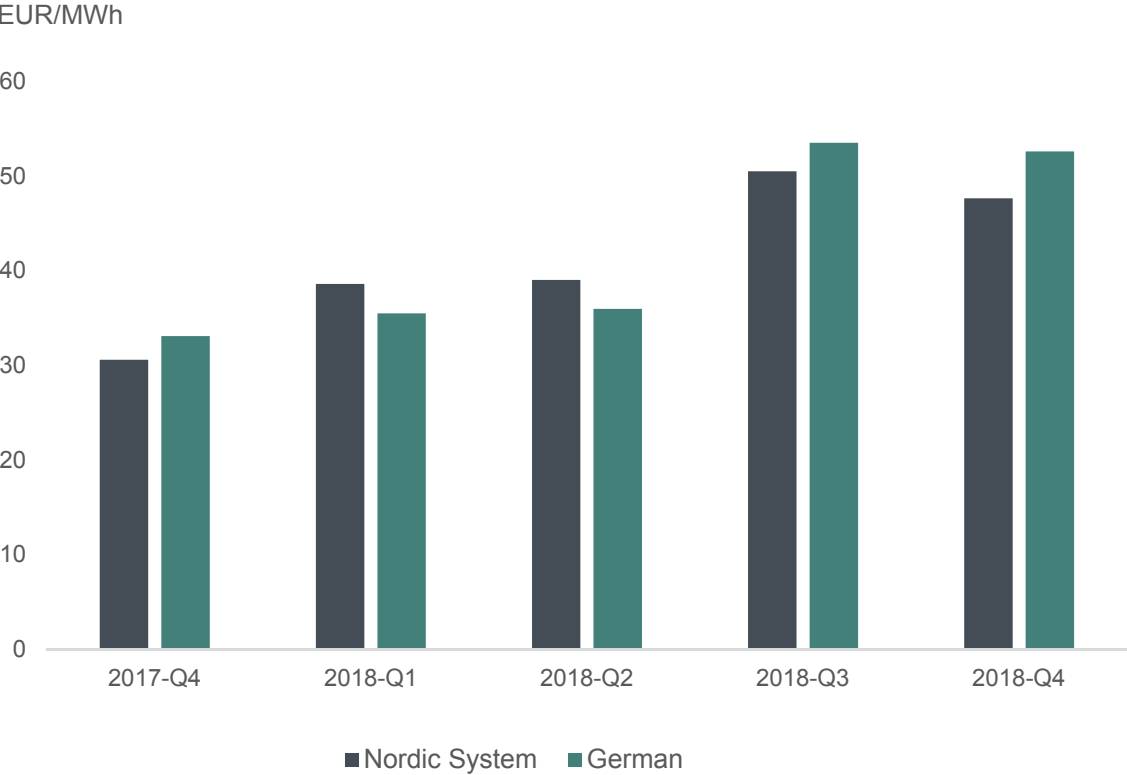


* Net Added Value: calculated as operating revenues less cost of material, including freight costs out
** Translated to NOK based on Q4 2018 12 months rolling currency rates

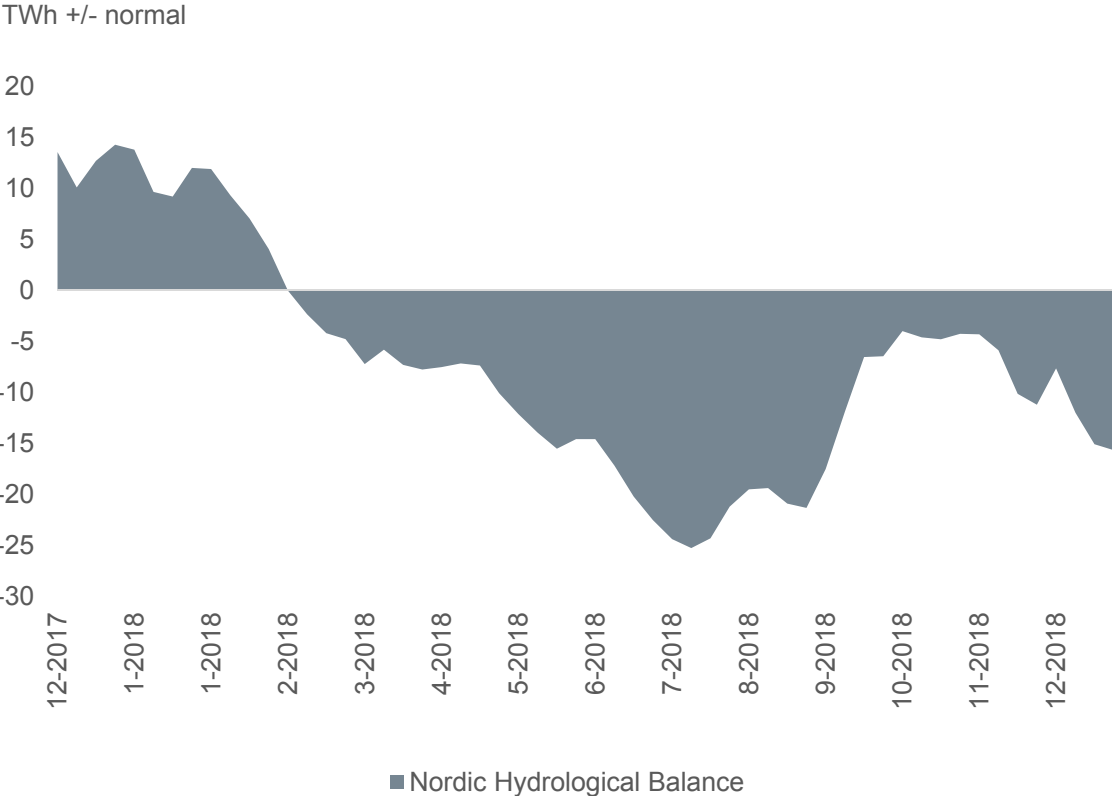
Continued high Nordic power prices on hydrological deficit and strong coal and CO₂ prices



Nordic System and German Power Price (EUR/MWh)



Nordic Hydrological Balance



Source Nordic Hydrological Balance (snow and water): 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.

Better improvement program hit by the Alunorte situation



Will not meet 2019-target of BNOK 3*

Bauxite & Alumina

- 50% production at Alunorte and Paragominas with strong negative impact on improvement program
- 2016-17 improvements more than offset by negative 2018 effects
- Original 2019 target of BNOK 1.3
- 2018 accumulated delivery of negative 1.0 BNOK

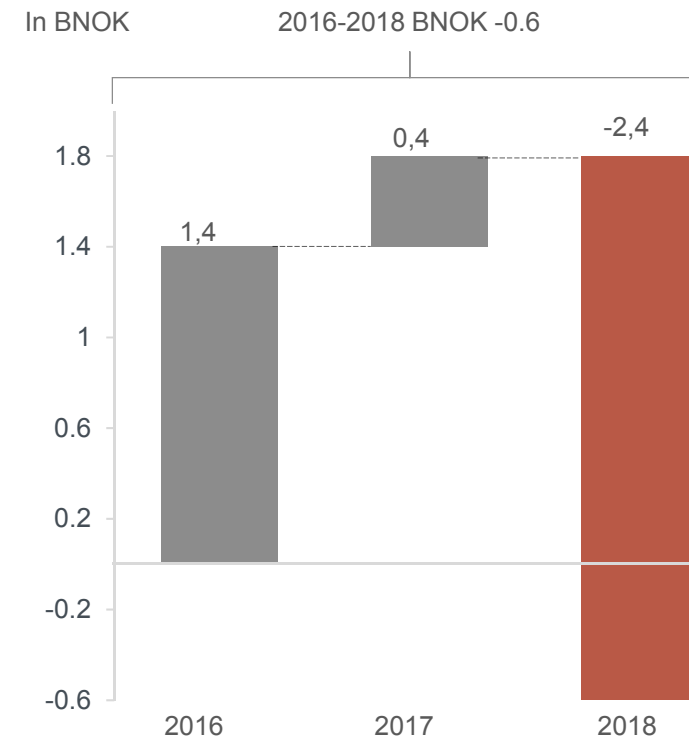
Rolled Products

- Benefit from AL3, UBC and cost performance
- Operational and ramp-up issues reducing improvement speed
- 2019 target of BNOK 0.7
- 2018 accumulated delivery of 0.4 BNOK

Primary Metal

- 50% production at Albras impacting improvement program negatively
- 50% production Alunorte with negative impact due to alumina qualities – challenges on operational parameters
- Original 2019 target of BNOK 1.0
- 2018 accumulated delivery of 0.0 BNOK

BNOK 3.0 *Better* improvement program progress



Proposing dividend of NOK 1.25* per share for 2018

Payout ratio of ~58% for the year

- Aiming for competitive shareholder returns compared to alternative investments in peers
- Reflects a robust financial situation, taking into account a demanding year for the company and the volatility in the aluminium industry
- Average five-year payout ratio** of ~57%
 - Dividend policy 40% payout ratio of reported net income over the cycle with 1.25 NOK/share considered as floor
- Represents payout of ~NOK 2.6 billion

* Pending approval from the AGM on May 7, 2019

** Dividend paid divided by net income from continuing operations attributable to equity holders, including proposed 2018 dividend

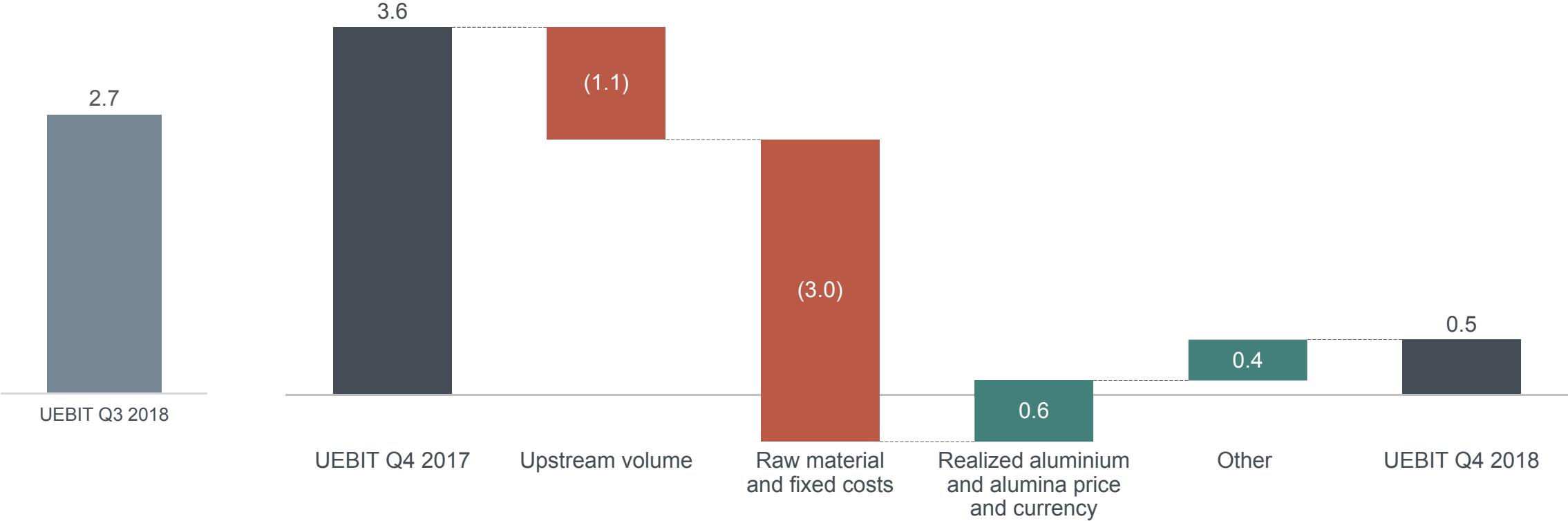


Results down on volumes and raw material costs



Q4 2018 vs Q4 2017

NOK billion

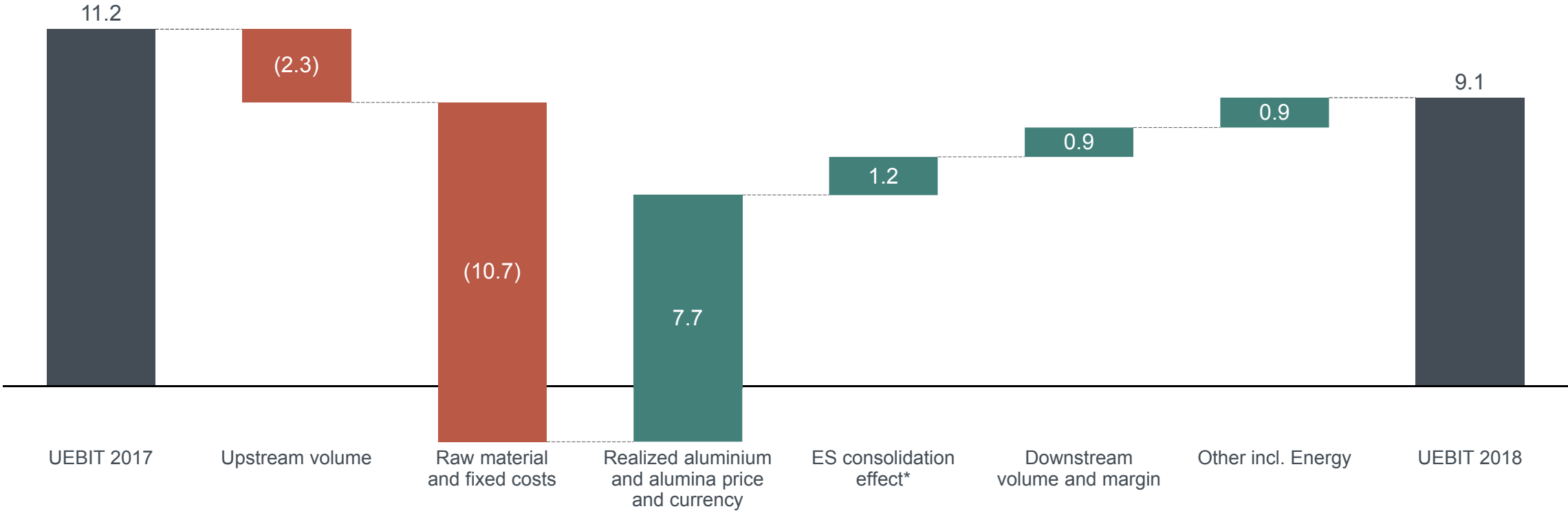


Results down on upstream volumes and raw material costs, partly offset by higher realized prices



FY 2018 vs FY 2017

NOK billion



* Extruded Solutions consolidation effect – difference between 50% of Underlying Net Income as equity accounted investment and fully consolidated Underlying EBIT, incl. excess value depreciation.

Key financials



Underlying EPS down to negative 0.06 NOK/share

NOK million	Q4 2018	Q4 2017	Q3 2018	Year 2018	Year 2017
Revenue	38 386	38 803	39 766	159 377	109 220
Underlying EBIT	534	3 555	2 676	9 069	11 215
Items excluded from underlying EBIT	199	(956)	620	390	(974)
Reported EBIT	335	4 511	2 057	8 679	12 189
Financial income (expense)	(721)	(776)	(423)	(2 060)	(1 114)
Income (loss) before tax	(386)	3 735	1 634	6 619	11 075
Income taxes	(207)	(135)	(710)	(2 139)	(1 891)
Net income (loss)	(593)	3 600	925	4 480	9 184
Underlying net income (loss)	(175)	2 816	1 696	5 819	8 396
Reported EPS, NOK	(0.26)	1.71	0.37	2.16	4.30
Underlying EPS, NOK	(0.06)	1.33	0.74	2.75	3.95

Items excluded from Underlying EBIT

Excluded a loss of 199 MNOK from Underlying EBIT

NOK million	Q4 2018	Q4 2017	Q3 2018	Year 2018	Year 2017
Underlying EBIT	534	3 555	2 676	9 069	11 215
Unrealized derivative effects on LME related contracts	(22)	(140)	(436)	(39)	(220)
Unrealized derivative effects on power and raw material contracts	82	(91)	183	260	(246)
Metal effect, Rolled Products	(93)	146	153	73	419
Significant rationalization charges and closure costs	(79)	(210)	-	(79)	(210)
Alunorte agreements – provisions	-	-	(519)	(519)	-
Other effects	(46)	(212)	-	(46)	(212)
Pension	(40)	-	-	(40)	-
Transaction related effects (Sapa)	-	1 463	-	-	1 463
Items excluded in equity accounted investments (Sapa)	-	-	-	-	(19)
Reported EBIT	335	4 511	2 057	8 679	12 189

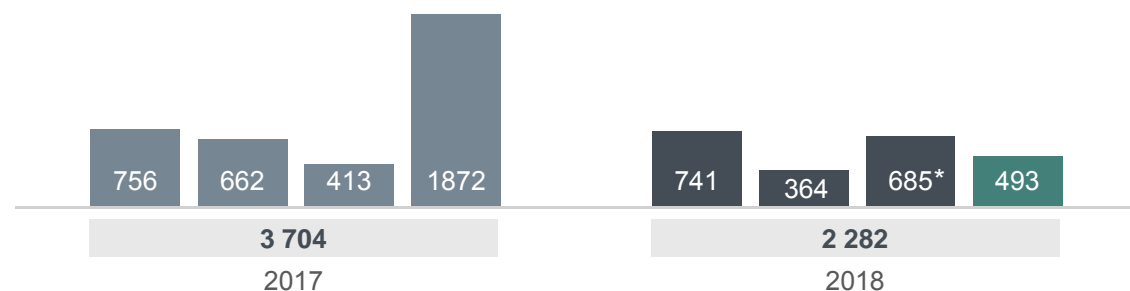
Bauxite & Alumina

Results down on production restrictions and higher raw material costs

Key figures	Q4 2018	Q4 2017	Q3 2018
Alumina production, kmt	786	1 693	821
Total alumina sales, kmt	1 983	2 344	1 711
Realized alumina price, USD/mt	463	398	460
Implied alumina cost, USD/mt	409	265	376
Bauxite production, kmt	1 254	3 049	1 286
Underlying EBITDA, NOK million	877	2 551	1 193
Underlying EBIT, NOK million	493	1 872	685

Underlying EBIT

NOK million



*Underlying EBIT excludes (519) MNOK in provisions for the TAC/TC agreements in Brazil.



Results Q4 18 vs Q4 17

- Lower volumes due to production restrictions at Alunorte and Paragominas
- Higher raw material costs
- Higher realized alumina prices
- Positive currency effect

Outlook Q1 19

- Alunorte and Paragominas producing at 50% capacity
- Lower external alumina sourcing
- Alumina prices realized with ~1 month lag

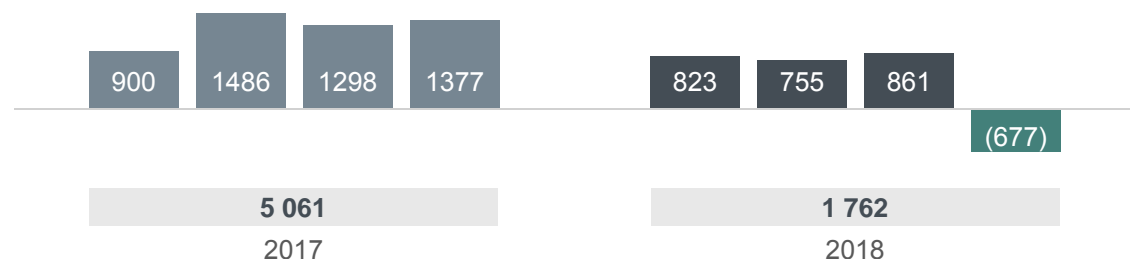
Primary Metal

Results down on higher raw material costs and lower volumes

Key figures	Q4 2018	Q4 2017	Q3 2018
Primary aluminium production, kmt	490	528	497
Total sales, kmt	503	554	516
Realized LME price, USD/mt	2 041	2 092	2 194
Realized LME price, NOK/mt	17 038	17 066	17 905
Realized premium, USD/mt	362	259	367
Implied all-in primary cost, USD/mt ¹⁾	2 350	1 850	2 150
Underlying EBITDA, NOK million	(176)	1 900	1 424
Underlying EBIT, NOK million	(677)	1 377	861

Underlying EBIT

NOK million



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

2) Including Qatalum volumes



Results Q4 18 vs Q4 17

- Increased raw material costs
- Reduced volumes on Albras curtailment

Outlook Q1 19

- ~ 60% of primary production for Q1 priced at USD ~1 975 per mt ²⁾
- ~ 55% of premiums affecting Q1 booked at USD ~430 per mt ²⁾
 - Q1 realized premium expected in the range of 325-375 USD/mt
- Raw material costs trending downwards
- Albras producing at 50% capacity

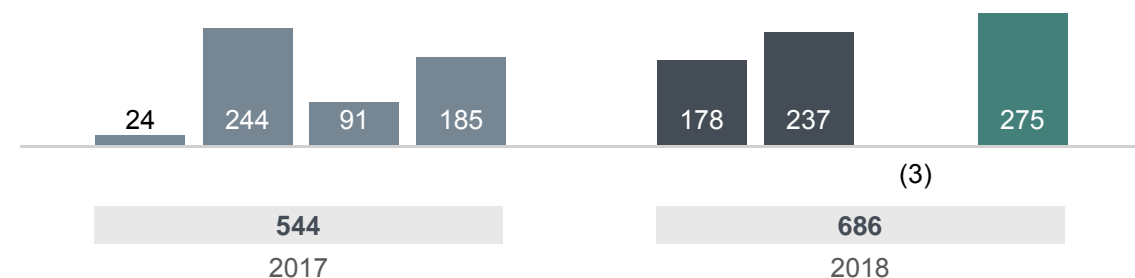
Metal Markets

Improved results from remelters, lower contribution from commercial activities

Key figures	Q4 2018	Q4 2017	Q3 2018
Remelt production, kmt	135	137	126
Metal products sales, kmt ¹⁾	682	720	685
Underlying EBITDA, NOK million	301	209	22
Underlying EBIT excl currency and inventory valuation effects, NOK million	217	157	78
Underlying EBIT, NOK million	275	185	(3)

Underlying EBIT

NOK million



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



Results Q4 18 vs Q4 17

- Improved results from remelters on higher margins
- Lower contribution from sourcing and trading activities
- NOK 58 million in positive currency effects Q4 18 vs positive NOK 28 million in currency and inventory valuation effects Q4 17

Outlook Q1 19

- Volatile trading and currency effects
- Remelt production affected by Henderson plant outage

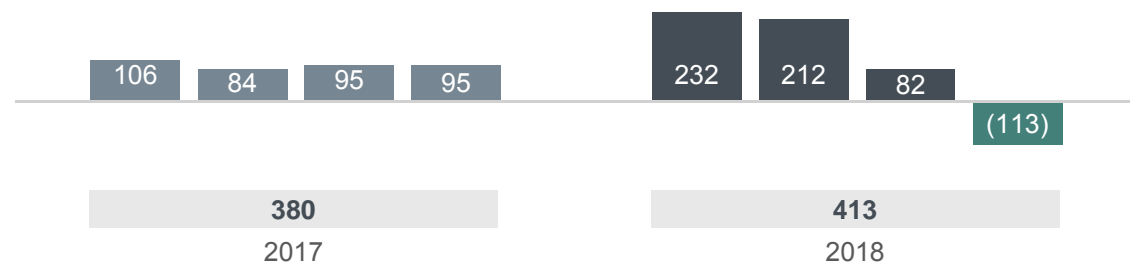
Rolled Products

Results down on higher costs, lower volumes and margins, negative Neuss contribution

Key figures	Q4 2018	Q4 2017	Q3 2018
External sales volumes, kmt	220	224	235
Underlying EBITDA, NOK million	133	325	314
Underlying EBIT, NOK million	(113)	95	82

Underlying EBIT

NOK million



Results Q4 18 vs Q4 17

- Decreased volumes and margins
- Increased personnel, maintenance and energy costs
- Improved AL3 performance
- New power contract in Neuss more than offset by lower realized aluminium prices and increased raw material costs

Outlook Q1 19

- Softening demand growth in some market segments
- Raw material costs trending downwards for Neuss

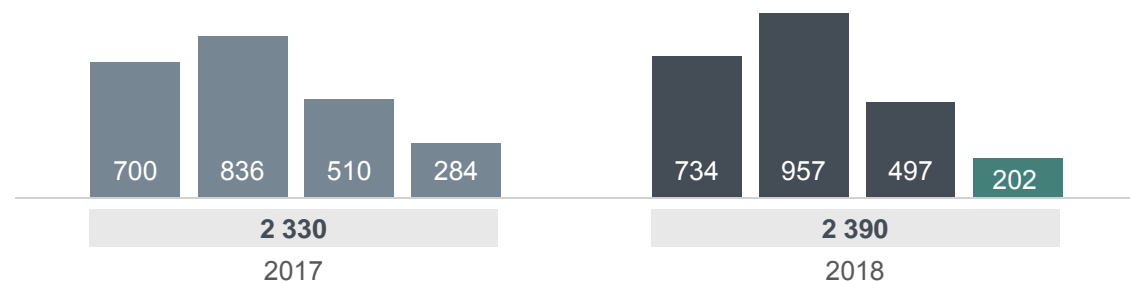
Extruded Solutions

Results down as higher fixed and production costs offset improved NAV

Key figures	Q4 2018	Q4 2017	Q3 2018
External sales volumes, kmt	318	318	343
Underlying EBITDA, NOK million	645	728	931
Underlying EBIT, NOK million	202	284	497

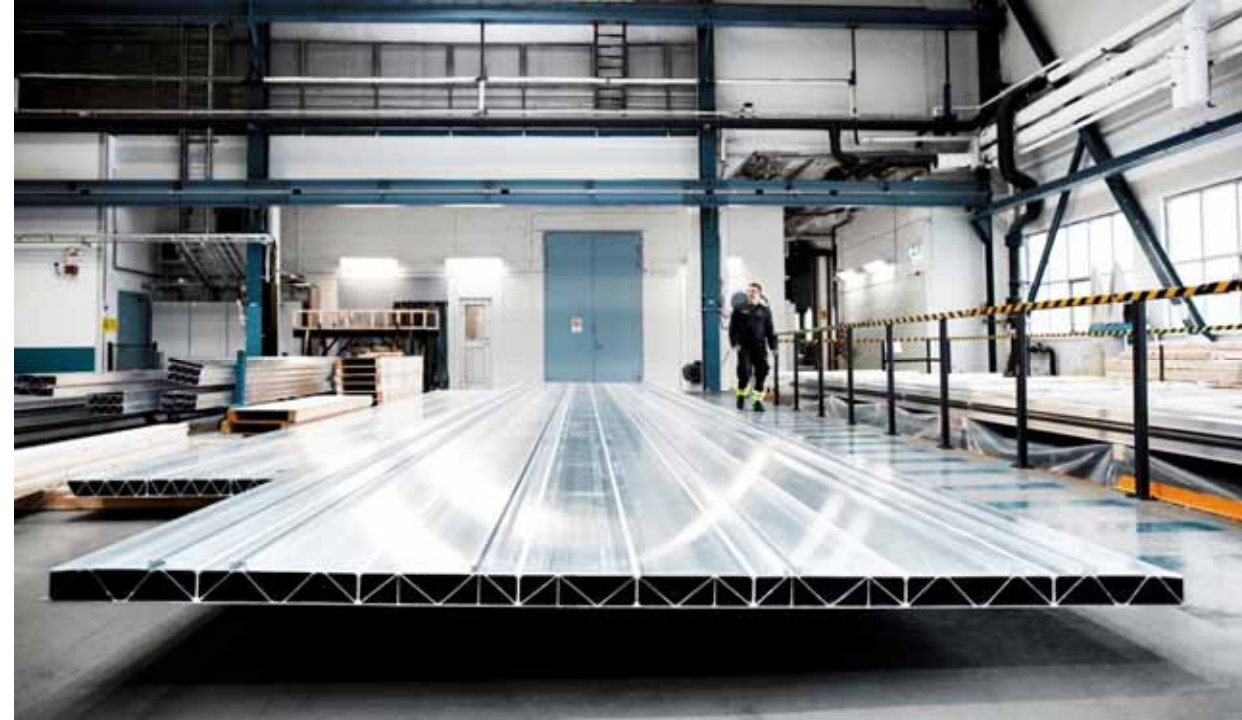
Underlying EBIT ¹⁾

NOK million



1) Pro-forma figures for Q1-Q3 2017

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



Results Q4 18 vs Q4 17

- Improved Net added value (NAV) ²⁾
- Increased fixed and production costs partly due to ramp-up of new product lines
- Integration and restructuring costs in new Precision Tubing plants in Brazil

Outlook Q1 19

- Softening demand growth in some market segments

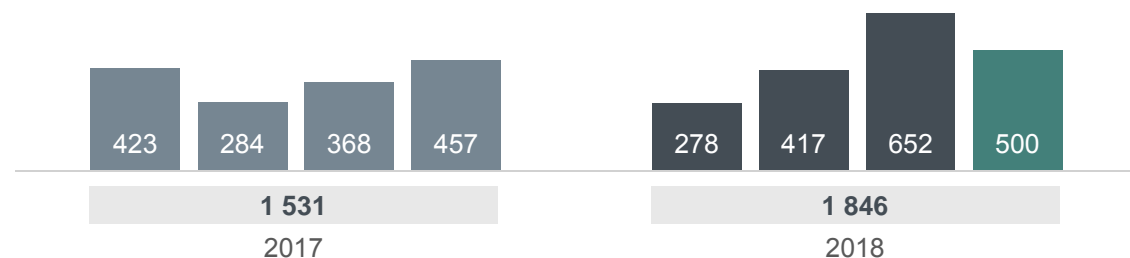
Energy

Results up on higher prices despite lower production

Key figures	Q4 2018	Q4 2017	Q3 2018
Power production, GWh	2 822	3 089	2 888
Net spot sales, GWh	1 166	1 633	1 315
Southwest Norway spot price (NO2), NOK/MWh	455	287	475
Underlying EBITDA, NOK million	566	519	716
Underlying EBIT, NOK million	500	457	652

Underlying EBIT

NOK million



Results Q4 18 vs Q4 17

- Significantly higher power prices
- Lower power production
- Negative effects from repricing of internal power contract with Rolled Products

Outlook Q1 19

- Price and volume uncertainty
- Planned maintenance affecting production in RSK



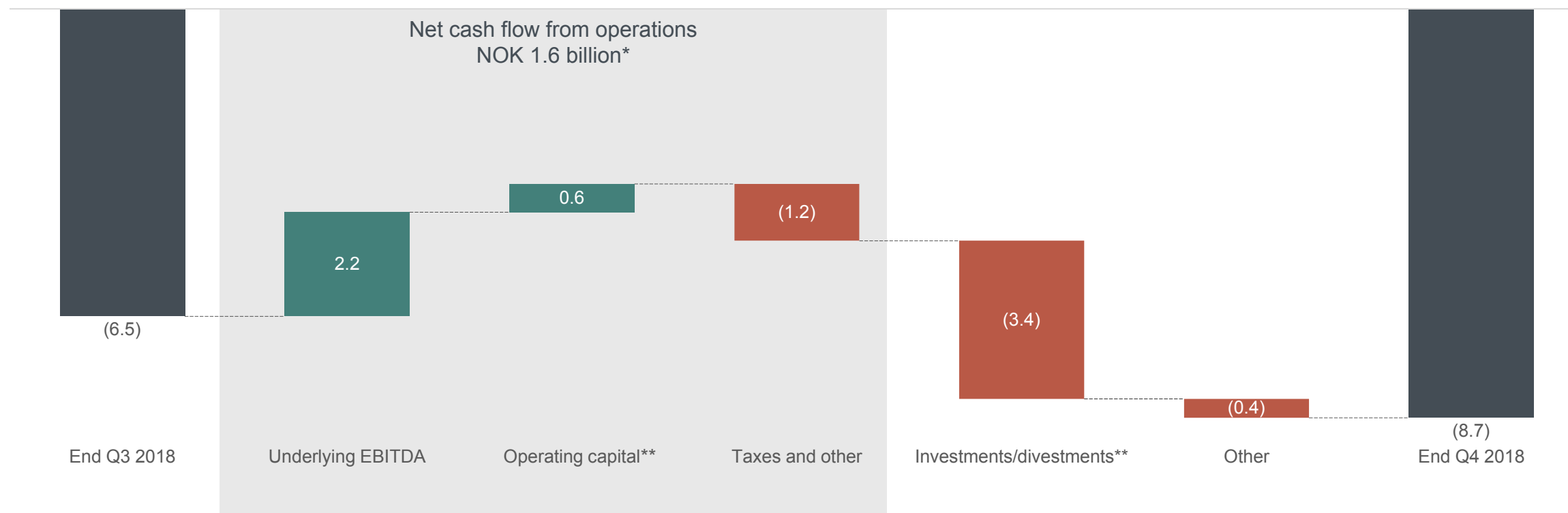
Other and Eliminations

Underlying EBIT, NOK million	Q4 2018	Q4 2017	Q3 2018
Other	(299)	(279)	(190)
Eliminations	154	(436)	93
Other and Eliminations	(145)	(715)	(97)

Net debt development Q4 2018

Increase in net debt as capex exceeded cash flow from operations

NOK billion



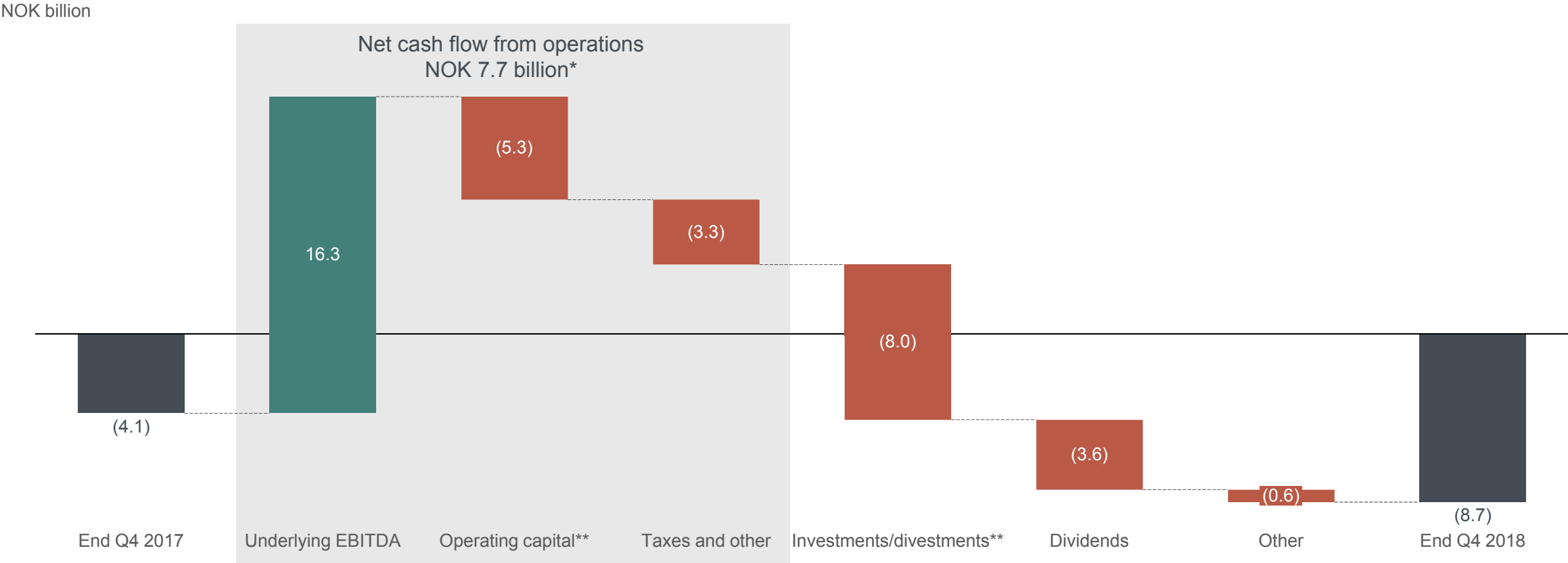
* Net cash provided by operating activities from cash flow statement, less change in restricted cash of ~0.1 BNOK and excluding (0.8) BNOK related to tax cases in Brazil (explained below).

**The table above deviates from the cash flow statement due to reclassification of indirect taxes in Brazil, previously considered part of investments, as certain indirect tax charges in Brazil were not completely deducted and claimed at the time of investment. This resulted in a decrease in PP&E of ~0,8 BNOK and an increase in long-term VAT receivables of ~0,8 BNOK (not reflected in the table above)

Net debt development 2018



Increase in net debt as capex and dividends exceeded cash flow from operations



* Net cash provided by operating activities from cash flow statement, less change in restricted cash of ~0.1 BNOK and excluding (0.8) BNOK related to tax cases in Brazil (explained below).
**The table above deviates from the cash flow statement due to reclassification of indirect taxes in Brazil, previously considered part of investments, as certain indirect tax charges in Brazil were not completely deducted and claimed at the time of investment. This resulted in a decrease in PP&E of ~0,8 BNOK and an increase in long-term VAT receivables of ~0,8 BNOK (not reflected in the table above)

Adjusted net debt up in Q4

Increased net debt position and net pension liability

NOK billion	Dec 31 2018	Sep 30 2018	Jun 30 2018
Cash and cash equivalents	6.0	6.8	5.7
Short-term investments	1.0	1.2	1.1
Short-term debt	(8.5)	(6.6)	(5.0)
Long-term debt	(7.1)	(7.9)	(9.4)
Net cash/(debt)	(8.7)	(6.5)	(7.5)
Net pension liability at fair value, net of expected tax benefit	(8.8)	(6.4)	(7.0)
Other adjustments ¹⁾	(5.6)	(5.5)	(5.7)
Adjusted net debt ex. EAI	(23.1)	(18.4)	(20.2)
Net debt in EAI	(5.6)	(5.6)	(5.7)
Adjusted net debt incl. EAI	(28.7)	(24.0)	(25.9)

1) Operating lease commitments and other obligations





2018 key achievements

- Realization of synergies from Extruded Solutions integration
- Full production at Karmøy Technology Pilot
- Build decision on Husnes restart and upgrade
- Power sourcing in Norway post 2020 at competitive prices
- Positive development at Automotive line 3
- Pursued attractive growth opportunities in Extruded Solutions and recycling



2019 priorities

- Safety first
- Lifting of embargos at Alunorte
- Value-creating integration
- Project execution and operational excellence
- Continuous improvement, innovation and sustainability
- Financial strength and flexibility

02

Market

Investor presentation, February 2019

Macro trends and favorable properties drive aluminium demand

Hydro's strategic direction aims to realize full potential of aluminium's strong qualities and versatility



Aluminium

- ✓ Lightness and strength
- ✓ Durability and formability
- ✓ Corrosion resistance
- ✓ Conductivity
- ✓ Recyclability
- ✗ Energy-intensity



Steel

- ✓ Strength and durability
- ✓ Recyclability
- ✓ Price
- ✗ Weight
- ✗ Corrosion
- ✗ Energy-intensity



Copper

- ✓ Conductivity
- ✓ Corrosion resistance
- ✓ Recyclability
- ✗ Price
- ✗ Weight
- ✗ Energy-intensity



Composites

- ✓ Lightness
- ✓ Strength
- ✗ Price
- ✗ Recyclability
- ✗ Climate footprint
- ✗ Energy-intensity



PVC

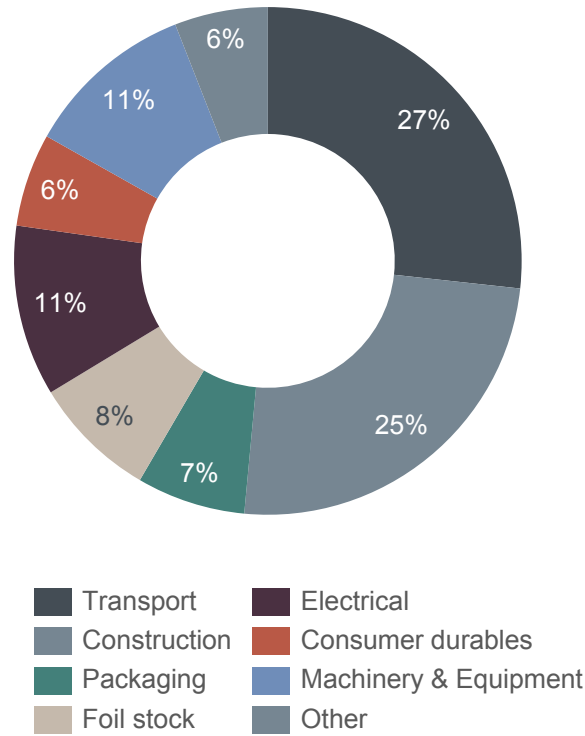
- ✓ Lightness and formability
- ✓ Corrosion resistance
- ✓ Price
- ✗ Climate footprint
- ✗ Recyclability
- ✗ Durability

Transport & construction key semis demand segments

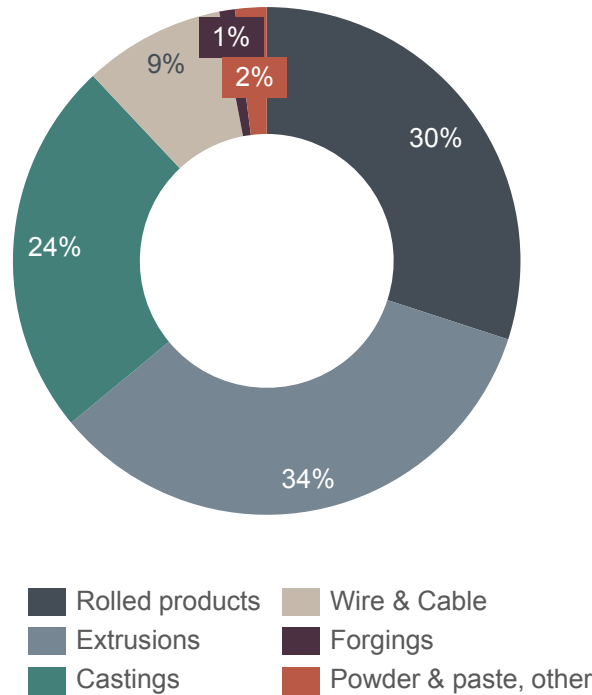


Global semis demand 2018: ~91 million tonnes

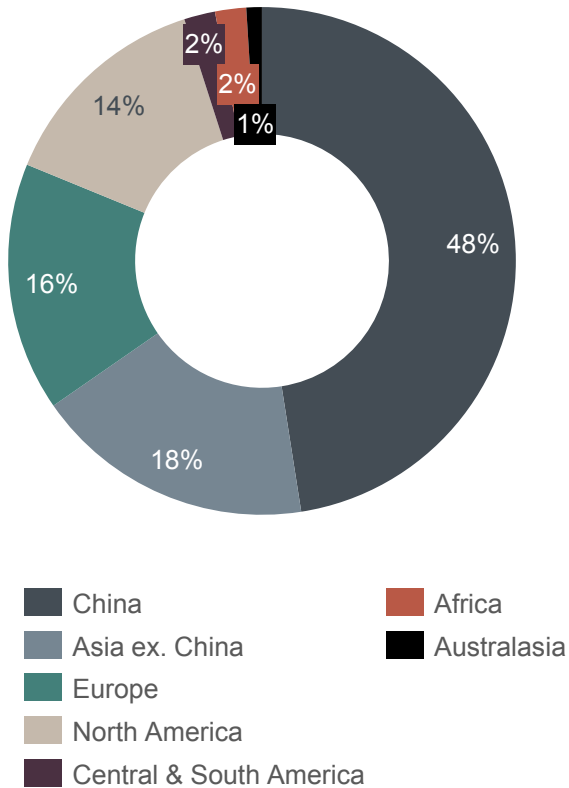
Per segment



Per product form



Per region



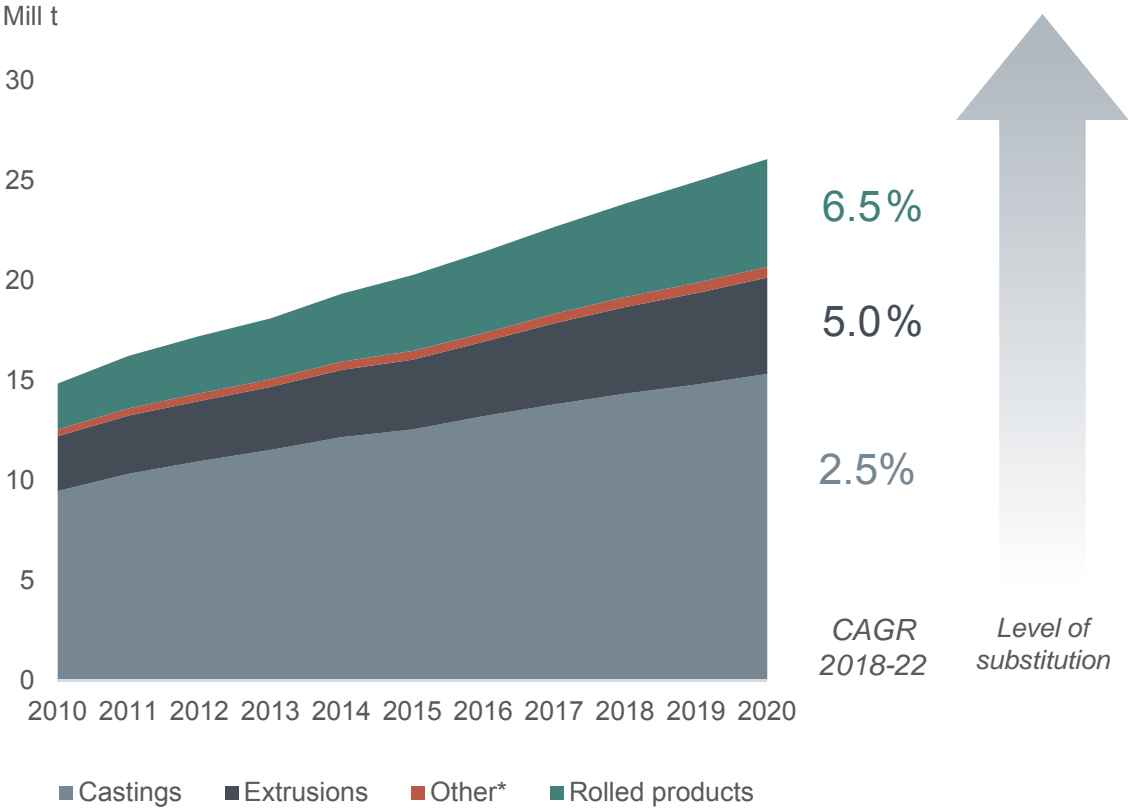
Automotive demand for aluminium supporting several semis products



Car makers utilizing aluminium to reduce weight and increase fuel-efficiency



Global semis demand for transport sector by product form



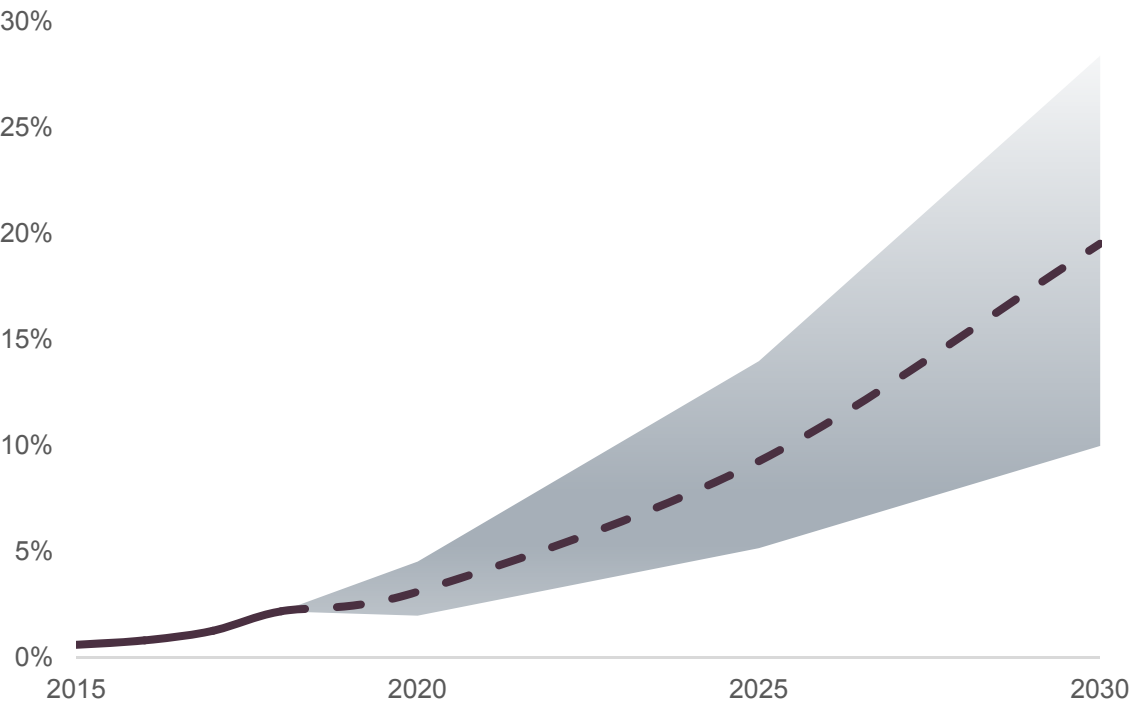
Source: Hydro analysis, Republished under license from CRU International Ltd
*Other includes e.g wire

E-mobility trend favourable for aluminium demand



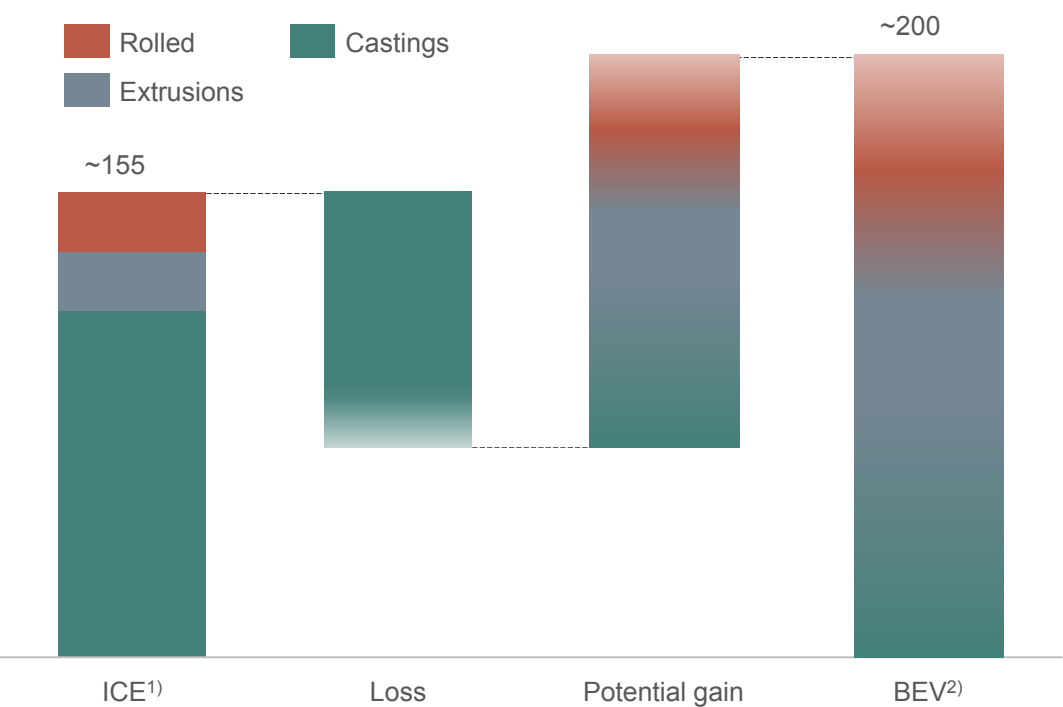
High aluminium content in BEVs, increasing share of total car sales

Electric vehicle* share of new car sales (%)



Net increase in aluminium content in electric vehicle's

Average kg aluminium per vehicle type in 2018



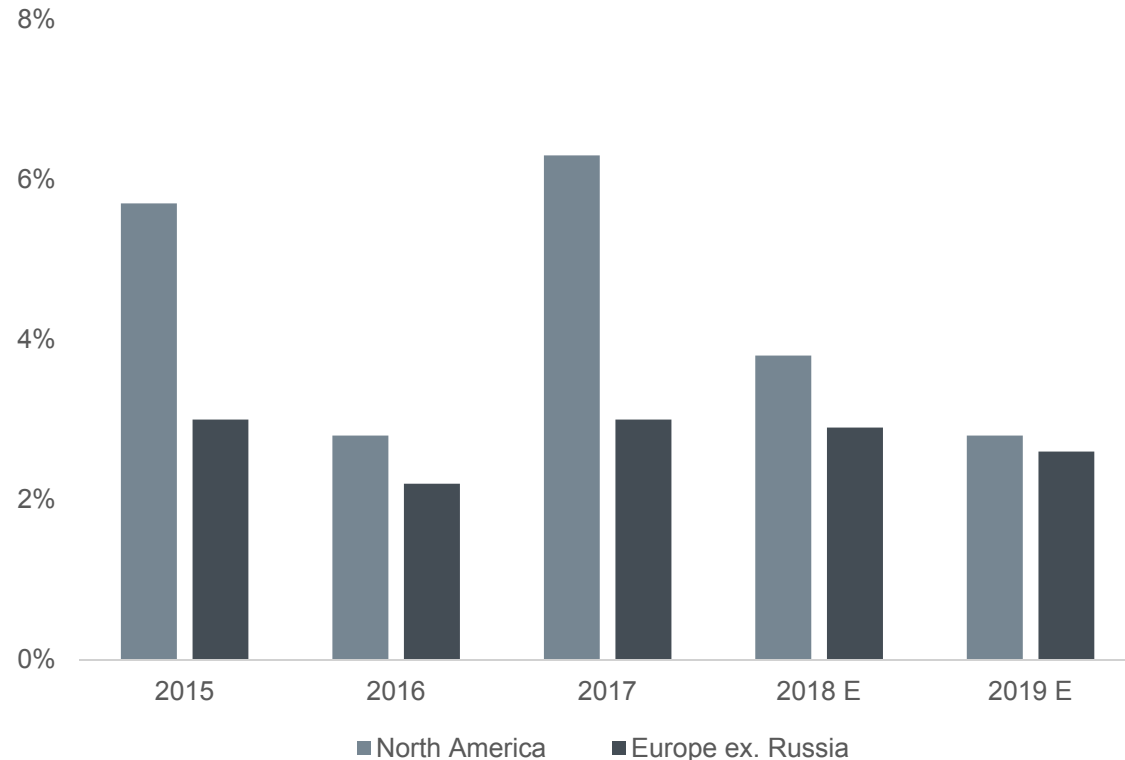
Source: Hydro analysis, Republished under license from CRU International Ltd
* Battery electric vehicles & plug-in-hybrid vehicles
1) ICE= Internal Combustion Engine, 2) BEV= Battery Electric Vehicle
Forecast based on 10 different sources including CRU, Wood MacKenzie, JP Morgan, IEA, Bloomberg New Energy Finance and others

Rolled products demand driven by transport segment

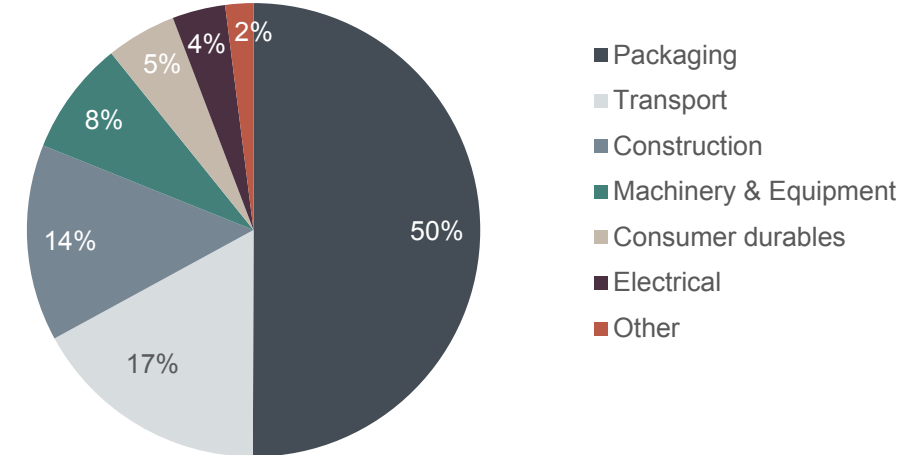
Transport share increasing in total rolled products demand

General rolled products demand, selected regions

YoY-growth



Global segment composition, rolled products (2018)



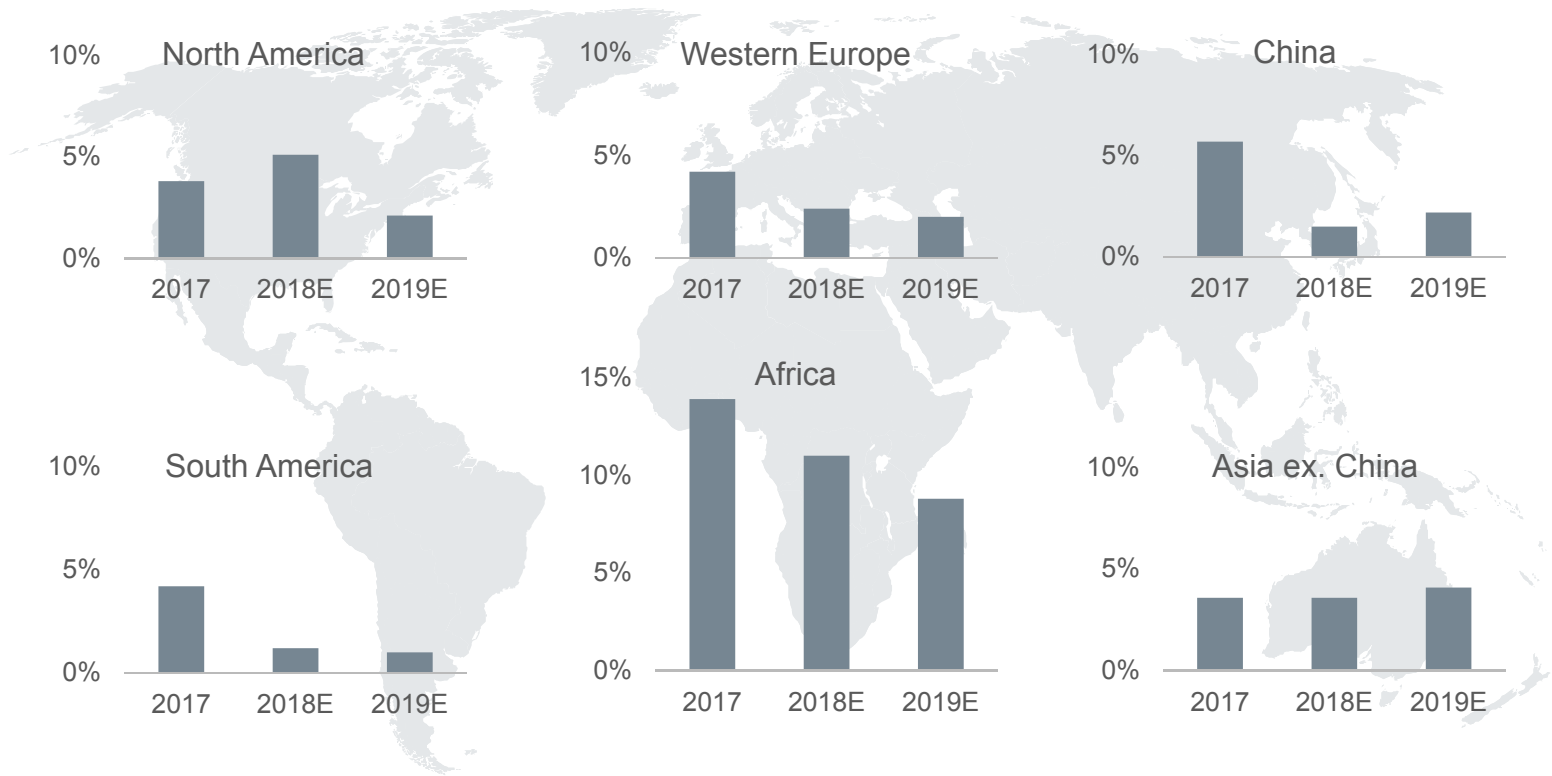
Expected market development

- Continued substitution trend in transport main demand driver
- Growth in packaging driven by can stock and foil in emerging markets

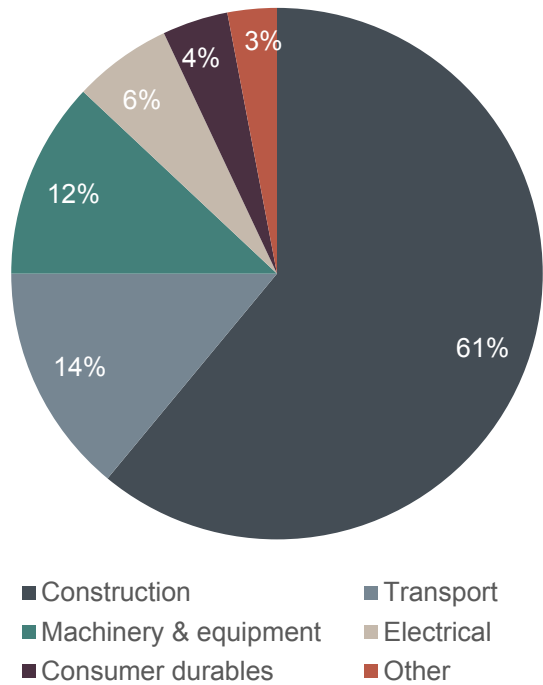
Moderating extrusion demand growth in Western Europe and North America, improving in Asia



Extrusion demand, selected regions
YoY-growth



Global segment composition, extrusions
(2018)



Source: Hydro analysis, Republished under license from CRU International Ltd

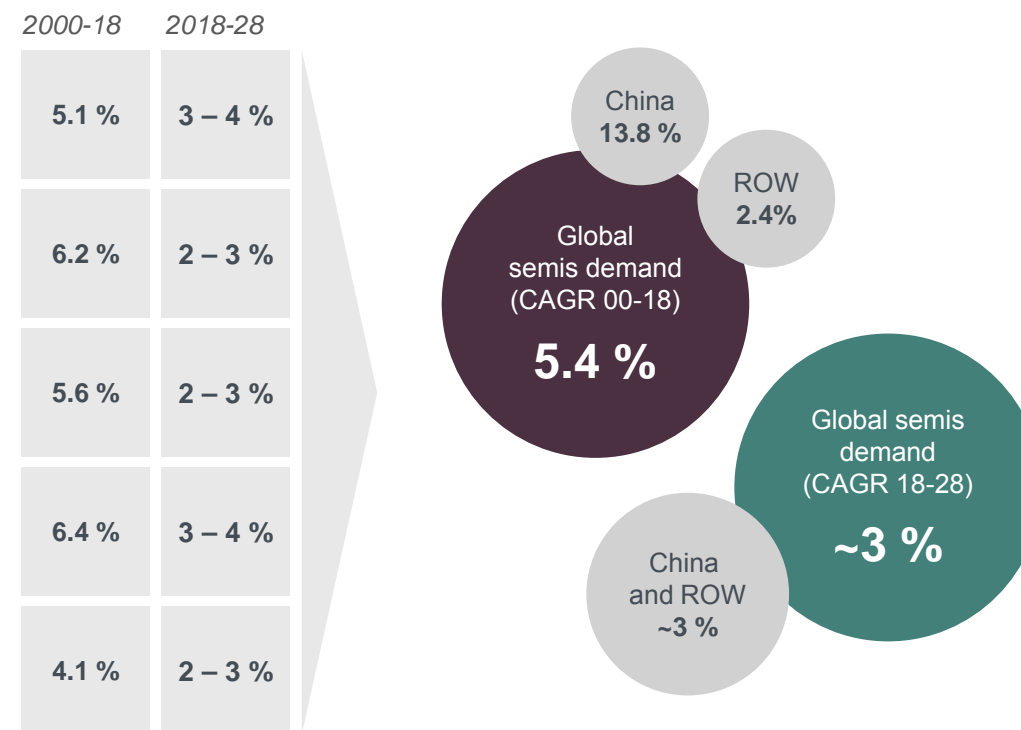
Strong growth drivers across segments providing solid demand outlook

Still encouraging demand outlook from strong base – converging demand China and outside China

Strong demand drivers in key aluminium segments

Transport	Growth in automotive vehicle production Aluminium content in cars increasing Growth in other transport modes, e.g. railway
Construction	Urbanization Housing market recovery in mature regions Energy neutral buildings
Electrical	Urbanization Copper substitution
Machinery & equipment	Improving industrial sentiment in mature regions Manufacturing activity and industrial growth in emerging countries
Packaging & foil	Urbanization Environmentally-friendly solutions

Global semis demand per segment, CAGR



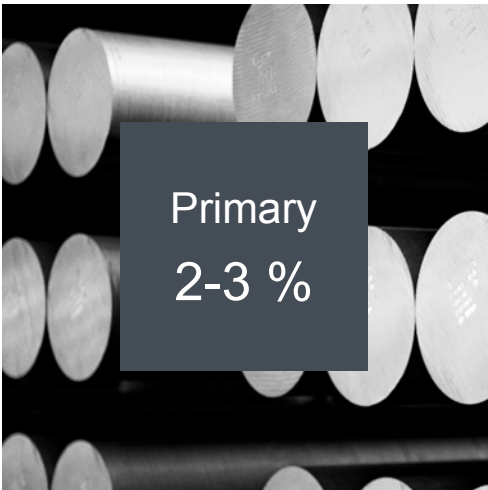
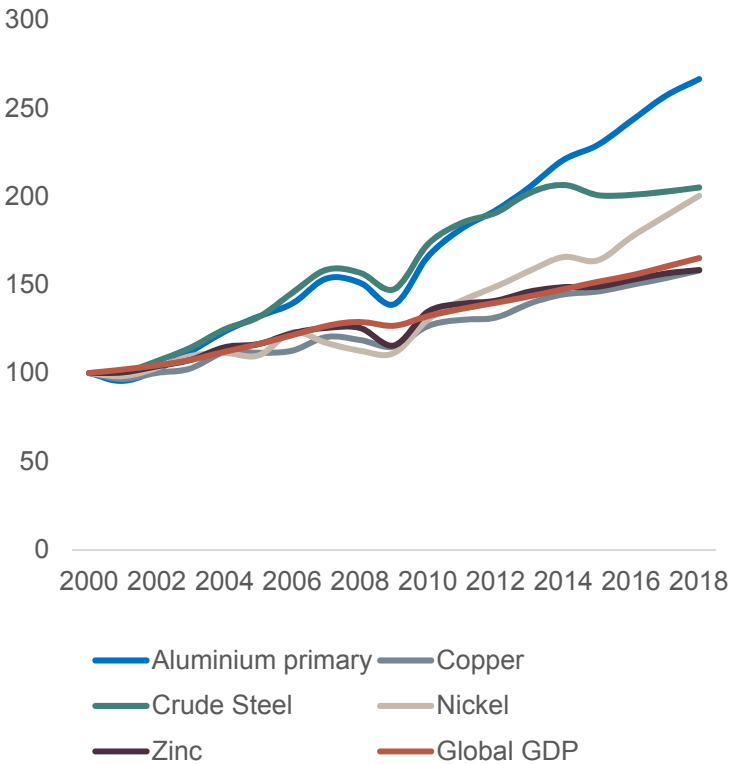
Aluminium continues to be the fastest growing base metal



Solid growth for semis, primary and recycling 2018-2028

Global metal demand

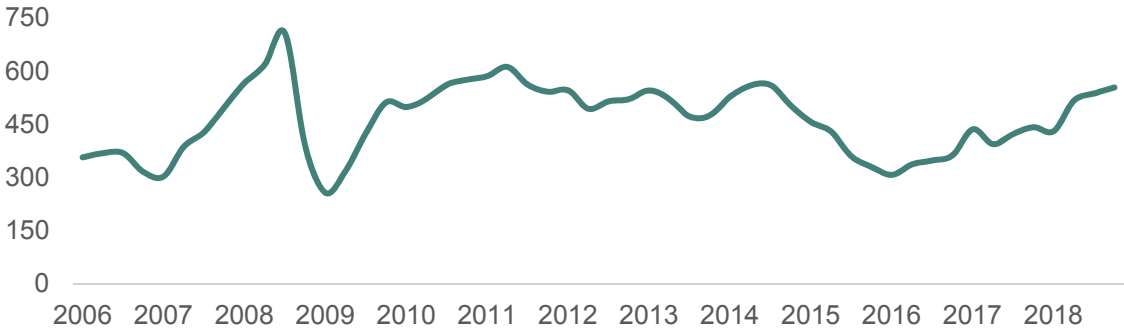
Index 2000=100



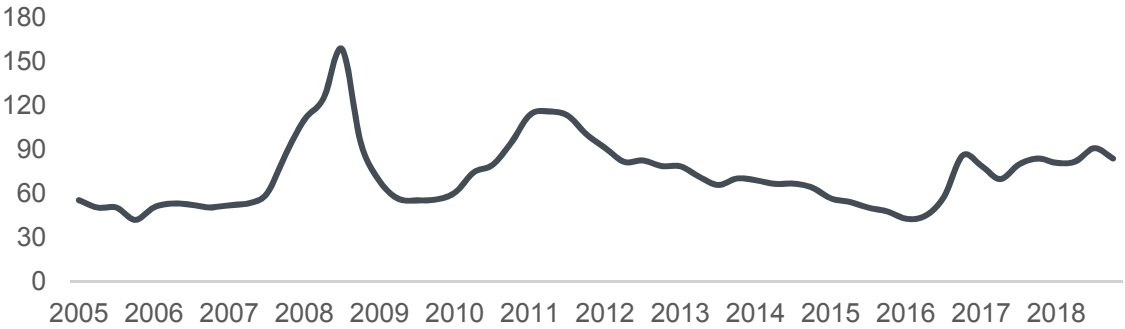
Commodity prices drive industry costs



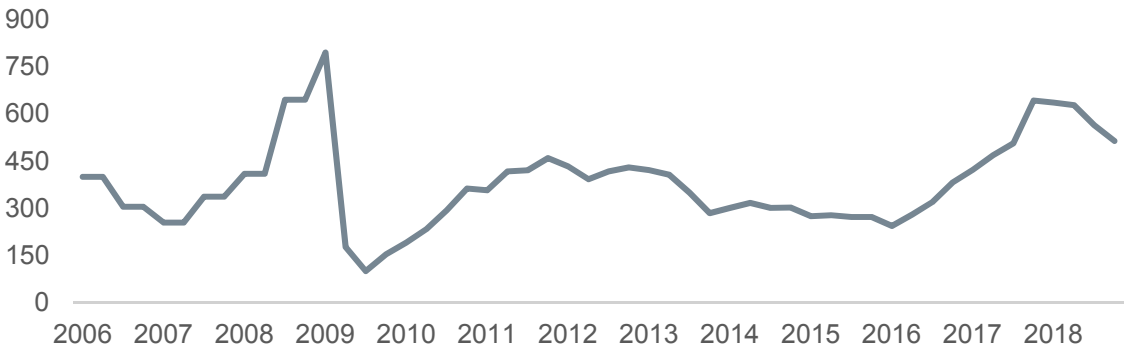
Fuel oil A1 (USD/mt)



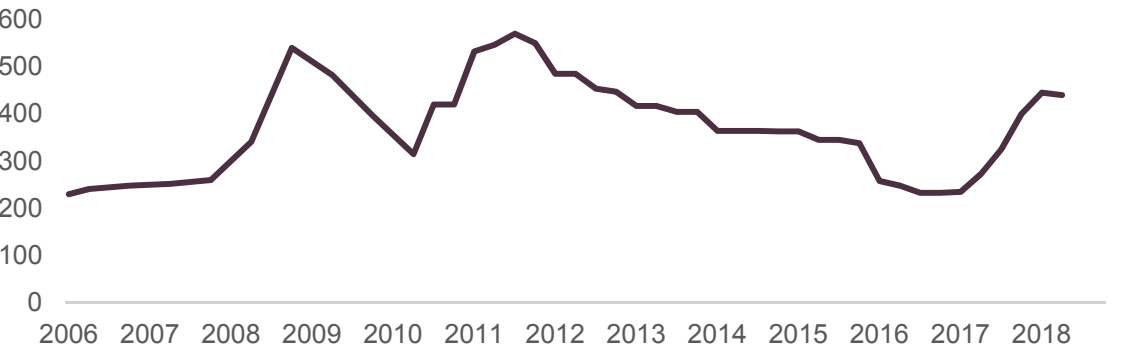
Steam coal (USD/mt)



Caustic soda (USD/mt)



Petroleum coke FOB USG (USD/mt)

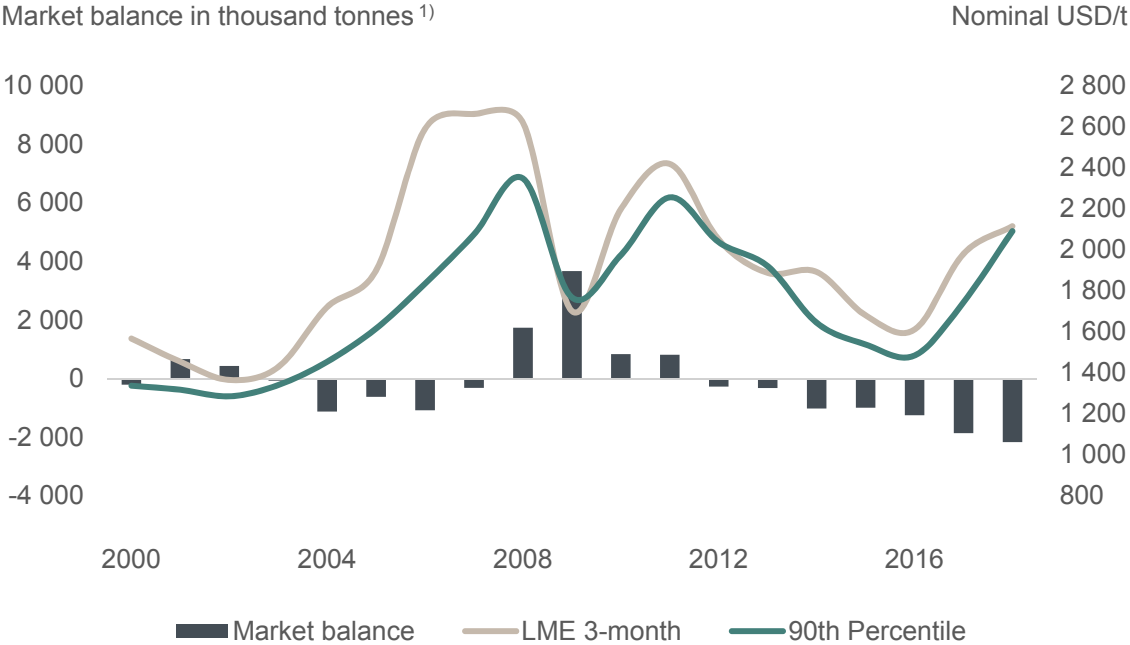


Historical strong correlation between LME and 90th percentile smelters

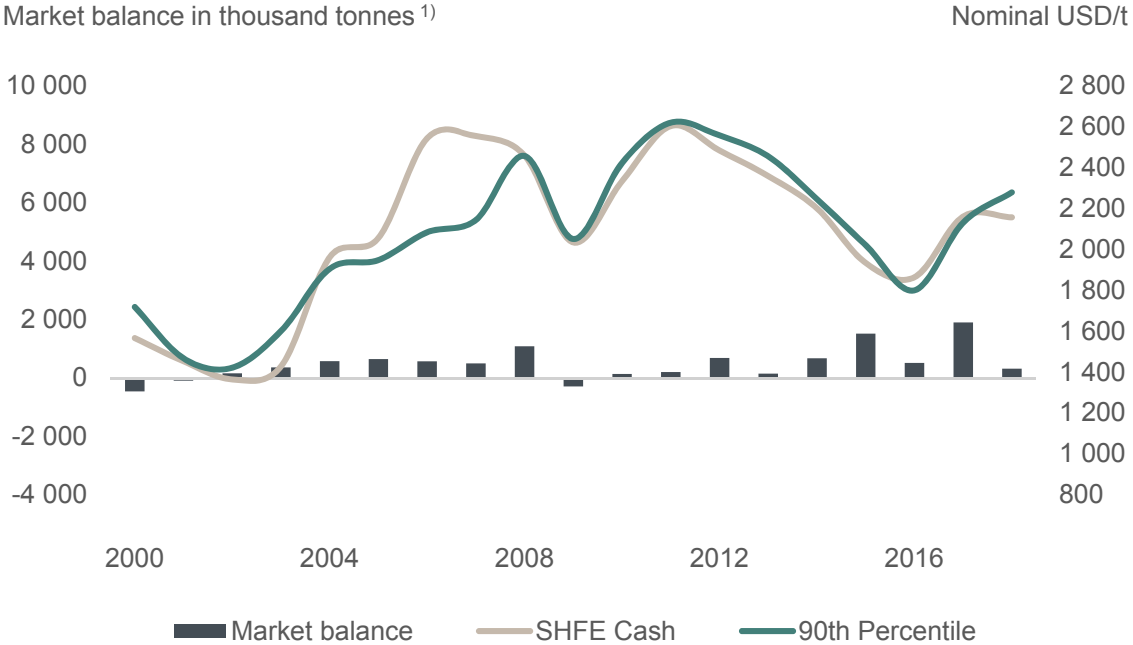


Primary metal market

World ex-China



China



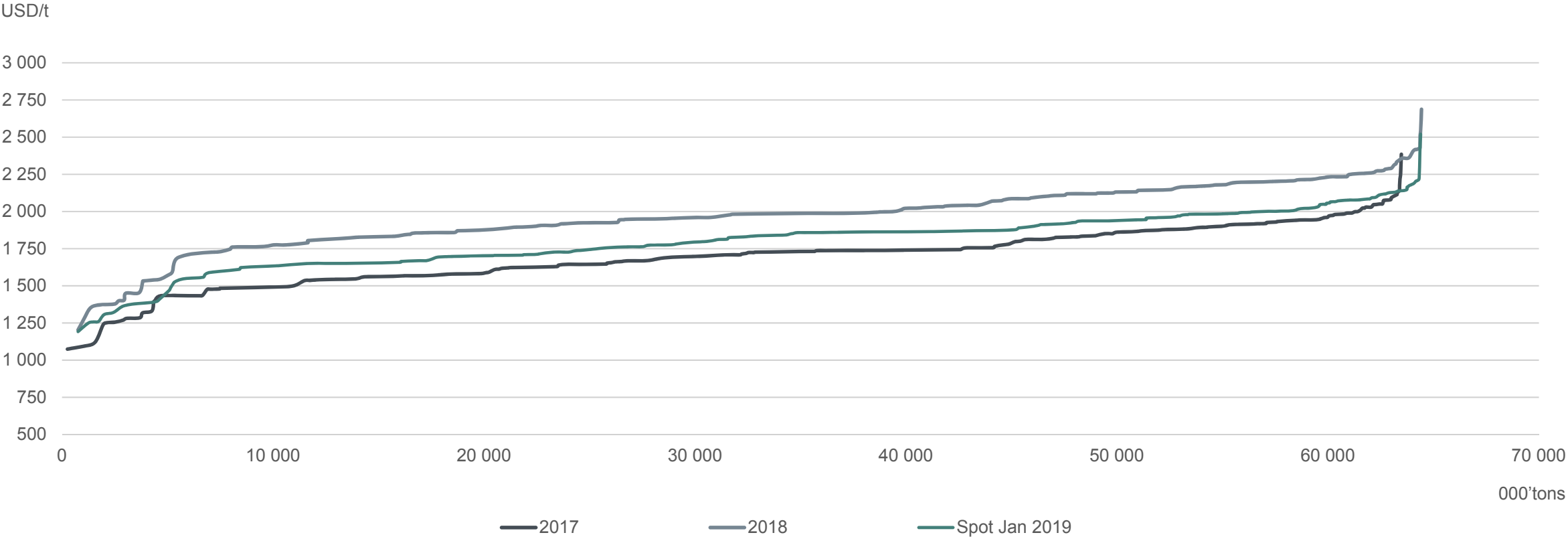
Source: CRU, Hydro Analysis
1) Primary production less primary demand

Global cost curve higher in 2018 driven by raw material cost increase



Primary metal market

CRU BOC curve by smelter (2018)



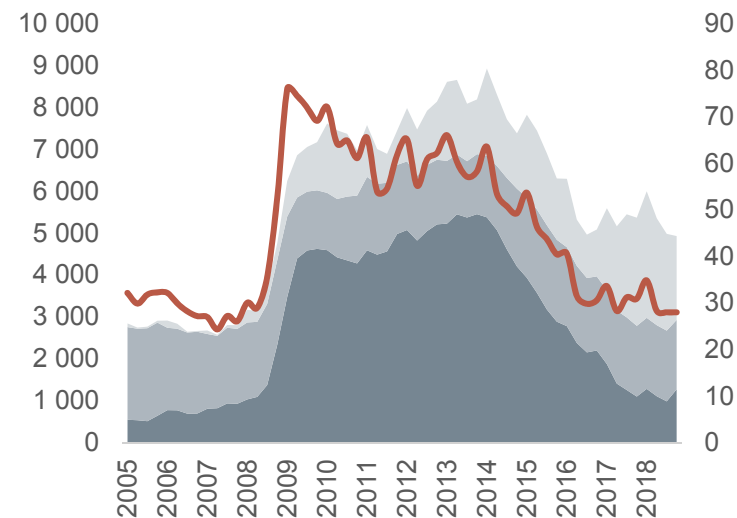
Source: Republished under license from CRU International Ltd
2018: LME 2115 and PAX 474. Spot Jan 2019: LME 1850, PAX 395

Total global inventory days trending downwards

Primary metal market

Global reported stocks and inventory days

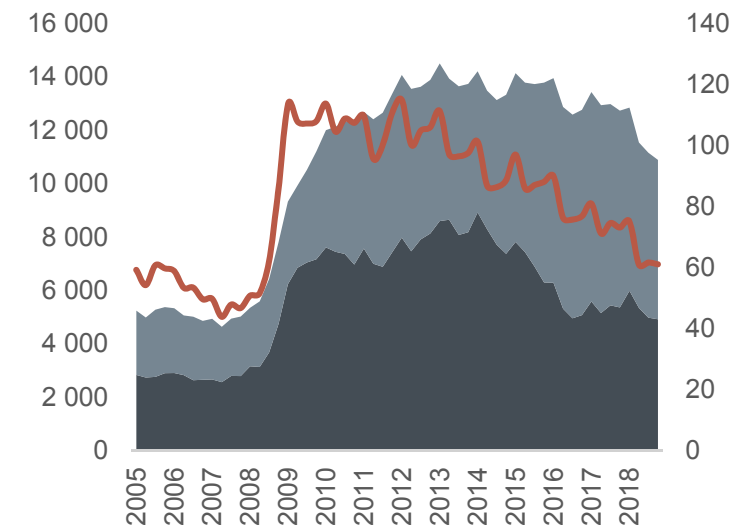
Thousand tonnes Inventory days



Reported China
Other reported ROW
LME stocks
Global reported inventory days

Total global stocks and inventory days

Thousand tonnes Inventory days



Global estimated unreported
Global reported
Global reported inventory days

- Reported stocks slightly decreasing in Q4-18
 - Reported stocks ex. China increasing, while reported stocks in China decreasing
- LME stocks at low levels compared to the last years, although rising in Q4
- High uncertainty regarding absolute level of unreported volumes

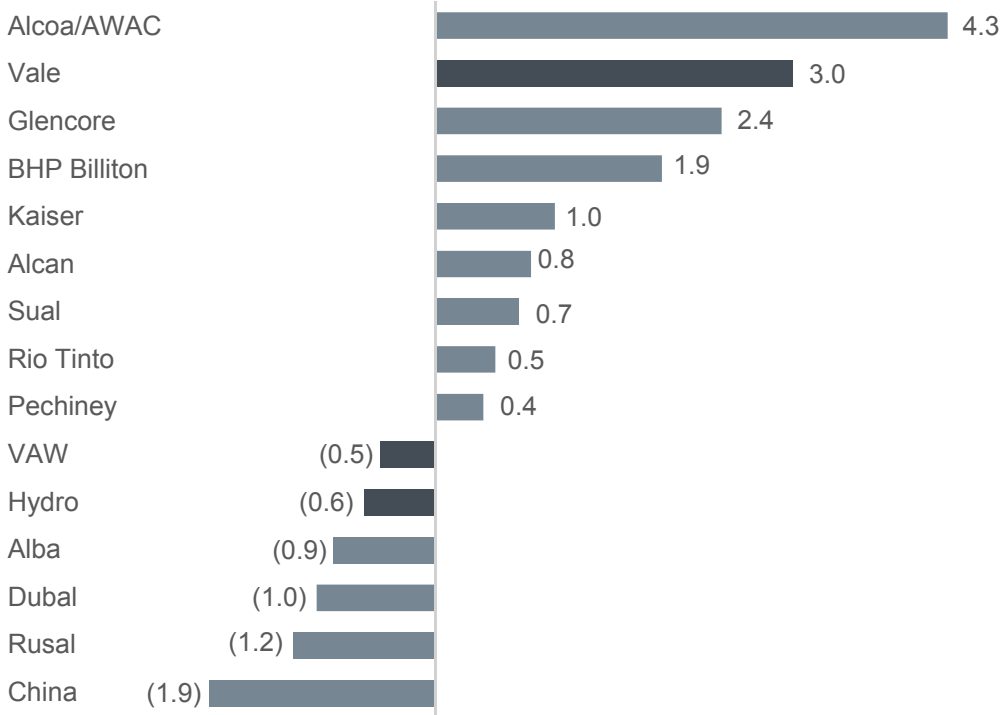
Alumina market consolidating, becoming more integrated



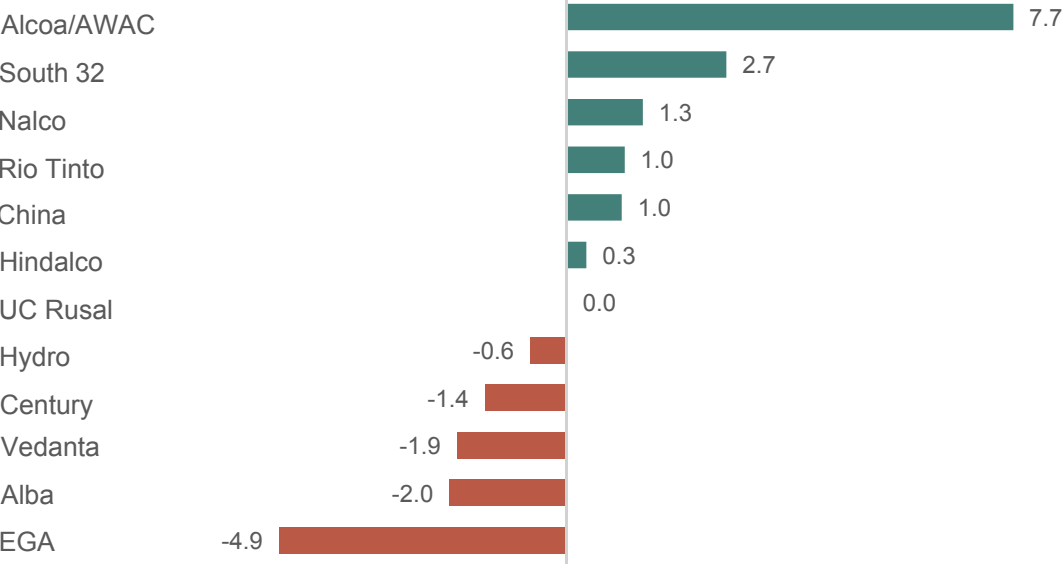
EGA and Vedanta planning capacity additions

Estimated net equity alumina position, in million tonnes

2000



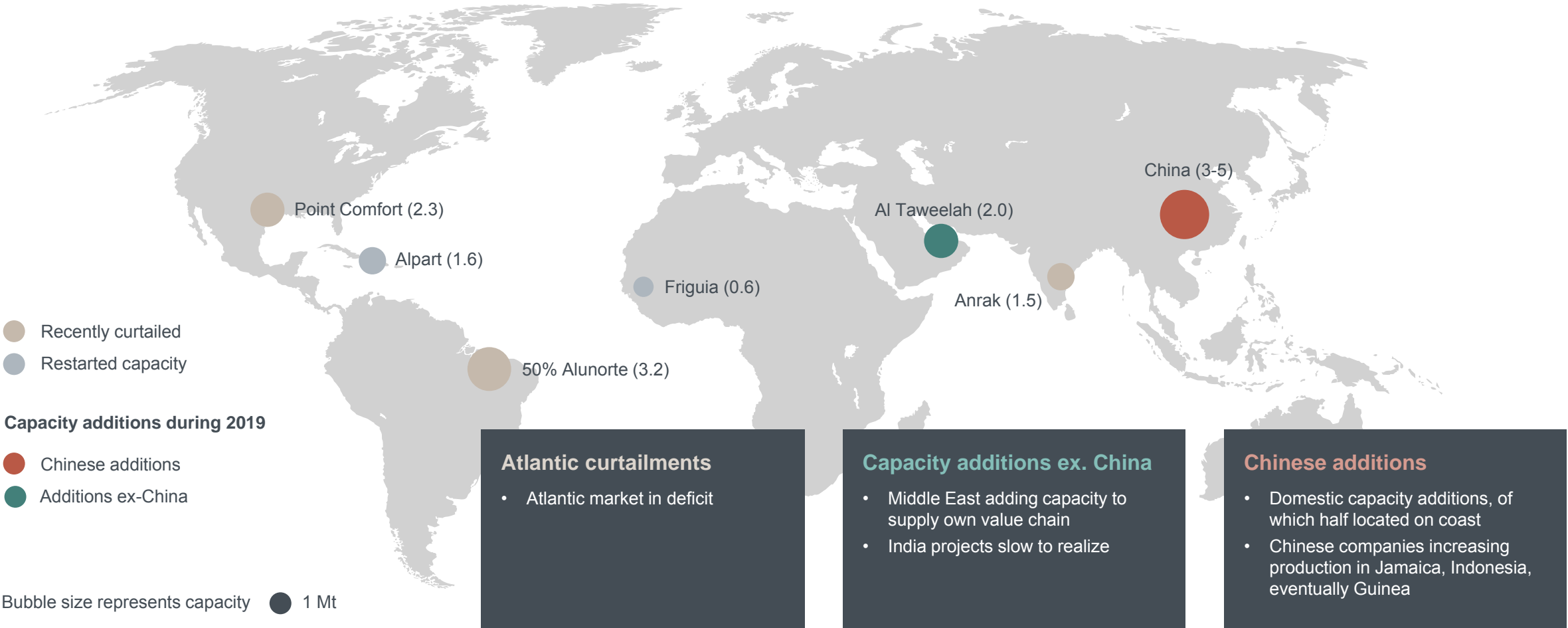
2018



Limited new alumina capacity ex-China expected in 2019



Long lead times to add new capacity



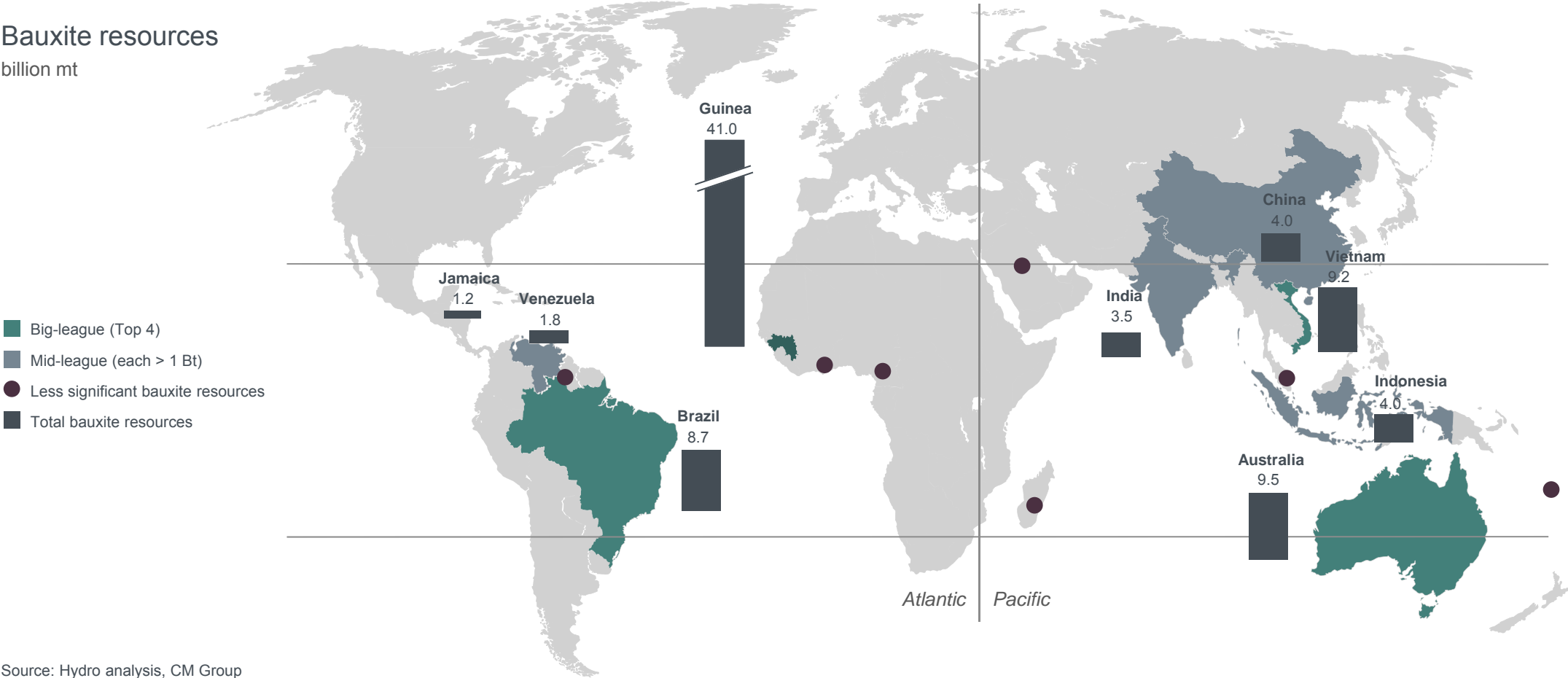
Source: Company reports, Hydro analysis, CM Group

Large and concentrated bauxite resources



Guinea stands out as a long-term source

Bauxite resources
billion mt



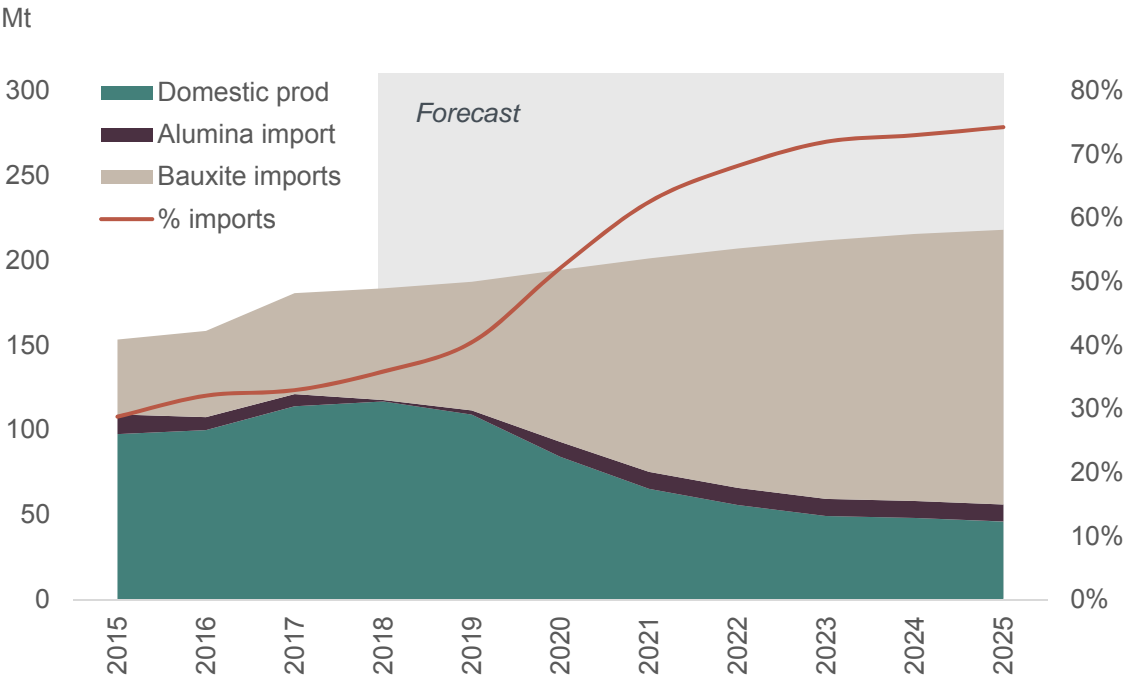
Source: Hydro analysis, CM Group

China increasingly reliant on bauxite imports



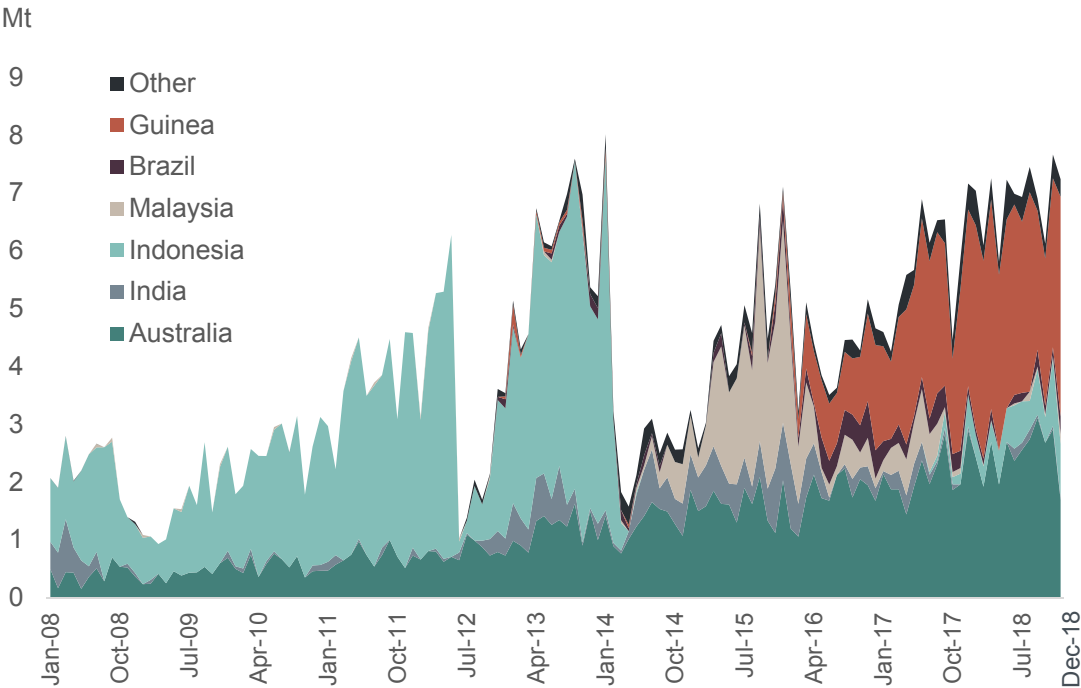
Guinea bauxite increasingly satisfying Chinese demand

Growing need for bauxite imports amid domestic depletion



- Increasing Chinese bauxite prices triggering more bauxite imports
 - Chinese quality deteriorating
 - Unlicensed mines closures

Monthly Chinese bauxite imports by origin



- Guinea bauxite production increasing dramatically
 - Includes non-Chinese players
 - Atlantic-sourced seaborne bauxite continues to grow, adding freight exposure

03

Business overview

Investor presentation, February 2019



Hydro – Group

Engineering the future, light-weighting our planet



- Combining natural resources and competence to engineer lighter, smarter solutions to current problems and future needs
- Leading the transition towards the low-carbon society within global aluminium
- Lifting the bar for corporate responsibility and sustainability, supporting our communities and protecting our planet

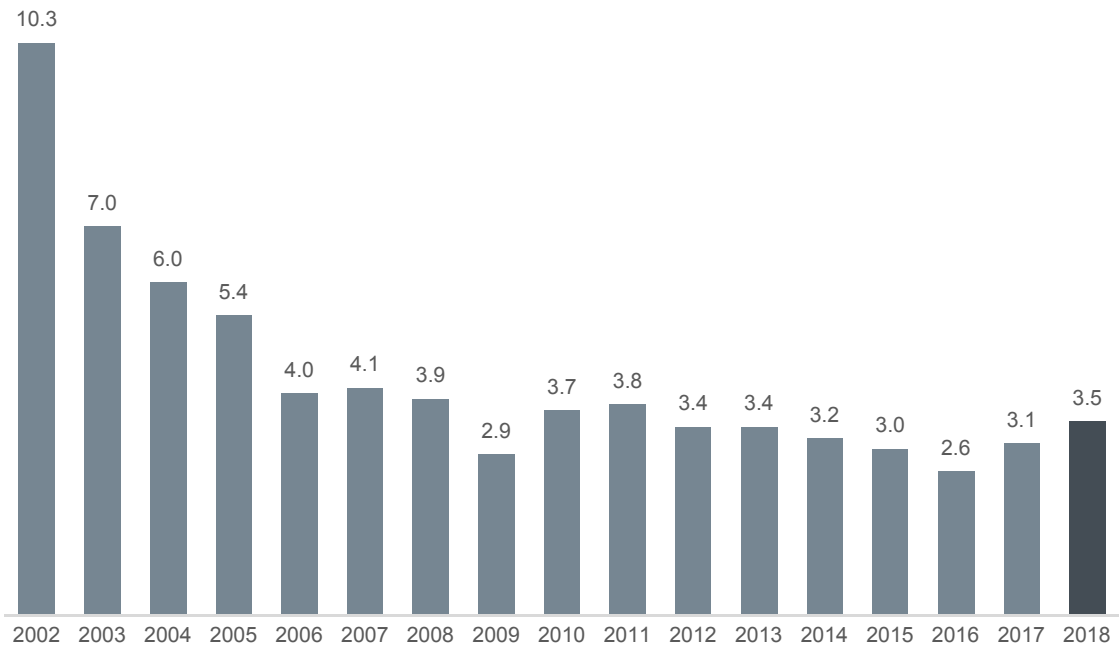
Infinite aluminium, infinite opportunities

Safe and responsible operations is a top priority



Leadership in HSE, CSR and compliance as a license to operate

TRI Rate¹⁾

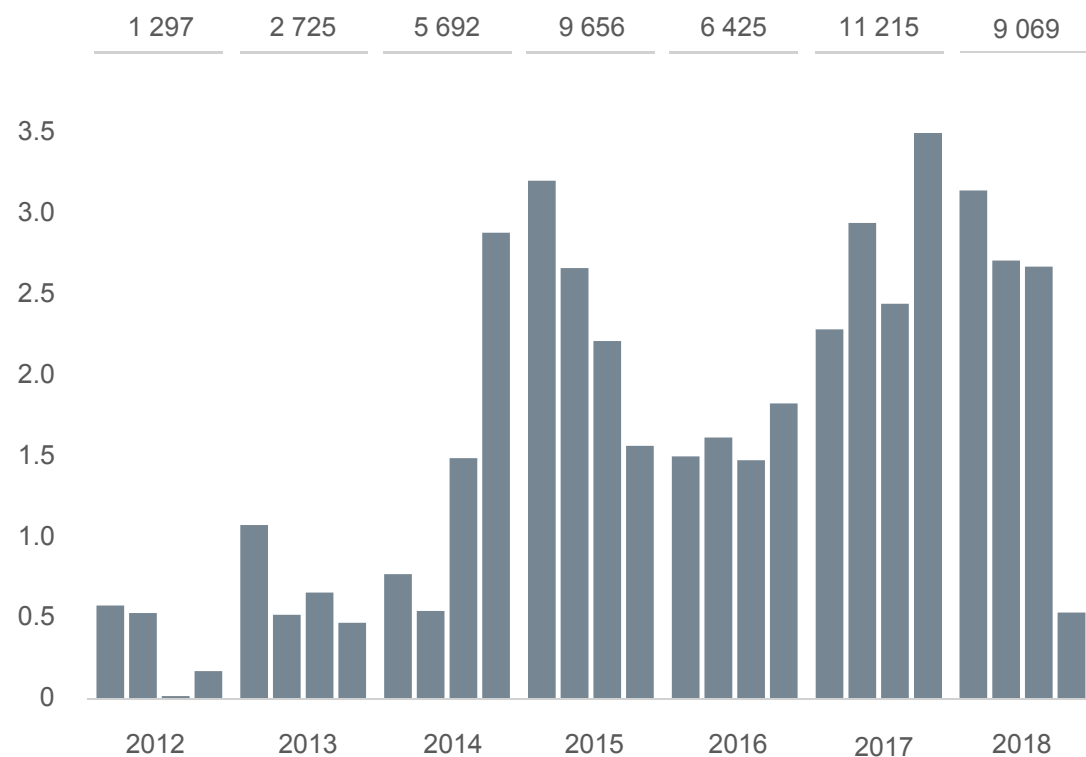


1) Total recordable incidents (TRI) rate defined as cases per 1 million hours worked, for own employees

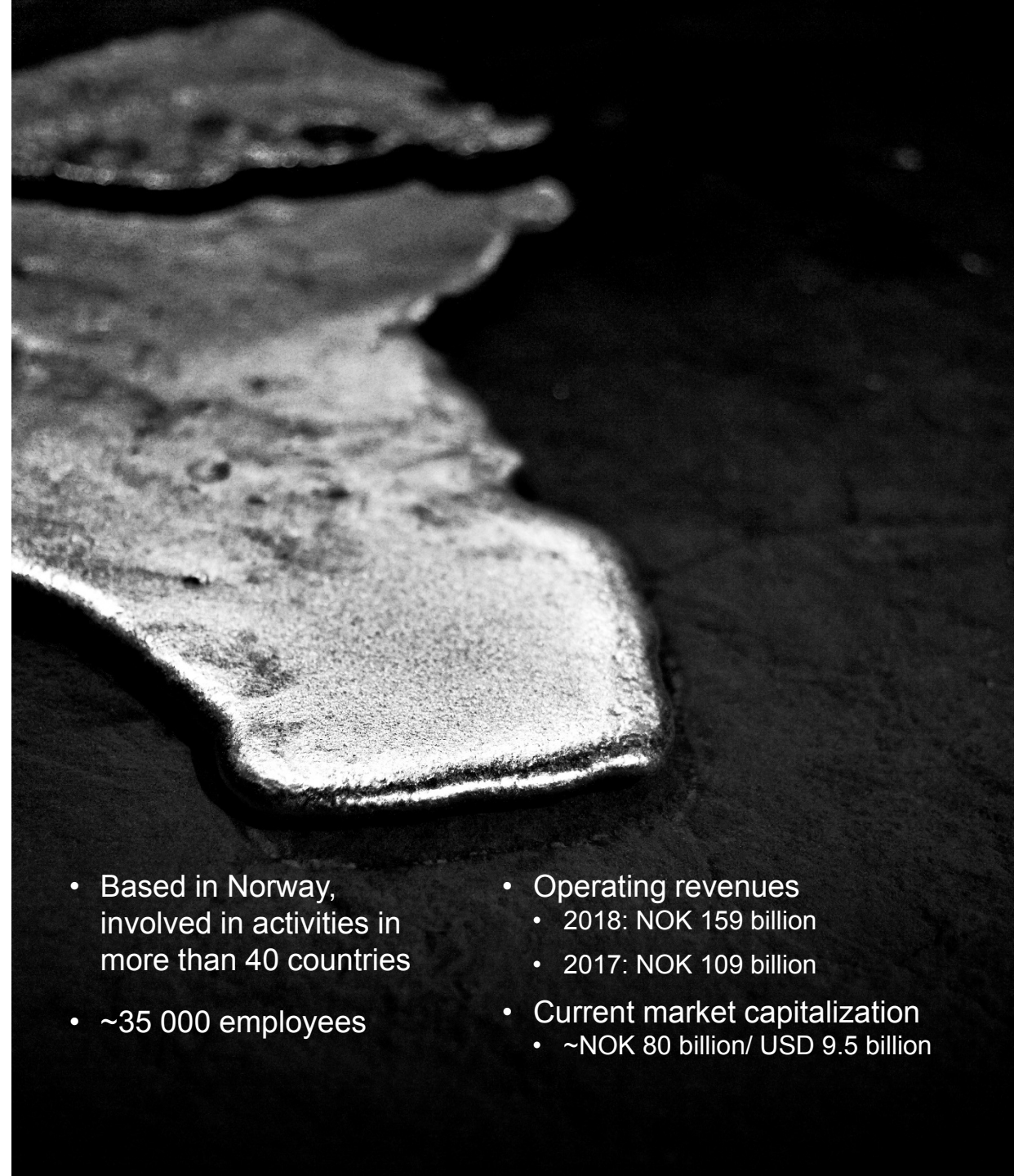


Hydro: a resource rich global aluminium company

Hydro underlying EBIT quarterly, NOK billion



Extruded Products classified as discontinued operations, and thereby excluded from revenues and underlying EBIT for 2011, 2012 and 2013.
Figures for 2012 are adjusted reflecting IAS 19R. Figures for 2013 are adjusted reflecting IFRS 11

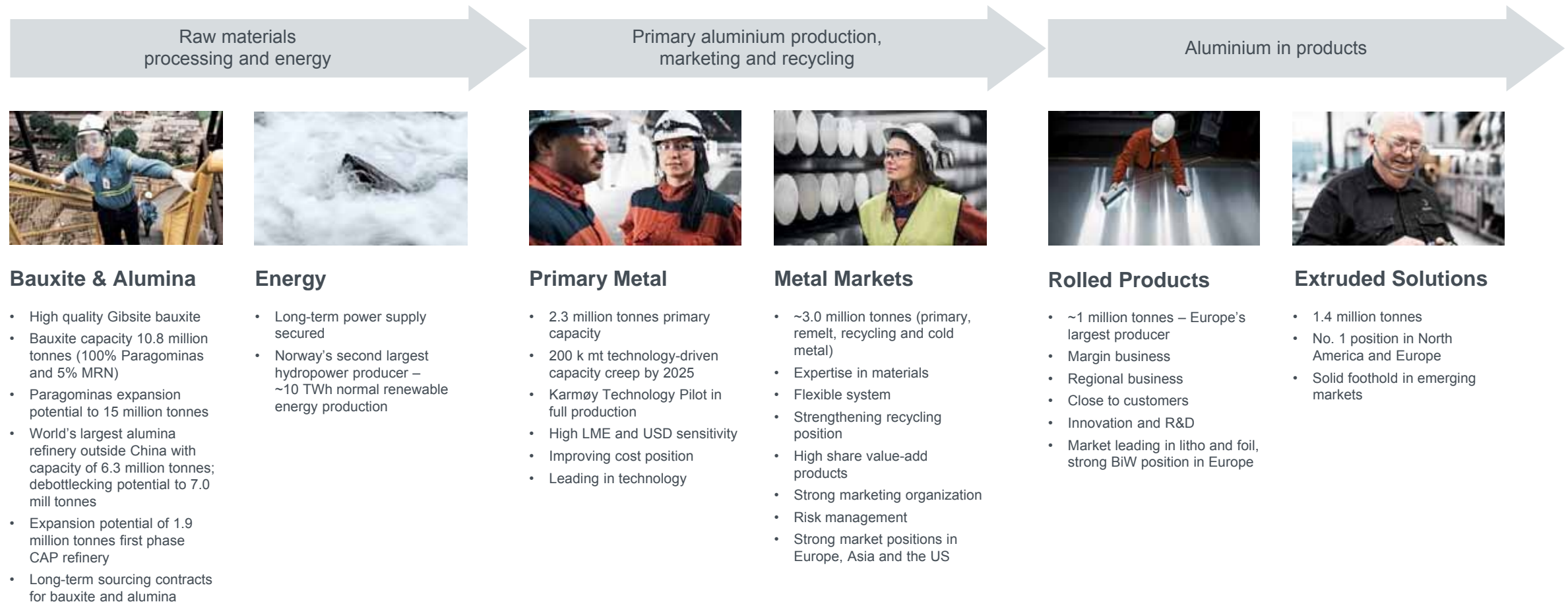


- Based in Norway, involved in activities in more than 40 countries
- ~35 000 employees
- Operating revenues
 - 2018: NOK 159 billion
 - 2017: NOK 109 billion
- Current market capitalization
 - ~NOK 80 billion/ USD 9.5 billion

Fully-integrated value chain



















World class assets, high-end products and leading market positions



Hydro – differentiating through the integrated model



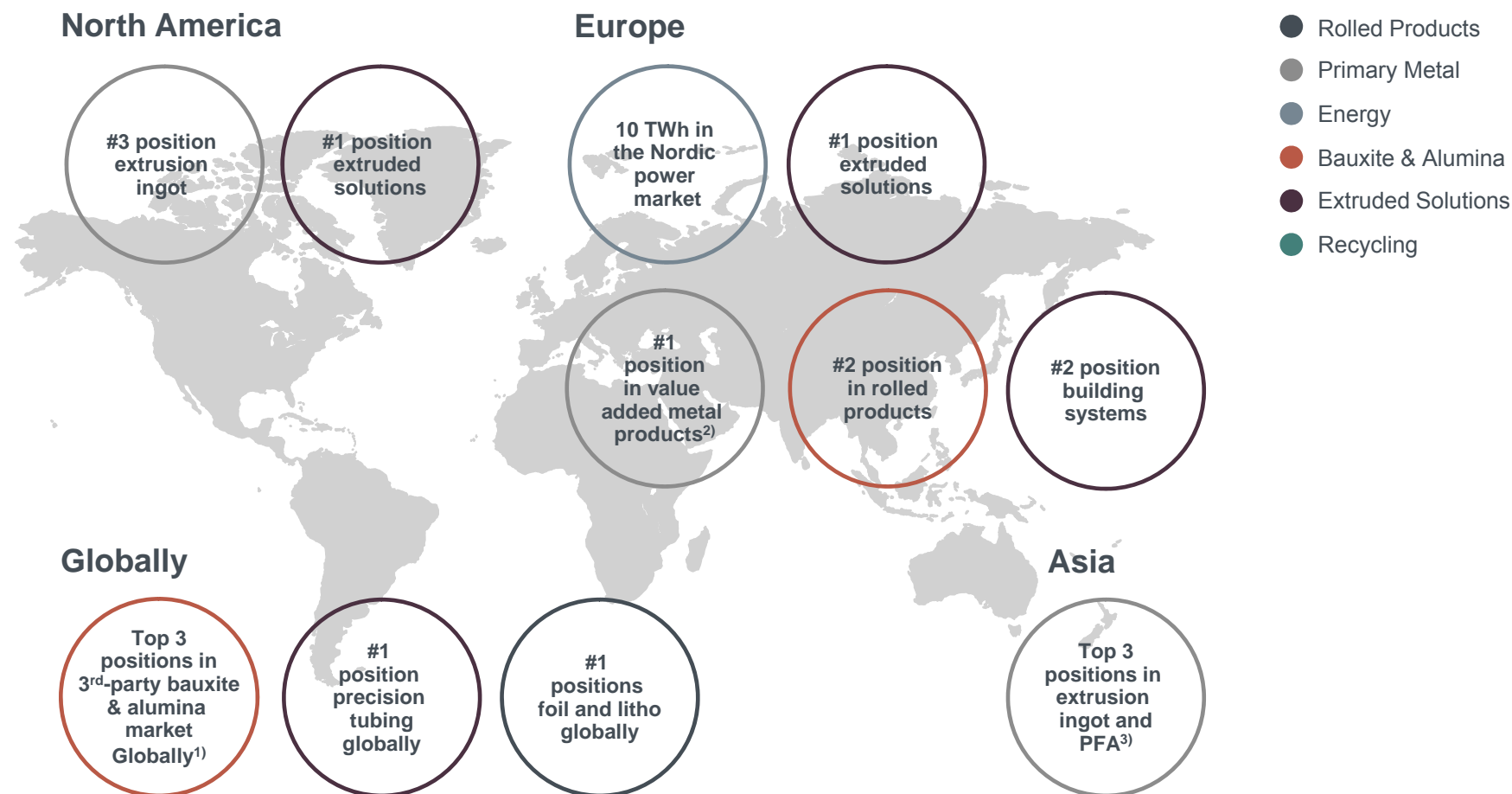
	 Hydro	RioTinto	 ALCOA	 SOUTH32	 RUSAL	 Constellium	 KAISER ALUMINUM	CenturyALUMINUM	Novelis	 ARCONIC	 China Hongqiao Group Limited 中國宏橋集團有限公司	 CHALCO
 Bauxite	●	●	●	●	●						●	●
 Alumina	●	●	●	●	●						●	●
 Energy	●	●	●		●						●	●
 Primary Metal	●	●	●	●	●			●			●	●
 Rolled Products	●		●		●	●	●		●	●	●	●
 Extrusion	●					●	●			●		●
 Recycling	●					●	●		●	●		●

Strong global presence throughout the aluminium value chain

Built on market understanding, customer closeness and competence

The complete aluminium company

- High-quality bauxite and alumina production in Brazil
- Primary production in Norway, Germany, Qatar, Slovakia, Brazil, Canada, Australia
- 10 TWh captive hydropower production
- European #2 in rolled products
- World leader in aluminium extruded profiles
- Remelting in the US, European recycling network
- Unparalleled technology and R&D organization



1) Outside China

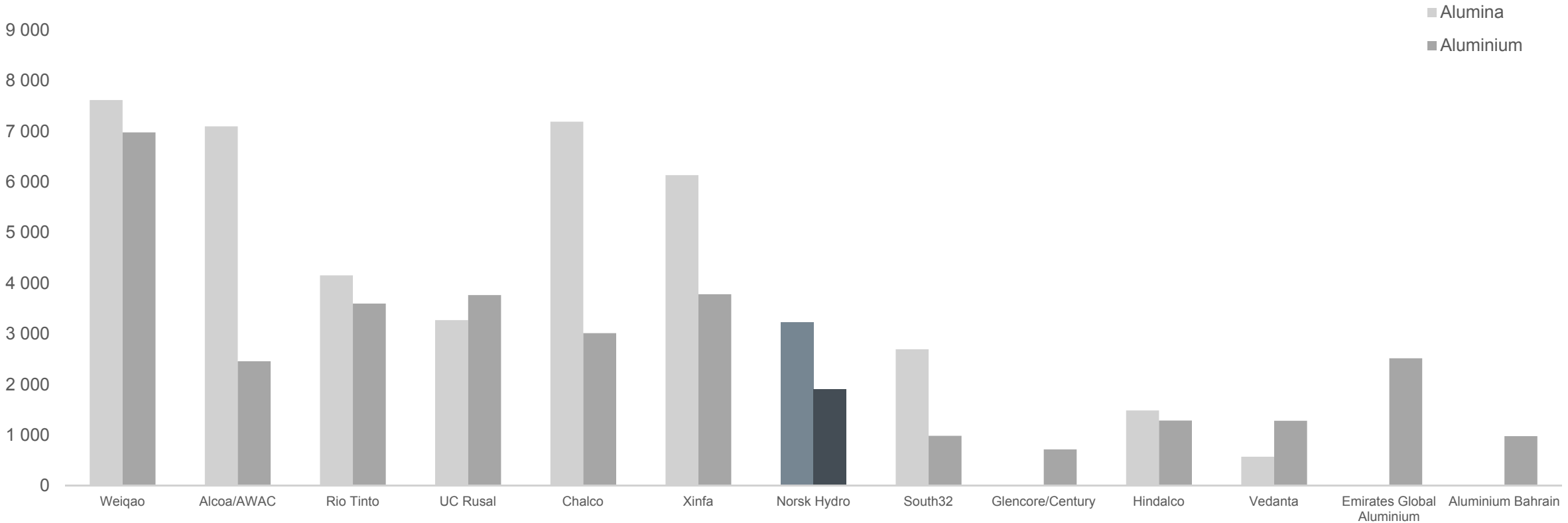
2) Extrusion ingot, sheet ingot, primary foundry alloys and wire rod

3) Primary Foundry Alloys

Hydro - a fourth largest aluminium producer outside China



Equity production in 2017 in aluminium equivalents, thousand mt



Strong positions across the value chain



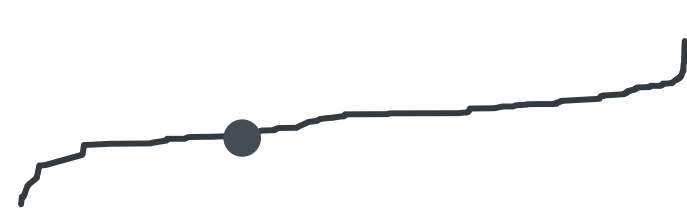
Upstream

Competitive cash cost position upstream

Alumina BOC curve by company¹ (2018)
USD/mt



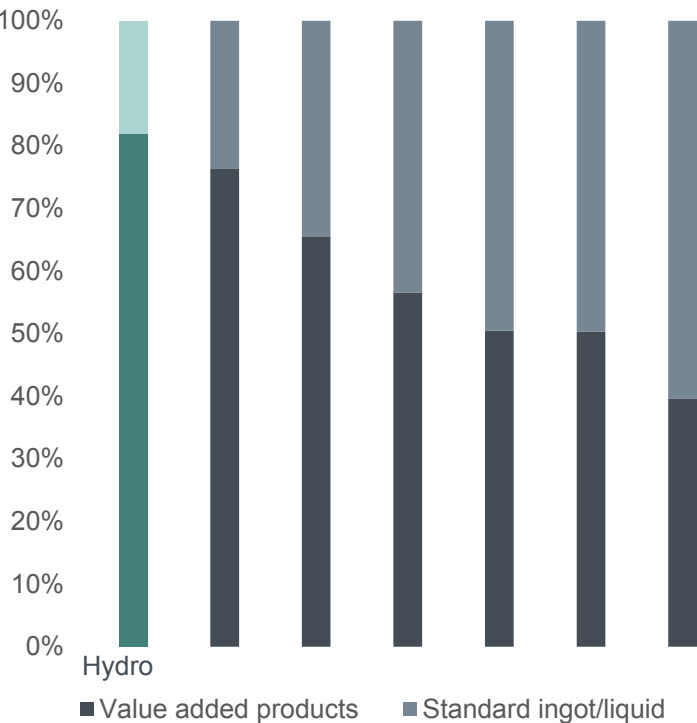
Smelter BOC curve by company² (2018)
USD/mt



Source: Republished under license from CRU International Ltd
1) Alumina cost curve: caustic soda USD 600, USD/BRL 3.75
2) Aluminium cost curve: LME USD 1 945, alumina USD 412, NOK/USD 8.5
Assumed 100% production at Alunorte and Albras

Midstream

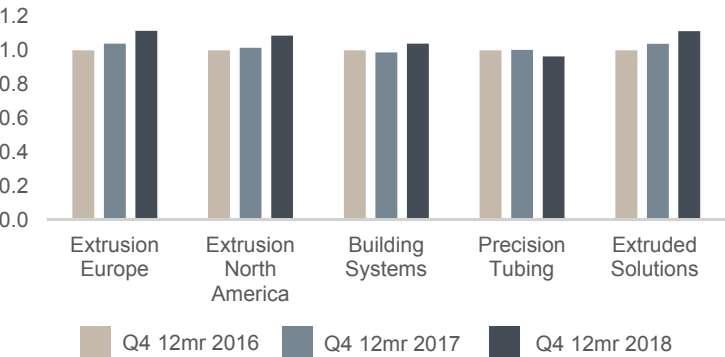
Strong position in value added products¹



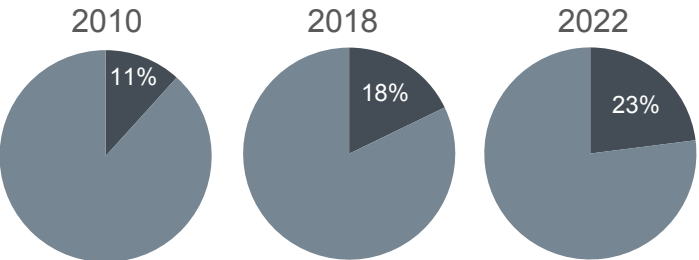
Source: Republished under license from CRU International Ltd
Actual figures for Hydro sales 2017
1) % of total shares being value added products; extrusion ingot, wire rod, sheet ingot and primary foundry alloy

Downstream

Improving NAV^{1,2} in Extruded Solutions



Increasing automotive share in Rolled Products³



1) Net Added Value: calculated as operating revenues less cost of material, including freight costs out
2) NOK indexed, translated to NOK based on Q4 2018 12 m rolling currency rates
3) In percentage of total sales

*Better, **Bigger**, Greener*



Hydro's aspiration for higher value creation

Better

Raise performance and improve customer offering

- Extend Hydro's leadership in advanced technology and product innovation
- Create value through raw materials access, customer collaboration and integrated model
- Continue benchmark performance and ensure attractive returns over the cycle

Bigger

Expand the use of aluminium and strengthen Hydro's platform for growth

- Promote Hydro and aluminium through value-adding products and solutions for our customers
- Be the preferred partner and most trusted voice of the aluminium industry
- Pursue selective growth from raw materials to products, solutions and recycling

Greener

Lead the transition towards sustainable solutions

- Advocate aluminium as a building block for the low-carbon, circular economy
- Continue to improve footprint from own production, recycling and sustainable solutions
- Making a positive difference by strengthening local communities and our business partners

Our mid-term goals strongly affected by Alunorte situation



	Ambitions	Target	Timeframe	Progress ¹	Status
<i>Better</i>	• Improve safety performance, strive for injury free environment	TRI<2	2020	3.4 ²	●
	• Realize ongoing improvement efforts <i>Better</i>	BNOK 3.0	2019	(0.5) BNOK	●
	• Secure new competitive sourcing contracts in Norway post 2020	4-6 TWh	2020	4.8 TWh ³	●
	• Lift bauxite production at Paragominas	11 mill mt/yr	2018	6.6 mill mt/yr ⁴	●
	• Lift alumina production at Alunorte	7.0 mill t/yr	2021	3.9 mill mt/yr ⁴	●
	• Shift alumina sales to PAX-based pricing	➤ 85% PAX ⁵	2020	75-80% PAX ⁶	●
	• Extend technology lead with Karmøy technology pilot	Start production	2H 2017	January 29, 2018	●
	• Extend technology lead with Karmøy technology pilot	Full ramp-up	Q2 2018	June 27, 2018	●
<i>Bigger</i>	• Realize technology-driven smelter capacity creep	200,000 mt/yr	2025	43,000 mt	●
	• Increase nominal automotive Body-in-White capacity	200,000 mt/yr	2017	Ramping-up, qualifications ongoing	●
	• Complete ramp-up of UBC recycling line	>40 000 mt/yr	2017	Delayed to Q4 2019	●
<i>Greener</i>	• Become carbon-neutral from a life-cycle perspective	Zero	2020	On track	●
	• Increase recycling of post-consumer scrap	>250,000 mt/yr	2020	168,000 mt	●
	• 1:1 rehabilitation target	1:1	2020	On track ⁷	●

1) Based on 2018 estimate unless stated otherwise

2) YTD Oct-2018, own employees

3) ~2.2 Twh power sourcing since CMD 2017

4) YTD Q3 2018 annualized

5) Based on sourcing volume of ~ 2-2.5 million tonnes per annum

6) Based on sourcing volume of ~ 3.5 million tonnes for 2018

7) 1:1 rehabilitation of areas available for rehabilitation within two hydrological seasons after release. Revised definition of target takes into account the nature of the mining cycle, and the time lag necessary to ensure quality rehabilitation to restore biodiversity

Status towards the target

● Ambition on track and on target

● Ambition behind plan, but on target

● Ambition will not meet the target within the timeframe

Better – Industry-leading improvement drive



Better improvement program will not meet NOK 3.0 billion 2019 target due to the Alunorte situation

Hydro's improvement drive until 2015

Hydro's current improvement ambition

Better **BNOK 3.0¹⁾**

Total improvements 2009-2015: BNOK 4.5

'From B to A'

Sapa JV

'Climb'

'Energy Aspiration'

CCIP II

'USD 300 program'

'JV program'

Bauxite & Alumina

BNOK 1.3 in 2019

- 50% production at Alunorte and Paragominas with strong negative impact on improvement program
- 2016-17 improvements more than offset by negative 2018 effects
- E2018 accumulated delivery of negative 1.0 BNOK

Rolled Products

BNOK 0.7 in 2019

- Benefit from AL3, UBC and cost performance
- Operational and ramp-up issues reducing improvement speed
- E2018 accumulated delivery of 0.4 BNOK

Primary Metal

BNOK 1.0 in 2019

- 50% production at Albras impacting improvement program negatively
- 50% production Alunorte with negative impact due to alumina qualities – challenges on operational parameters
- E2018 accumulated delivery of 0 BNOK

Better 2016-2018 of (0.6) BNOK

1) Real 2015 terms. Includes some larger investments of NOK 3-3.5 billion NOK in 2015-2019: AL3 and UBC in Rolled Products. Creep projects in Primary Metal. Alunorte debottlenecking in B&A.

Bigger – A solid platform for building an even stronger Hydro



Bauxite & Alumina



- Move beyond nameplate capacity
- Potential for debottlenecking Alunorte to 7.0 million mt
- Mature CAP project and Paragominas expansion

Energy



- Mature captive growth opportunities
- Raise income potential from market operations
- Leverage value from Nordic power surplus
- Develop new business portfolio

Primary Aluminium



- Enhance position in high-margin segments
- Realize technology-driven capacity creep
- Grow post-consumed scrap recycling to 150,000 mt/yr
- Extend technology lead with Karmøy technology pilot
- Further mature smelter growth options

Rolled Products



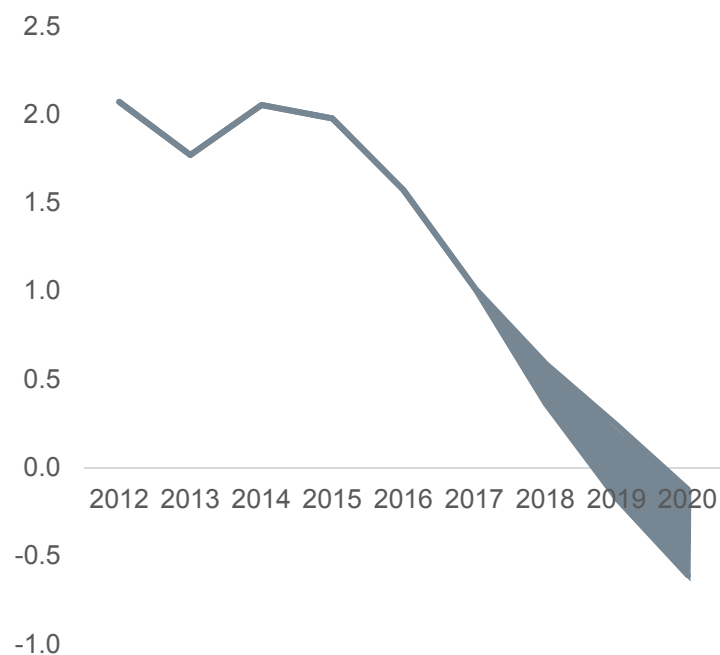
- Expand nominal automotive BiW capacity to 200,000 t/yr
- Increase recycling of post-consumed scrap above 100,000 t/year incl. ramp-up of UBC* recycling line
- Build positions and lift margins through technology leadership and innovation

* Used beverage can (UBC)

Greener – Carbon-neutral from a life-cycle perspective by 2020

Hydro's climate strategy: Carbon-neutral from a life-cycle perspective by 2020

In mill tonnes CO2



Integrated into business strategy in all business areas

Climate and energy- efficiency in production

- Increasing energy-efficiency and reducing emissions in production processes in aluminium plants, rolling mills, and alumina refinery
- Increasing production of renewable hydropower, evaluating potential of switching to renewable energy sources or natural gas in production processes

Use-phase benefits

- Developing products and solutions, establishing partnerships with advanced customers, and identifying new applications for metal and downstream products
- Supporting global energy-efficiency goals by helping customers reduce energy consumption and emissions and by promoting sustainable frameworks

Recycling

- Reducing waste and saving ~95% of energy by recycling of post-consumed scrap in Primary Metal and Rolled Products
- Utilizing advanced sorting technology and developing recycle-friendly alloys

Summary of strategic focus areas going forward

On-going initiatives and strategic ambitions

Bauxite & Alumina



- B&A operations back on track
- Closer collaboration with key stakeholders
- Fuel switch project

Energy



- RSK solution
- New business
- Competitive sourcing

Primary Metal



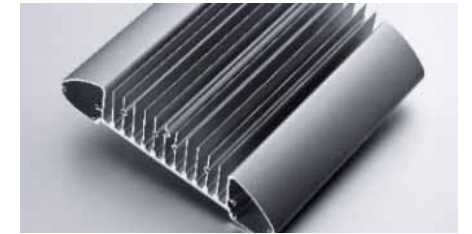
- Pilot spin-offs
- Husnes restart
- Albras back on track
- Recycling

Rolled Products



- Further growth in automotive
- Recycling
- High-grading product portfolio

Extruded Solutions



- Selective growth
- Value over volume

Innovation, technology, digitization

Sustainability

Commercial differentiation

Continuous improvements



Bauxite & Alumina

Bauxite and alumina cluster in Para, Brazil

MRN bauxite mine



- Top 3 bauxite mine in the world
- 5% ownership
- Volume off-take agreement for Vale's 40% stake
- Capacity 18 million tonnes

Paragominas bauxite mine



- 100% ownership
- One of the world's largest bauxite mines
- Nameplate capacity of 9.9 million tonnes
- 2017 production 11.4 million tonnes
- 2018 production 6.2 million tonnes*
- Possible expansion to 15 million tonnes
- Long-life resource

Alunorte alumina refinery



- 92% ownership
- World's largest alumina refinery outside China
- Nameplate capacity of 6.3 million tonnes
- 2017 production 6.4 million tonnes
- 2018 production 3.7 million tonnes*
- Potential for debottlenecking to 7.0 mill mt/yr
- Bauxite supplied from Paragominas and MRN
- World-class conversion cost position
- Utilizing state-of-the-art press filter technology to process bauxite residue
- Enhancing plant robustness to prepare for extreme weather events

CAP alumina refinery project



- Long-term greenfield opportunity
- 81% ownership
- Paragominas expansion to be developed in parallel

**Bauxite
licenses**

**Refining and
mining competencies**

**External
supply contracts**

**Sales contract
portfolio**

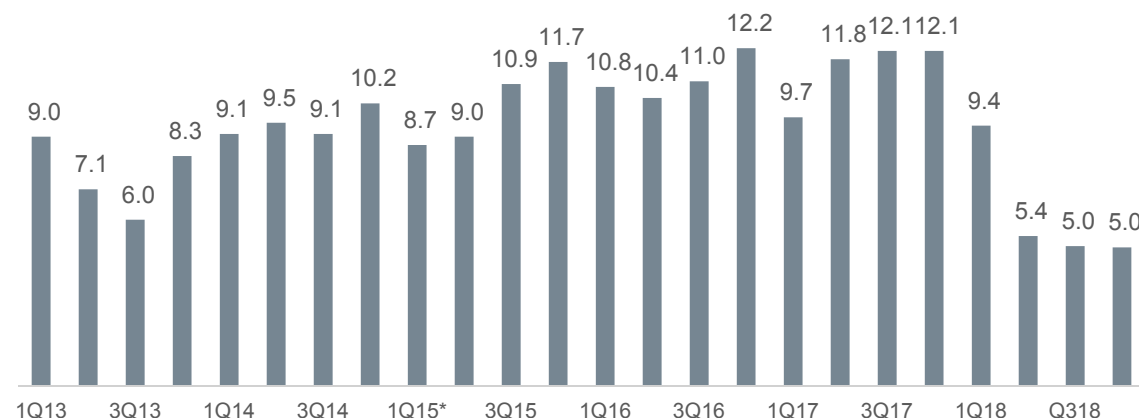
* Alunorte and Paragominas producing at 50% capacity since March 2018 due to a 50% production embargo on the Alunorte refinery.

Reduced production at Alunorte and Paragominas, following Alunorte embargo



Bauxite production in Paragominas

Annualized million tonnes

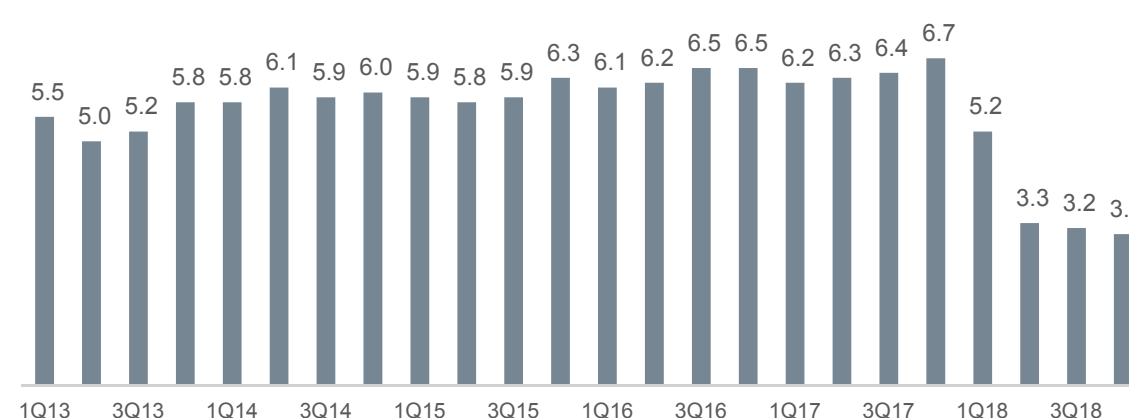


Paragominas bauxite mine

- Affected by Alunorte embargo, currently producing at 50%
- 2017 production:
 - Production above nameplate capacity
 - Improved equipment conditions, operating standards and process control
 - Improved ore quality control in the mining process

Alumina production at Alunorte

Annualized million tonnes



Alunorte alumina refinery

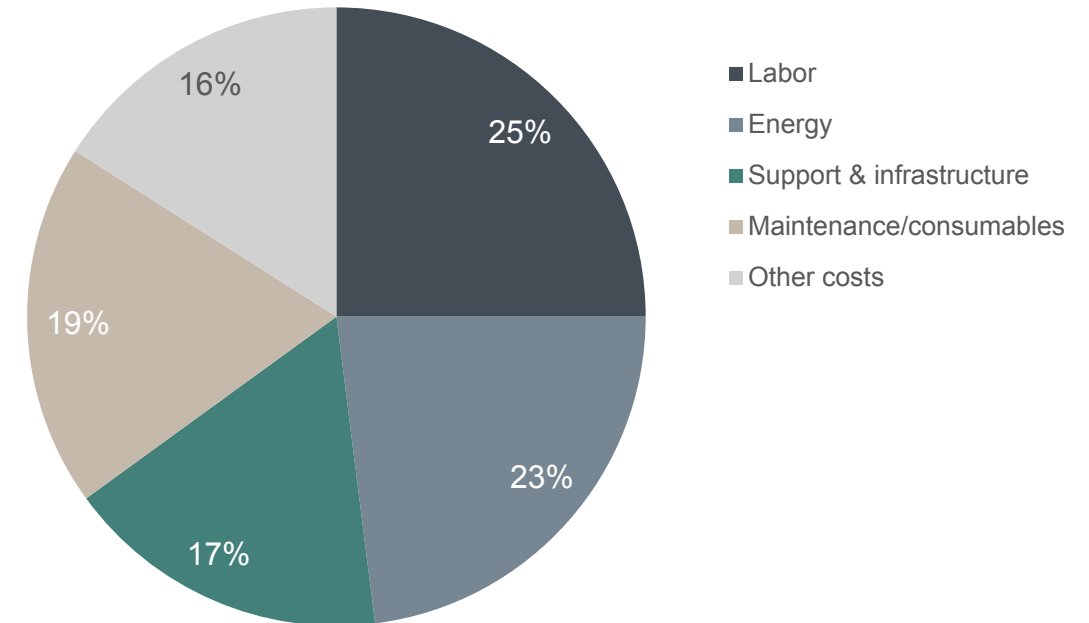
- Forced production cut, currently producing at 50%
- 2017 production:
 - Improved equipment effectiveness and process stability
 - Increased robustness in power supply to prevent serious power outages
 - Improving energy mix and raw material efficiency

* Extended maintenance period in March / April 2015 resulted in lower bauxite production

Bauxite operational mining costs in Paragominas

- Energy cost - Power and fuel
- Large fixed cost base
- Labor cost
 - Influenced by Brazilian wage level
 - Productivity improvements
- Maintenance and consumables
 - Mainly influenced by Brazilian inflation

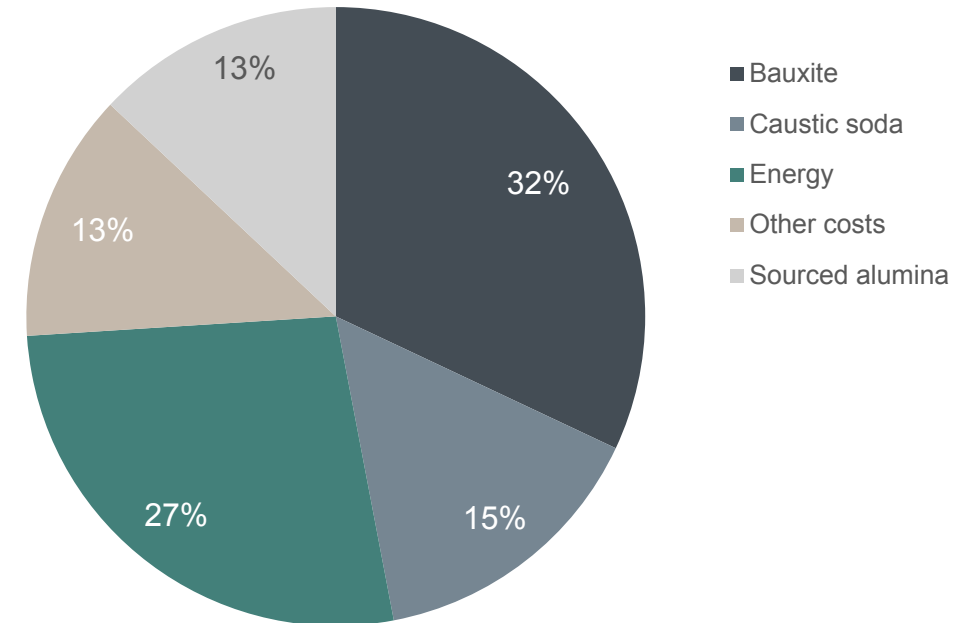
Paragominas bauxite mining costs 2017



Favorable integrated alumina cost position

- Implied alumina cost 2017 - USD 242 per mt
 - Alunorte, Paragominas and external alumina sourcing for resale
- Implied alumina cost 2018 – USD 358 per mt
 - Short alumina position, additional external sourcing to compensate for the 50% production embargo
- Bauxite
 - Internal bauxite from Paragominas at cost, sourced bauxite from MRN
 - External bauxite sales
- Energy
 - First-quartile energy consumption – 8 GJ/mt
 - Energy mix of heavy fuel oil, coal and electric power
- Caustic soda
 - Competitive caustic soda consumption due to bauxite quality
 - Competitive caustic soda sourcing contracts
- Other costs
 - Maintenance, labor and services

Implied alumina cost¹⁾ position 2017
USD 242 per mt



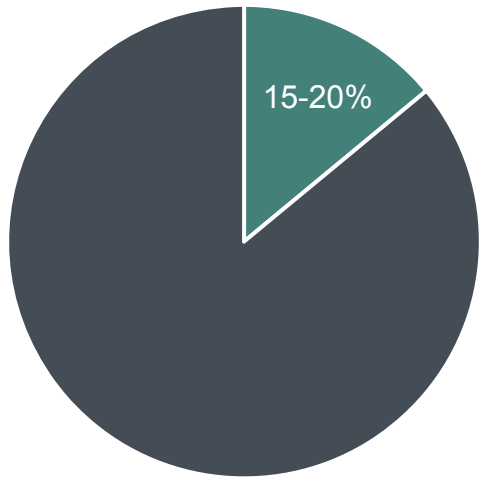
1) Realized alumina price minus Underlying EBITDA for B&A, per mt alumina sales

Impact on Alunorte and Paragominas cost profiles following 50% curtailment



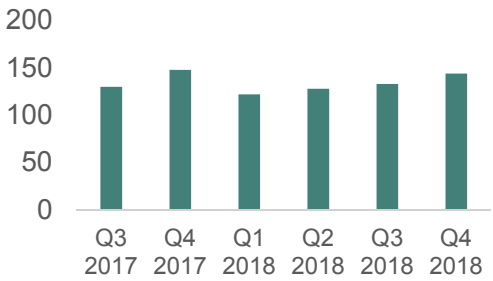
Alunorte

Alunorte cost split

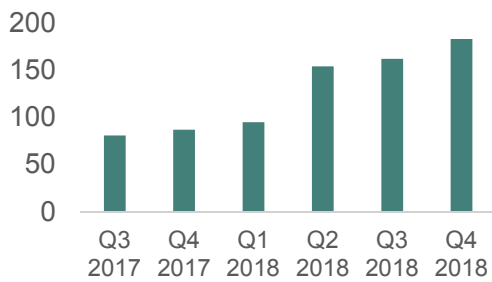


- Fixed costs
- Variable costs

Fixed cost in BRL

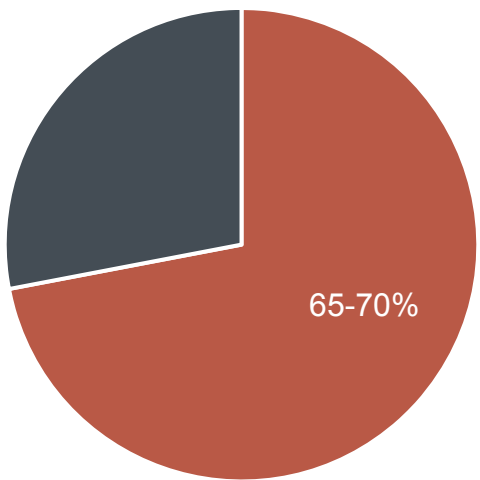


Fixed cost per mt in BRL



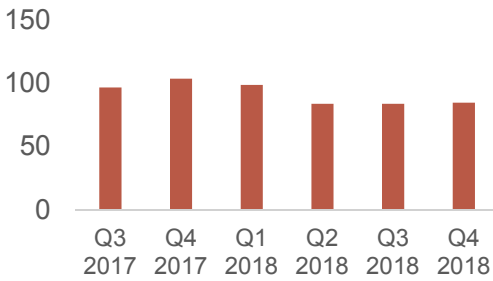
Paragominas

Paragominas cost split

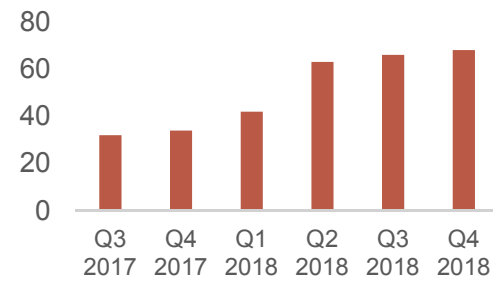


- Fixed costs
- Variable costs

Fixed cost in BRL



Fixed cost per mt in BRL



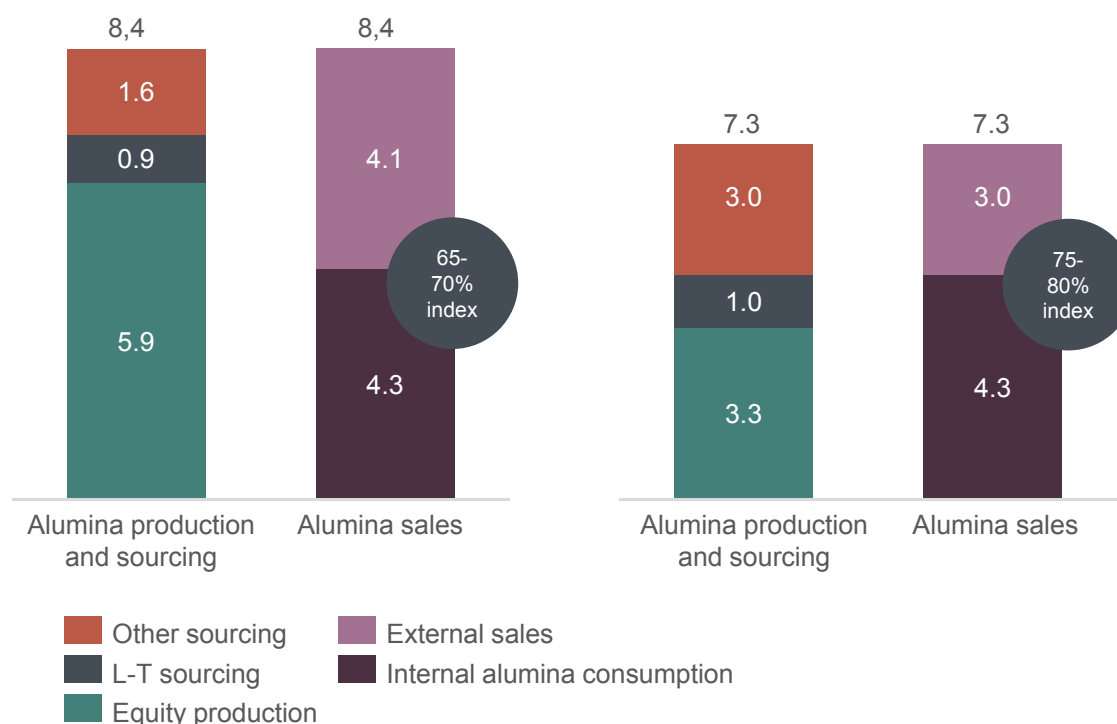
Strong commercial organization maximizing the value of B&A assets

Hydro alumina portfolio before and after the Alunorte curtailment¹⁾

Million tonnes

Full Alunorte production (2017)

After Alunorte curtailment (2018)



¹⁾ Alunorte was curtailed in March, Albras in April 2018. Alunorte equity production (92% share). Internal alumina consumption calculated on consolidated basis – including 100% Albras and Sivalco, and with 50% Qatatum share.

External alumina sourcing

- 2.0-2.5 million mt of external alumina sourced annually
 - 4.0 million mt sourced in 2018 to compensate for the 50% production embargo at Alunorte
 - Additional sourcing mainly on PAX
- Long term off-take agreement with Rio Tinto
 - ~900 000 mt annually from Yarwun refinery
- Short- and medium term contracts
 - To balance and optimize position geographically
 - Various pricing mechanisms
 - Older contracts linked to LME
 - New medium to long term contracts mostly index
 - Fixed USD per mt for spot contracts on index

From long to short alumina position due to the embargo

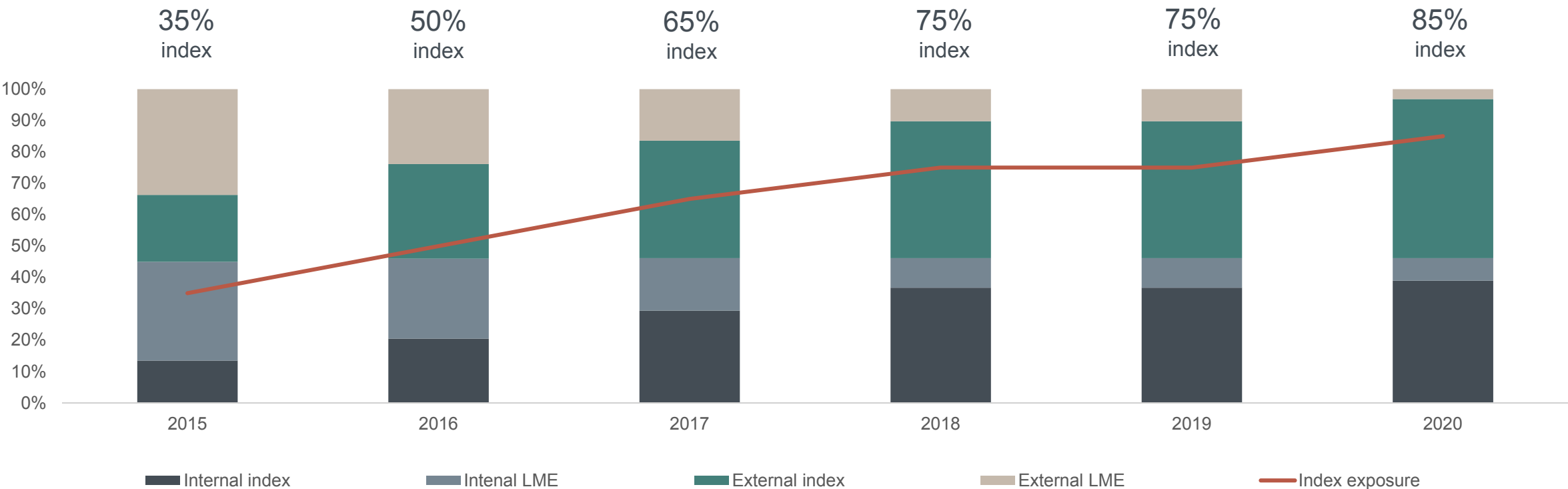
- Pricing should reflect bauxite and alumina market fundamentals
- Selling 2.5-3.5 million mt annually of MRN bauxite externally
 - Premium for high bauxite product quality
 - Majority sold to customers in the Atlantic basin
 - Mostly term contracts based on % of PAX and/or fixed USD/mt element
- Selling 3.0-4.0 million mt/yr of alumina externally in a “normal” year
 - In 2018 sold 3.0 million mt externally affected by the production embargo and force majeure clauses
 - Index pricing and short to medium-term contracts
 - New contracts: 100% sold on index, except Hydrate and short-term contracts, normal terms 2-7 years
 - Legacy LME-linked contracts: priced at ~14% of LME 3M

Shift of alumina sales to index-based pricing continues at full speed



Index pricing the new norm for the industry

Sales exposure to index and short term pricing¹⁾



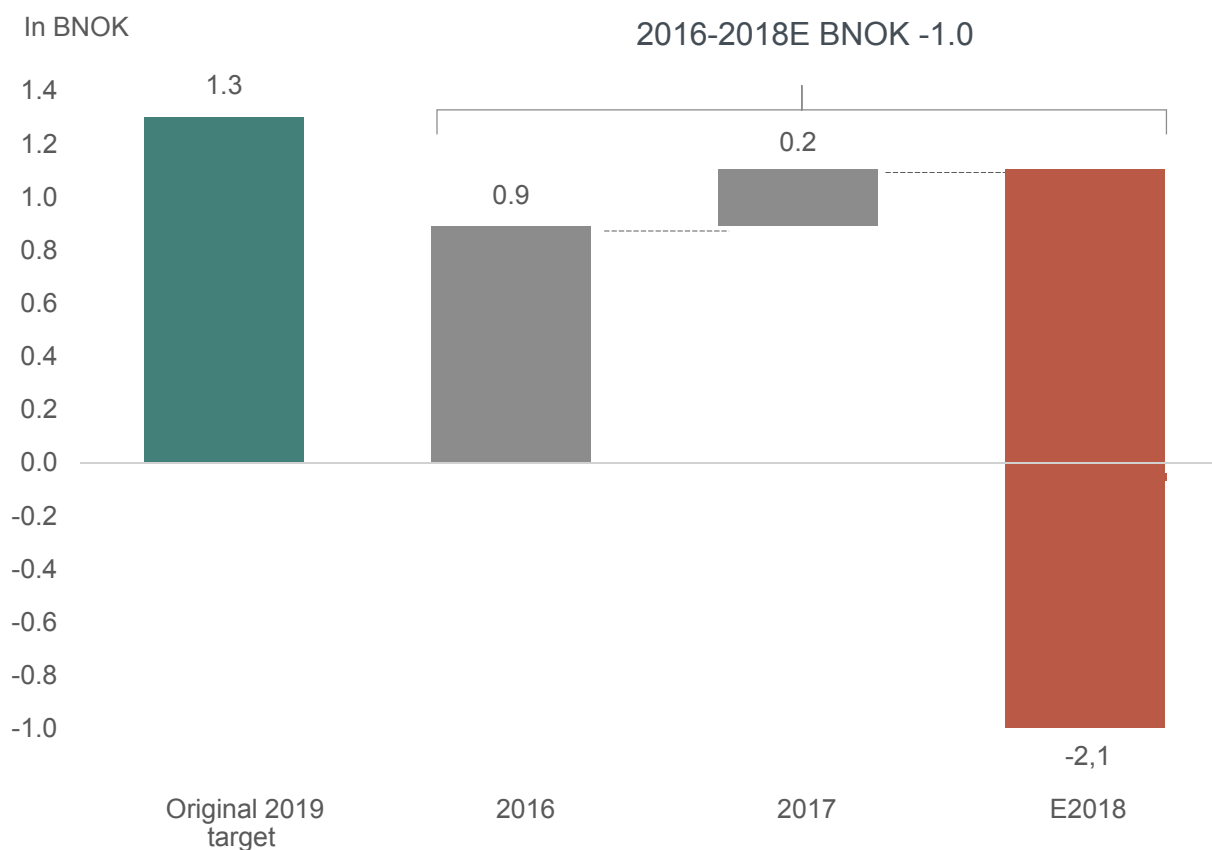
1) Rounded figures. Indicating volumes available for index pricing. Includes minority sales priced at % of LME with floor. Based on annual sourced volumes of around 2.5 mill t, assuming normal production at Alunorte.

Significant negative curtailment effects on *Better* improvement program

Will not reach 2019 target due to the Alunorte situation

- 50% production at Alunorte and Paragominas with strong negative impact on improvement program
- 2016-17 improvements more than offset by negative 2018 effects
- Curtailment effect of negative BNOK 2.1 in 2018
- Some positive effects from commercial and procurement, as well as non-volume related contributions at Alunorte and Paragominas

Bauxite & Alumina *Better* program progress



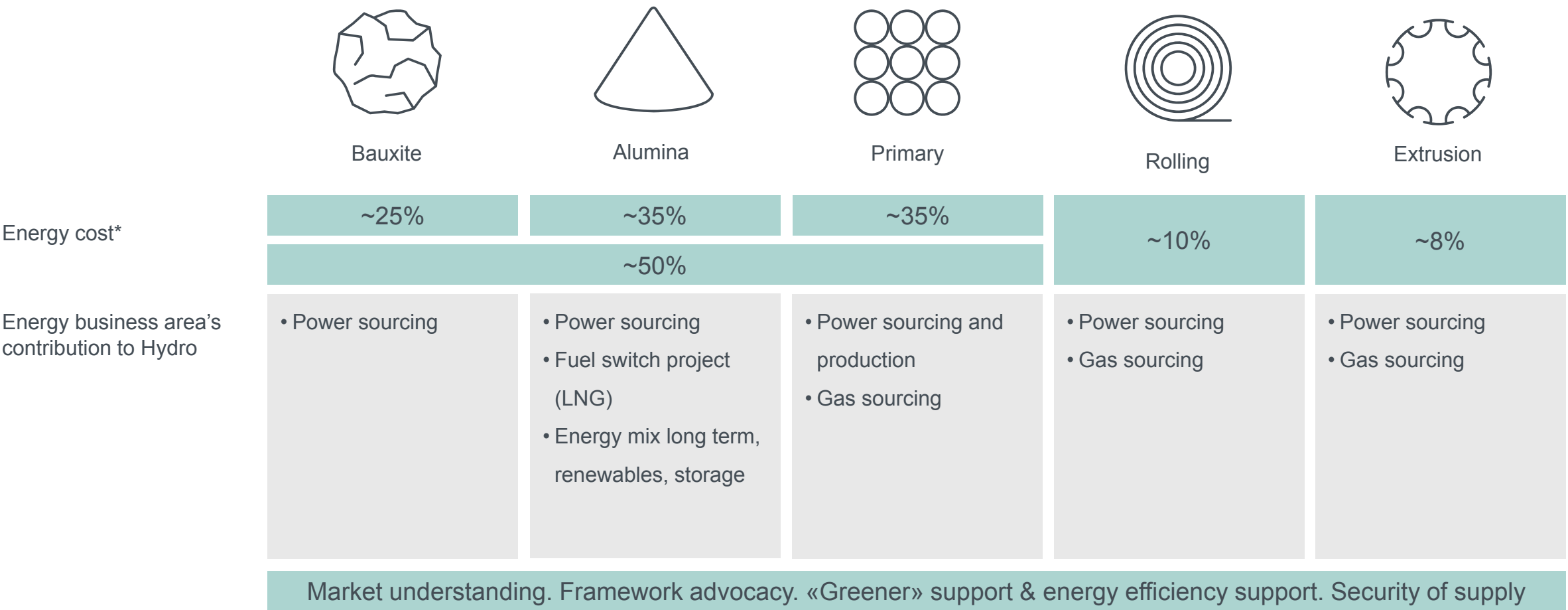


Energy

Energy is a key differentiator in the aluminium industry



Center of energy excellence in Hydro

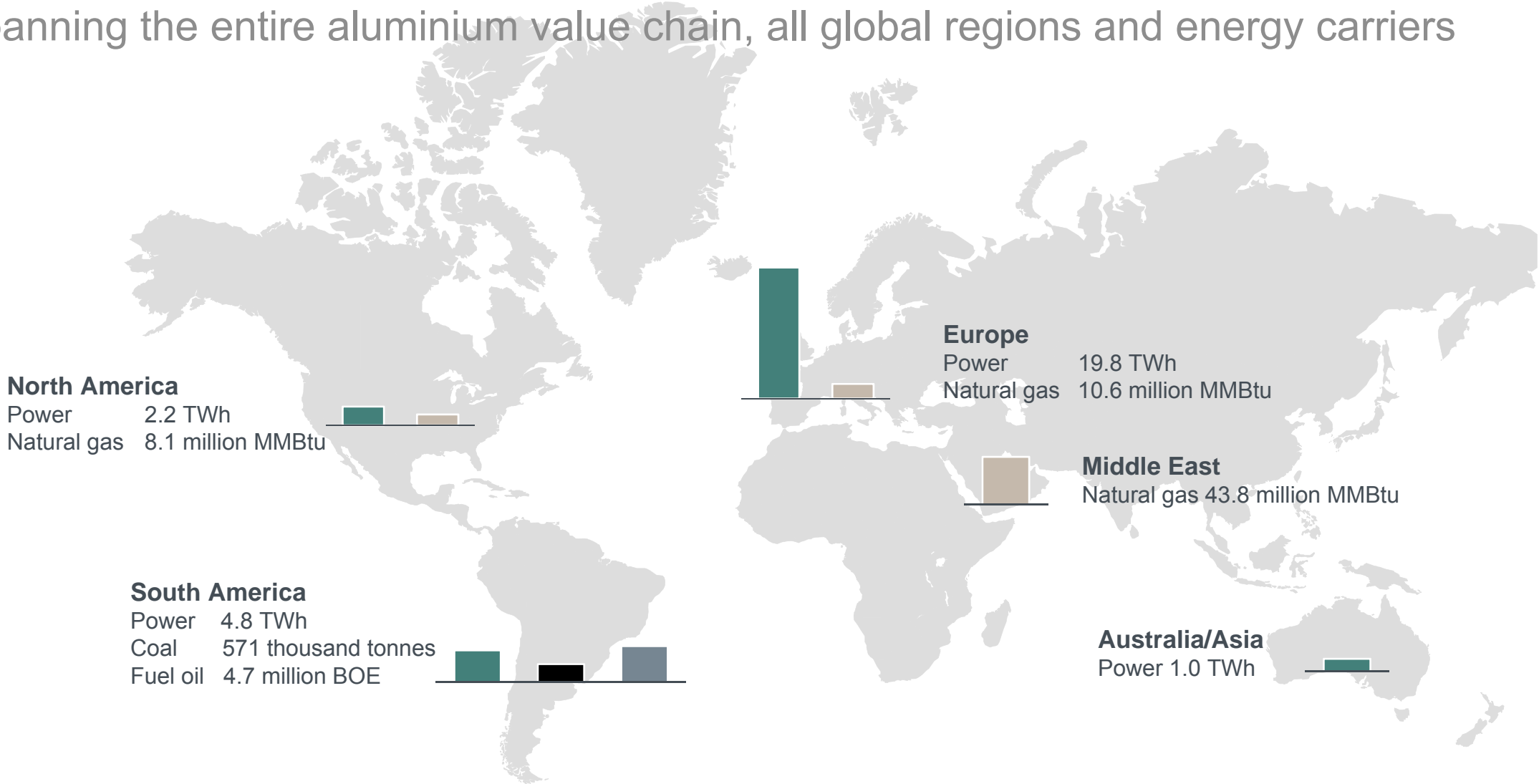


*Share of Business Operating Cash Cost

Hydro's global primary energy demand



Spanning the entire aluminium value chain, all global regions and energy carriers



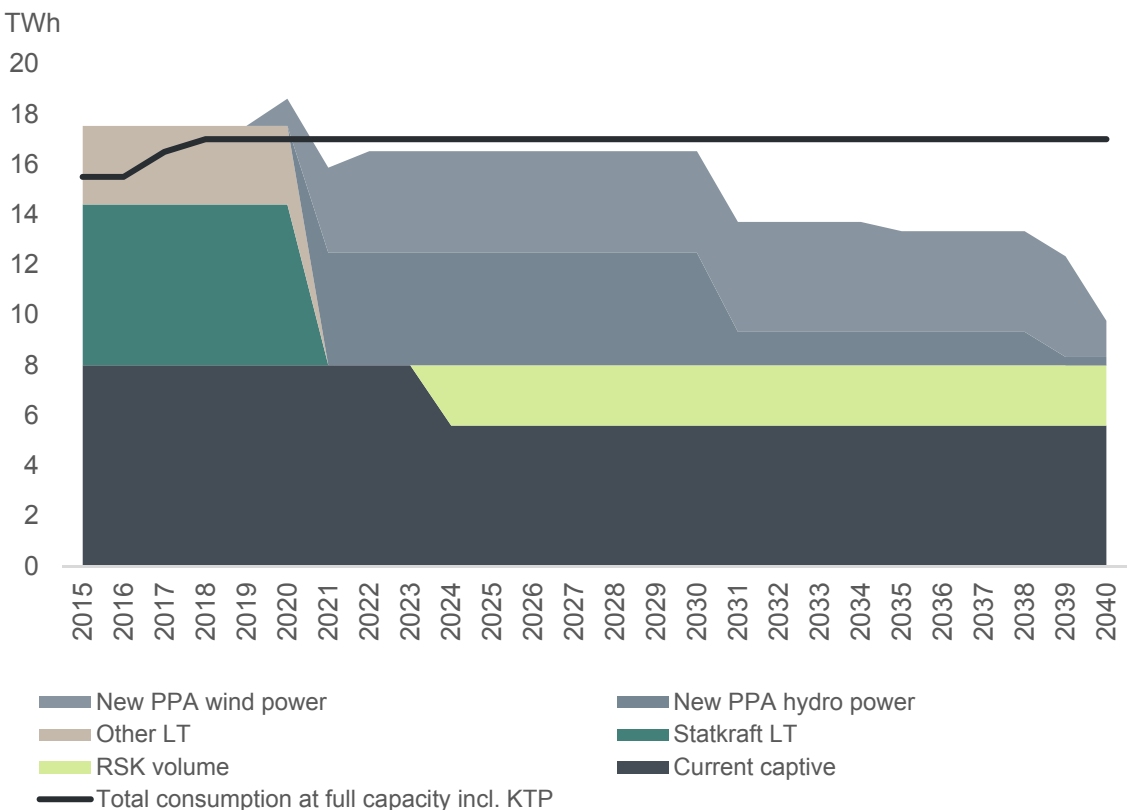
Values are listed in its conventional trading unit. MMBtu= Million British thermal units, ton=metric ton thermal coal, BOE= Barrel of Oil Equivalent.
Bar charts are represented in the equivalent primary energy size for each category. Primary energy follows IEA's definition.
Based on equity-adjusted 2017 values for Norsk Hydro's bauxite mines, alumina refineries, smelters, remelters, rolling mills and 2018 estimate for extrusion plants.

Securing long-term competitive power sourcing for smelters

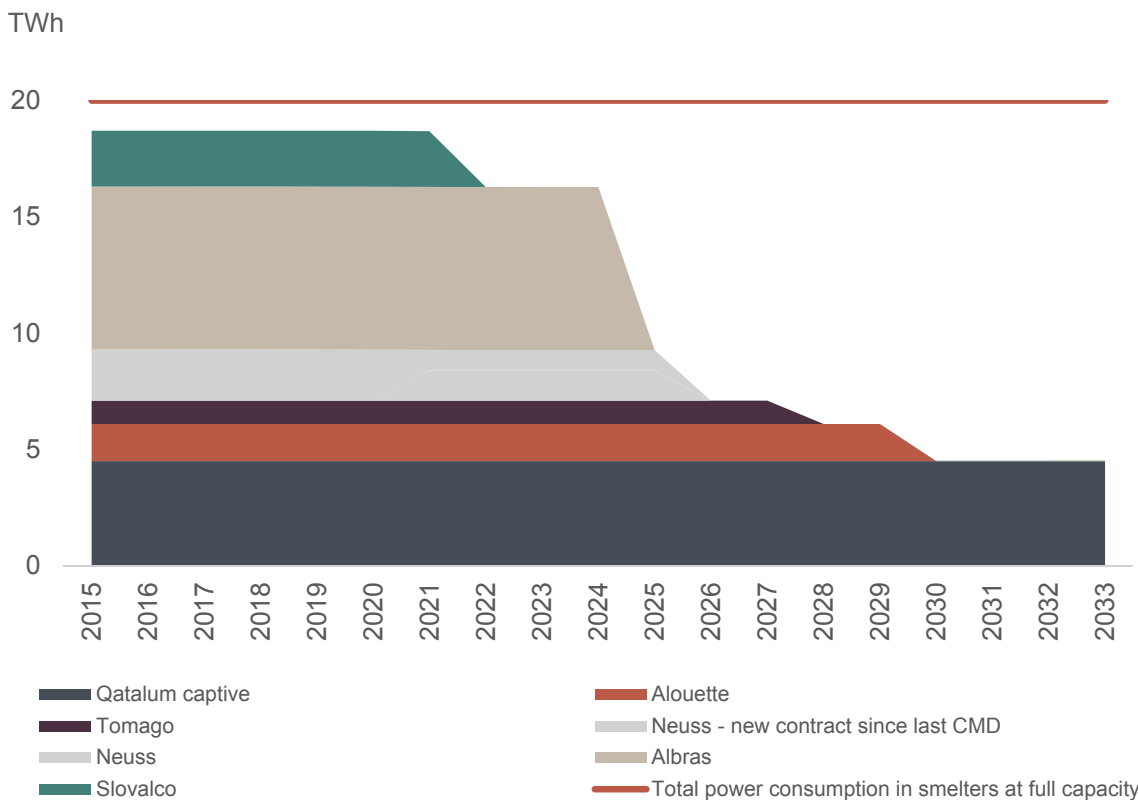


Unique combination of hydro- and windpower

Sourcing platform for fully-owned smelters, Norway¹⁾



Sourcing platform for JVs and Neuss smelter¹⁾



1) Net 8 TWh captive assumed available for smelters
 2) Albras and Slovalco on 100% basis

10 TWh normal annual power production

Development in power assets last five years

- 2012: Holsbru and Vasstøl power plants in operation
- 2013: Vigeland acquisition completed, exemption from concession requirement granted
- 2016: Midtlæger and Mannsberg power plants in operation
- Turbine runner projects improving plant efficiency
- Focus: maintain cost control in operations and projects

New growth projects

- Mature new equity growth options

Framework conditions

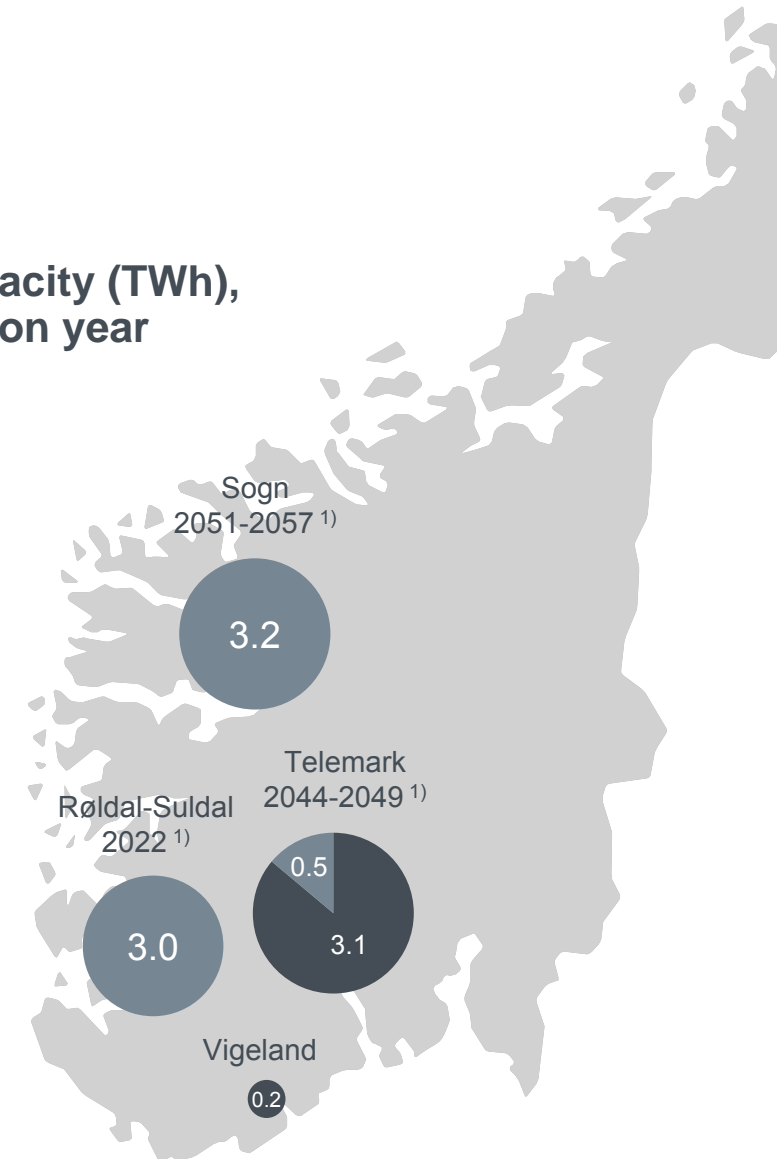
- Reversion regime secures full value of energy assets:
 - Prevents further licensing to non-public entities, but allows for everlasting minority private ownership of up to 1/3
 - Law proposal from government on industrial ownership approved by Parliament in June 2016
 - Broad optionality to maintain asset value within the reversion regime

Power production capacity (TWh), per region and reversion year

Normal annual production

10 TWh

- No reversion
- Subject to reversion
- Bubble size = production in TWh

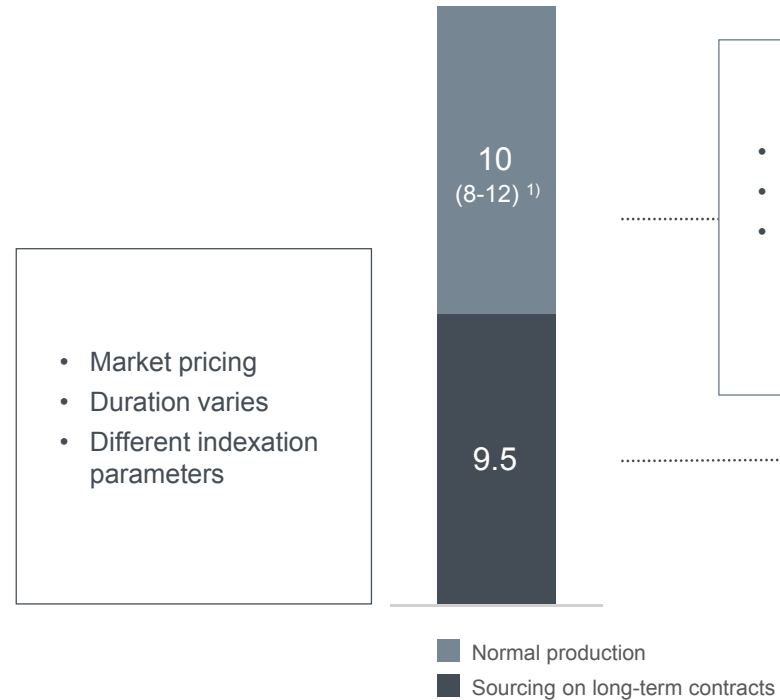


Market pricing principle applied to internal contracts

Based on external price references

Sourcing side

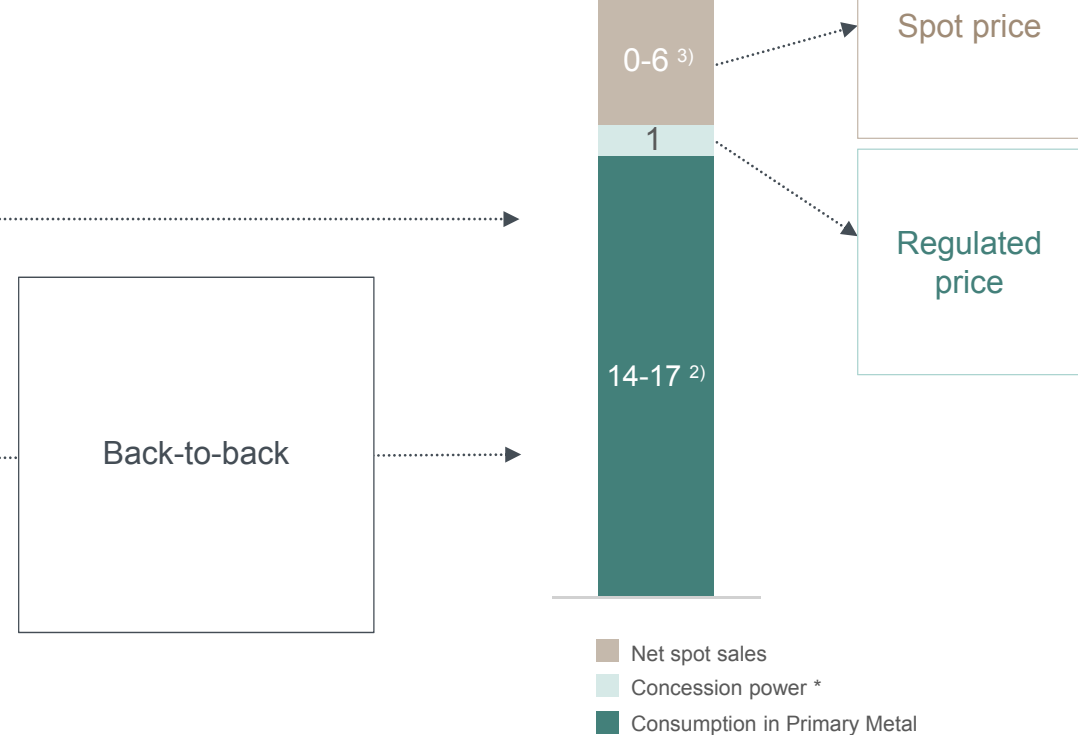
TWh



- Long-term contract
- Market pricing
- Fixed annual pricing adjustments

Revenue side

TWh



Back-to-back

Norway up to 2020

1) Depending on the precipitation level, hydropower production may vary from 8 TWh in a dry year to 12 TWh in a wet year

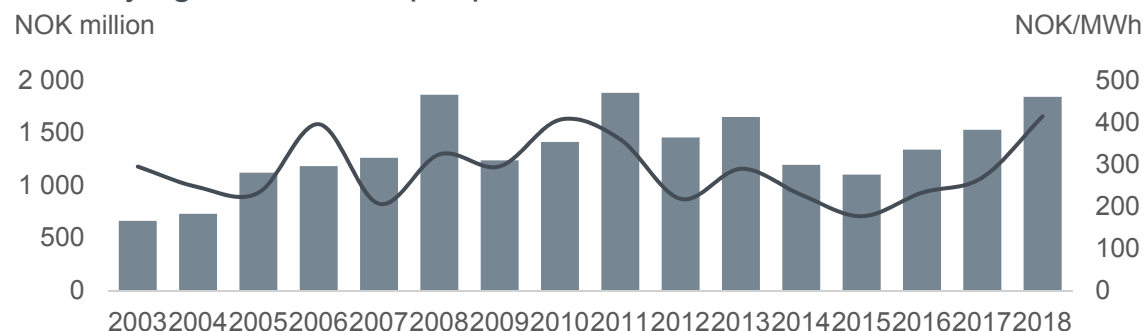
2) Consumption in PM at current production levels and at full installed capacity (incl. Karmøy pilot plant)

3) Net spot sales vary depending on the power production level and internal consumption in PM

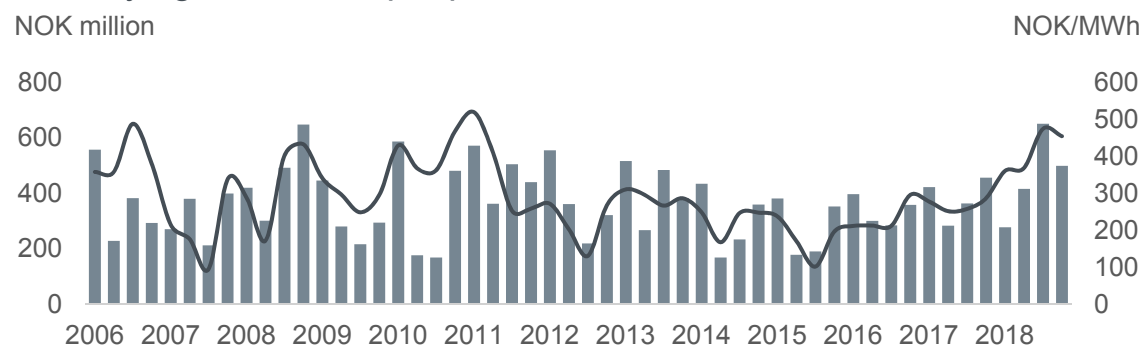
* Includes legacy external contracts

Energy earnings drivers

Underlying EBIT¹⁾ and spot price



Underlying EBIT and spot price



■ Underlying EBIT — Spot price

- Production and market prices strongly linked to hydrological conditions
- Fairly stable annual EBIT contribution
- Seasonal market variations in demand and supply
- Occasional delink between area prices
- Power portfolio optimized versus market
- Stable and competitive cost base:
 - Mainly fixed costs
 - Volume-related transmission costs
- Expiry of legacy supply contract entered in 2008 will have positive effect of NOK 400-500 million from 2021
- New 8 TWh internal contract for power sales to Primary Metal in Norway effective from 2021-30
 - Positive EBIT effect to Energy approximately NOK 300 million
 - Net power sourcing cost, internal and external, for Primary Metal largely unchanged

1) Underlying EBIT 2003–2006 based on USGAAP

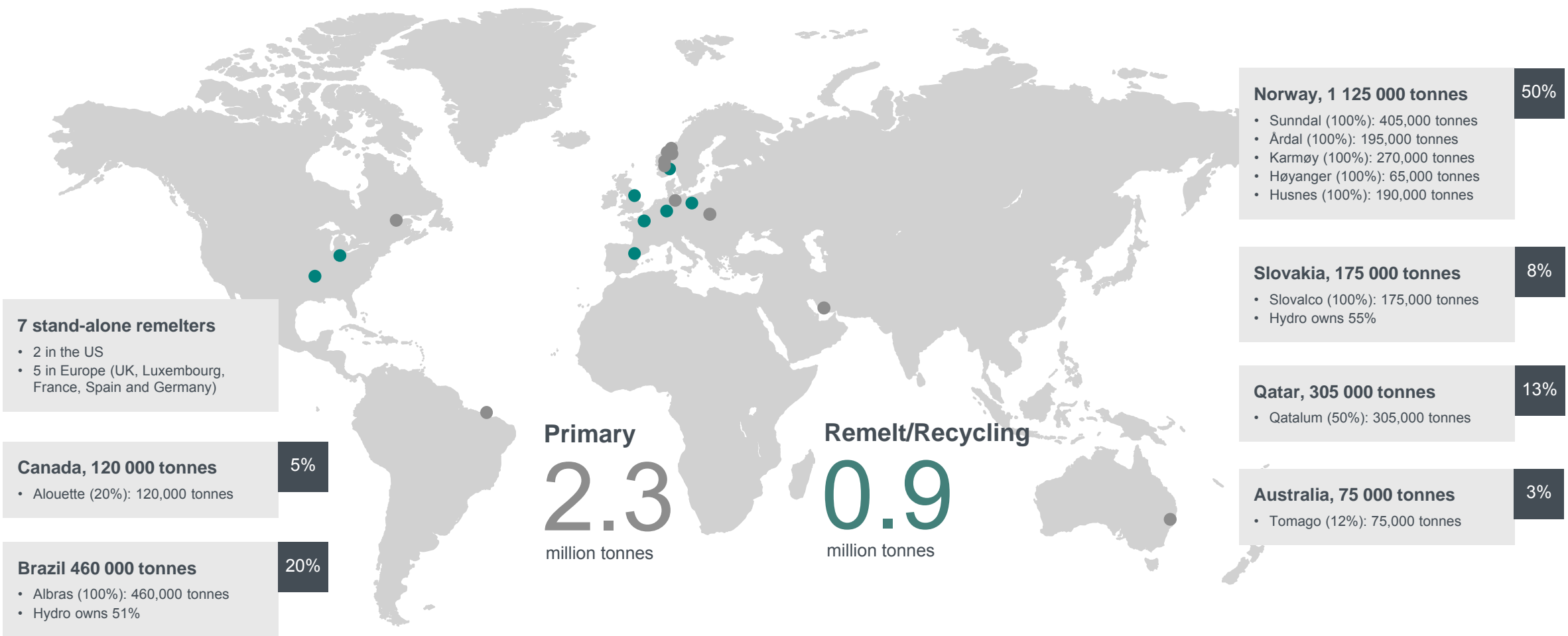


Primary Metal

World-wide primary aluminium production network



Primary Metal and Metal Markets



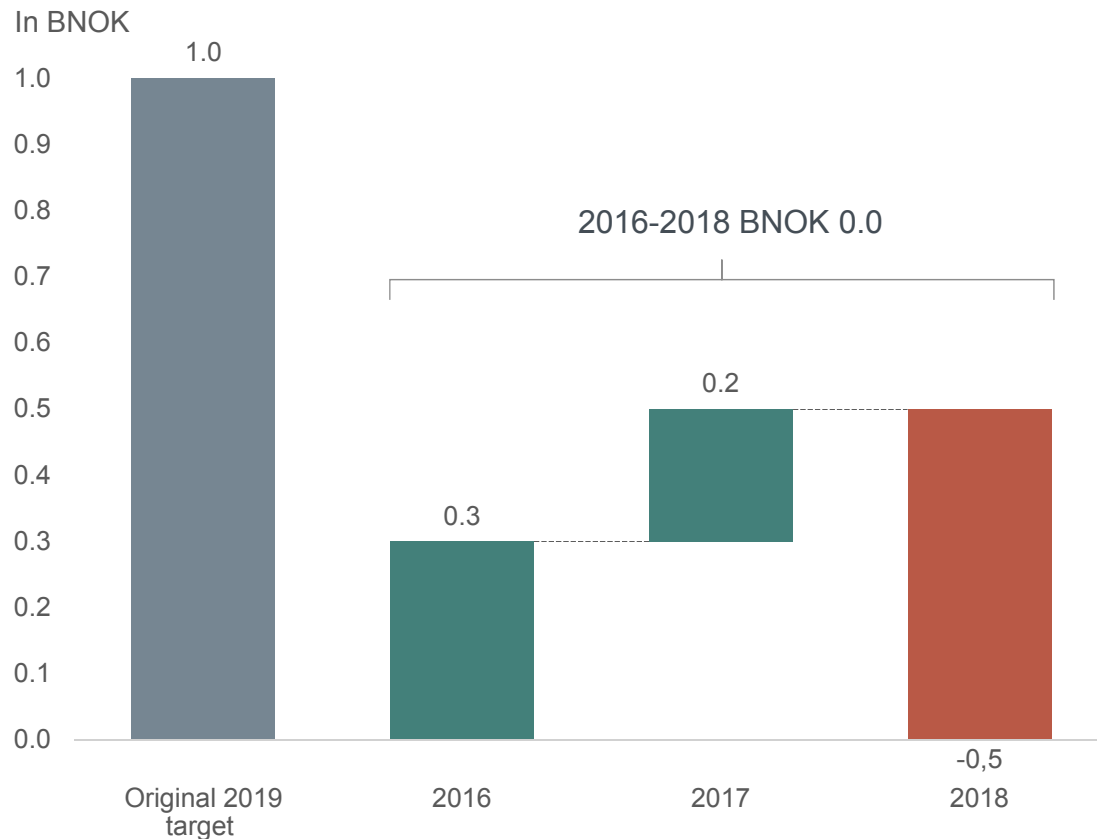
2.3 million mt is consolidated capacity. Slovalco and Albras are fully consolidated, Tomago and Alouette are proportionally consolidated and Qatalum is equity accounted. Neuss, which is a part of Rolled Products, is not included. 0.9 million mt includes stand-alone remelters, recycling facilities and additional casthouse capacity at primary plants.

Improvement program in 2018 impacted by Alunorte situation



Primary Metal keeps focus on continuous improvements

Primary Metal *Better* program progress



Long history of improvement efforts with BNOK 2,6 delivered in 2010-2015

2018 Improvement program influenced by:

- 50% curtailment of Albras
- Operational instability due to different alumina sources

2019 improvement speed will be significantly impacted by timing of Alunorte restart, due to:

- Uncertain duration of Albras curtailment
- Different alumina sources impacting operational parameters

Improvements focus will continue:

- Operational excellence inclusive spin-offs from the Karmøy technology pilot
- Industry 4.0 as enabler
- Continue to high grade the product portfolio

On track with verifying world's most climate and energy efficient electrolysis technology



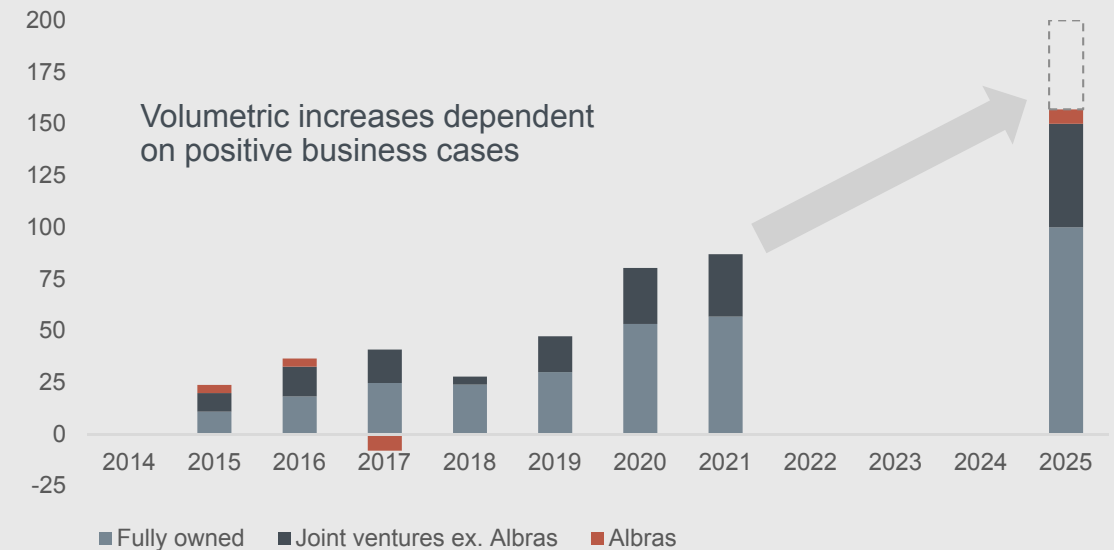
- Karmøy technology pilot
 - 48 HAL4e cells, 12.3 kWh/kg
 - 12 HAL4e Ultra cells, < 11.8 kWh/kg
- All 60 cells in normal operation
- Fine tuning of process parameters, pot tending equipment, and operational practice
- Performance according to plan, but slightly affected by off-grade alumina in Q4 2018
- Performance tests scheduled for 2020

Spin-off implementation from Karmøy technology pilot started

- Spin off elements are an integral part of improvement programs at all plants
- Business cases carefully considered for each improvement step
 - Volume vs. energy consumption improvements part of the business case evaluations
- Energy consumption and current efficiency improvement potentials are strengthened
 - Spin offs from Karmøy Technology Pilot control platform
 - Digital twin for process control in the electrolysis being rolled out, starting in Sunndal



Creep ambition, in 1000 tonnes



Unlocking new improvements through Industry 4.0 initiatives



40 ongoing projects



Robotics & Automation projects



Trusted Data Layer Casthouse



Soft Sensor incl. Trusted Data Layer



Mobile Maintenance Worker



Trusted Data Layer Carbon + Analytics
workbench improvements



Bring Your Own Device

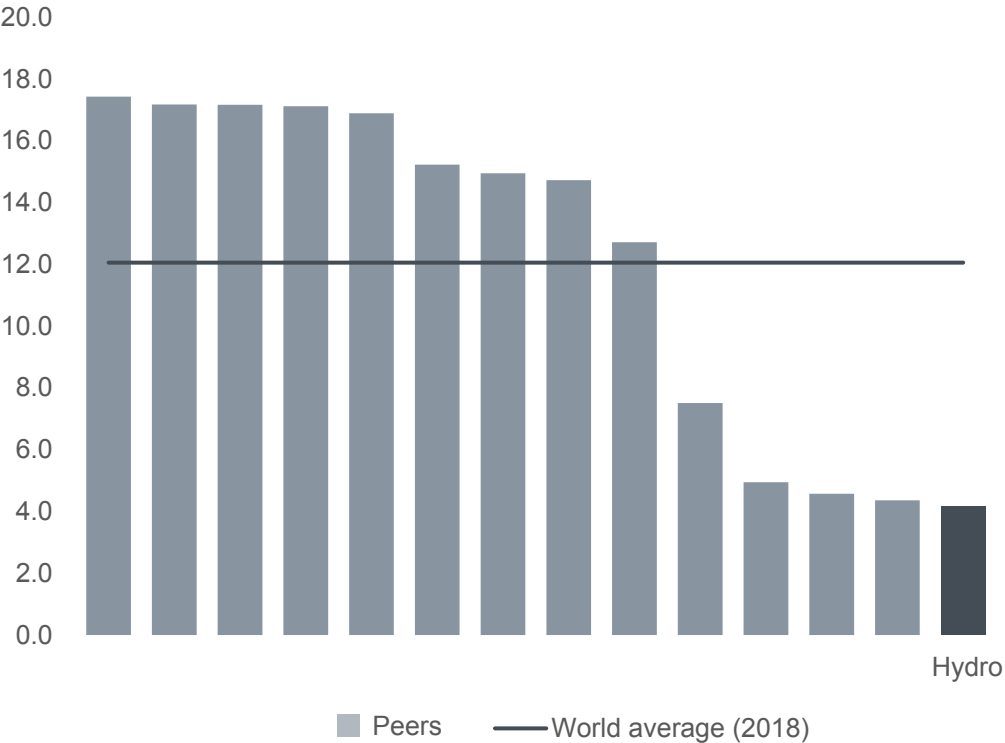
Digital Foundation including Cyber Security

Organization Foundation including Primary Metal Digital Academy

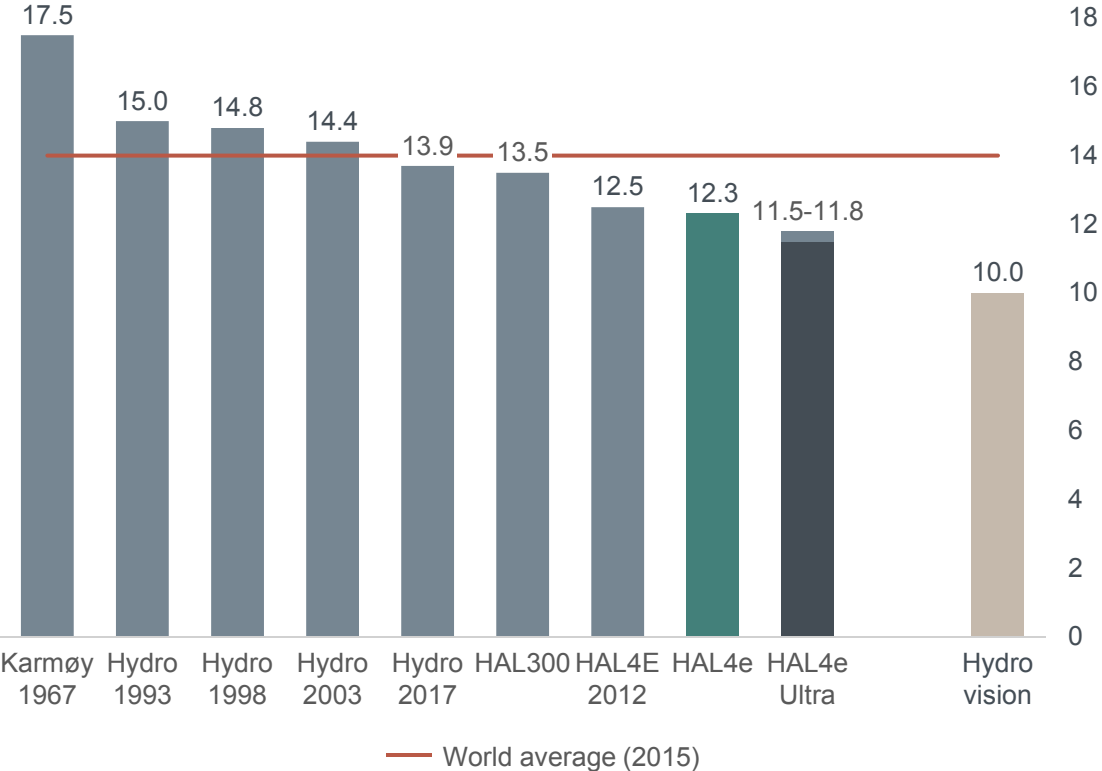
Low carbon footprint due to renewable energy base and industry lowest energy consumption



Total emissions, in tonne CO2/t al



Energy consumption in Hydro smelters¹⁾, kwh/kg al

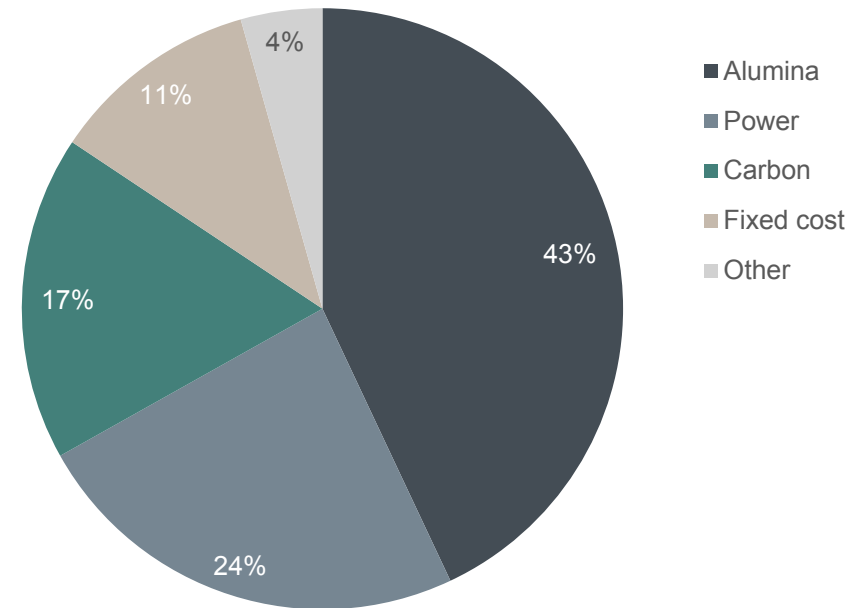


Source: CRU and Hydro analysis
1) Hydro's consolidated share

Competitive primary aluminium cash cost

- Primary aluminium cash cost 2018
 - All-in implied primary aluminium cash cost¹⁾ USD 2 175 per mt
 - LME implied primary aluminium cash cost²⁾ USD 1 825 per mt
- Alumina
 - Alumina prices for 2018 heavily affected by Alunorte curtailment
 - Alumina from both internal and external sources
 - Purchases based on alumina index ~80%⁴⁾
 - Purchased based on LME link ~20%
- Power
 - Long-term contracts
 - 2/3 of power need from renewable power
 - Contracts with a mix of indexations; inflation, LME, coal, fixed
- Carbon
 - 2-3 year contracts for petroleum coke and pitch, quarterly pricing
- Fixed costs
 - Maintenance, labor, services and other
- Other
 - Other direct costs and relining

Liquid aluminium cash cost 2018³⁾



1) Realized LME aluminium price minus underlying EBITDA margin, including Qatalum, per mt primary aluminium sold
2) Realized LME aluminium price minus underlying EBITDA margin, including Qatalum, per mt primary aluminium produced
3) Pie chart based on cost of producing liquid aluminium, not directly comparable to the LME or All-in implied primary aluminium cash cost
4) More alumina purchases on indexes due to Alunorte curtailment



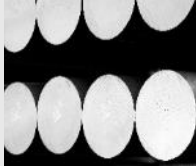




Metal Markets

Strong position in value-added casthouse products



- Capitalizing on value-added casthouse products portfolio
- Extensive multi-sourcing system including fully- and part-owned primary casthouses and stand-alone remelters
- Flexible sourcing system enabling rapid and cost effective volume adjustments
- Value creation from margin management based on commercial expertise and risk management competence
- Strong market positions in Europe, US and Asia



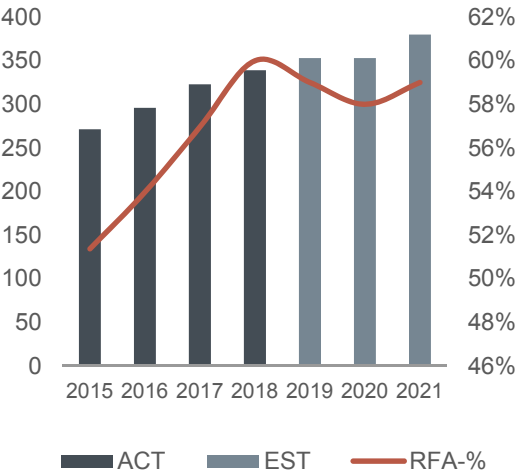
Extrusion ingot 1.6 million mt		Leading global position Unique primary and recycling capacity network
Foundry alloys 0.5 million mt		Leading global position Strong capabilities in all automotive segments
Sheet ingot 0.3 million mt		Leading European position Well positioned to capture automotive growth
Wire rod 0.1 million mt		Leading European position Market attractively supported by copper substitution
Standard ingot 0.4 million mt		Leading global position Global flow optimization through key positions

Market-driven expansion in recycling

Developing and investing in capacity and solutions

Targeting 40% increase in RFA Sales

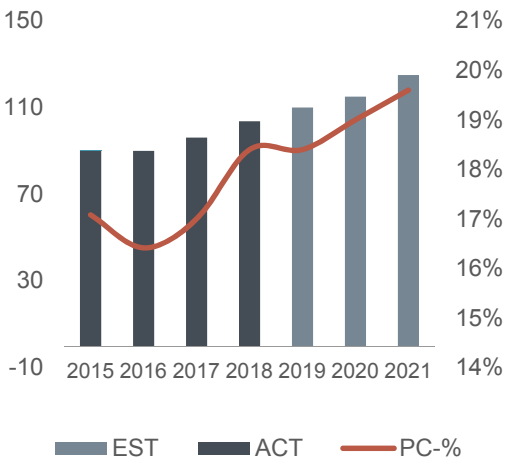
RFA sales for EI remelters, in mt



Sales of Recycling Friendly Alloys (RFA) from remelters to increase by more than 100 000 mt from 2015 to 2021 (around 60% of total)

Targeting 40% increase in post-consumer scrap usage

Post-consumer scrap usage, in mt



Usage of post-consumer scrap to increase from ~90 000 mt in 2015 to ~125 000 mt in 2021



Azuqueca expansion



Lucé remelter upgrade completed

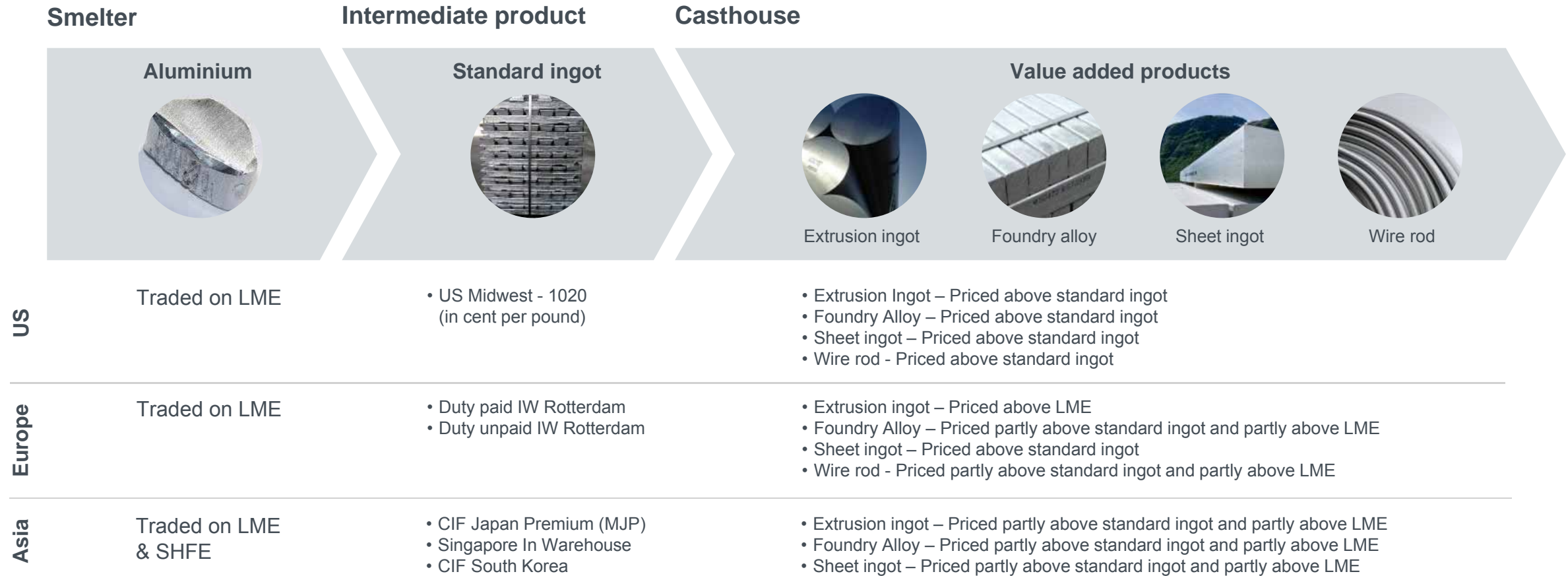


Remelter at Slovalco



Hydro 75R

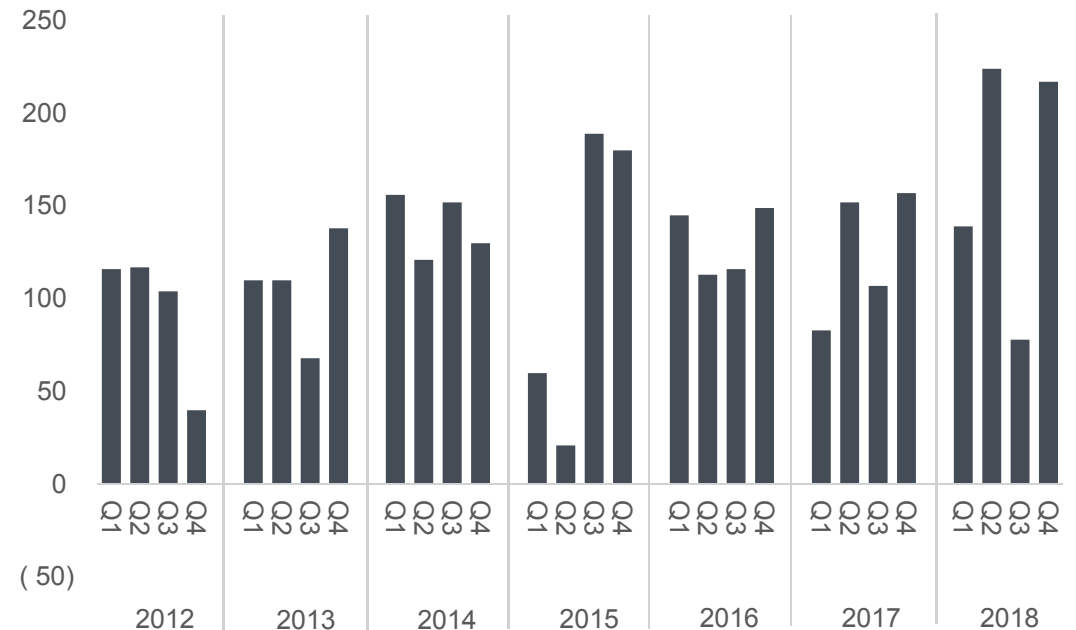
Pricing of value-added products



Metal Markets earnings drivers

- Remelters
 - Revenue impact – volume and product premiums above LME
 - Cost impact
 - Scrap and standard ingot premiums above LME
 - Raw material mix
 - Freight cost – proximity to market
 - Energy consumption and prices
- Other main businesses
 - Physical and LME trading
 - Third-party products
- Results influenced by currency fluctuations and inventory valuation effects
- Underlying EBIT ex. currency and inventory valuation effects at around 500 MNOK per year

Underlying EBIT excluding currency effects and inventory valuation effect, NOK million¹⁾



¹⁾ Underlying EBIT ex. currency and ingot inventory valuation effect have been restated for 2013 and 2014



Rolled Products

Hydro Rolled Products



Strong European production base and global sales force

~1 million tonnes of flat rolled products per year

- Unique integrated aluminium cluster
 - Dedicated smelter
 - World's largest rolling mill
 - Dedicated conversion mills
- Casthouse network and integrated recycling capacity
- Industry-leading R&D facility



● Rolling mill ● Sales Office ● Smelter ● R&D centre

The Americas



Asia

Singapore

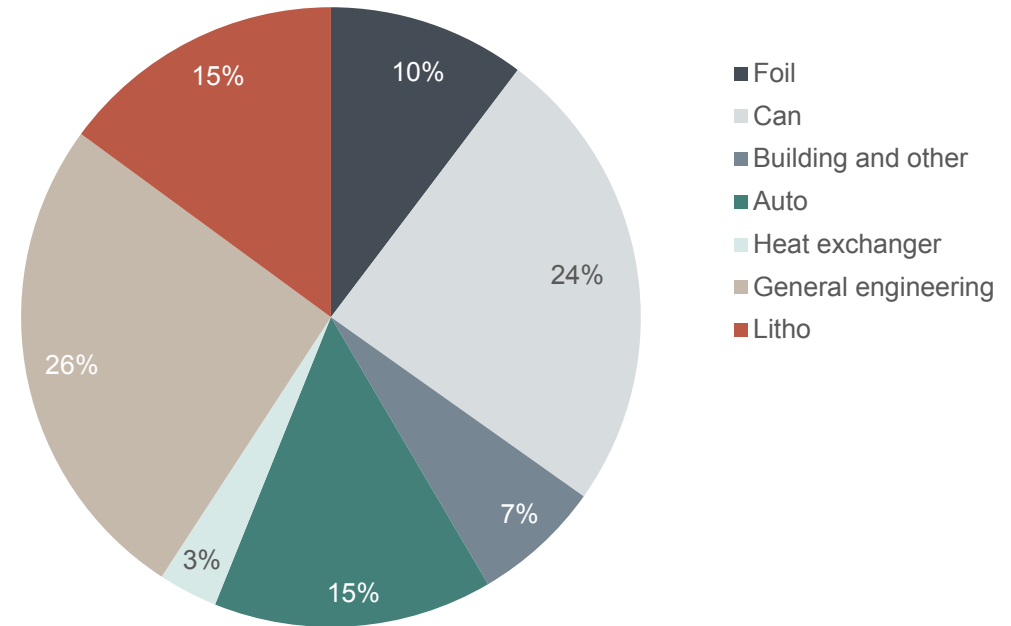


Major flat rolled products producer in Europe

- World leader in high-end products foil and litho
 - Alunorf (JV 50%) – world's largest rolling mill
 - Grevenbroich plant – world's largest multi-product finishing mill
- High-grading product portfolio
 - Margin management and cash generation
 - Portfolio adjustment towards higher margins
- Capitalize on automotive market growth
 - Investment in new automotive body-in-white capacity
 - Ramp-up ongoing
- Strengthen recycling position
 - Investment in new Used Beverage Can (UBC) recycling line
 - Production started beginning of 2016, ramp-up ongoing
 - Targeting stable output at 40 000 mt run-rate by end 2019

External sales in tonnages 2018

Total 951 kT



Strong positions in rolled products market segments

Portfolio high-grading and strong focus on quality and service as key elements for success

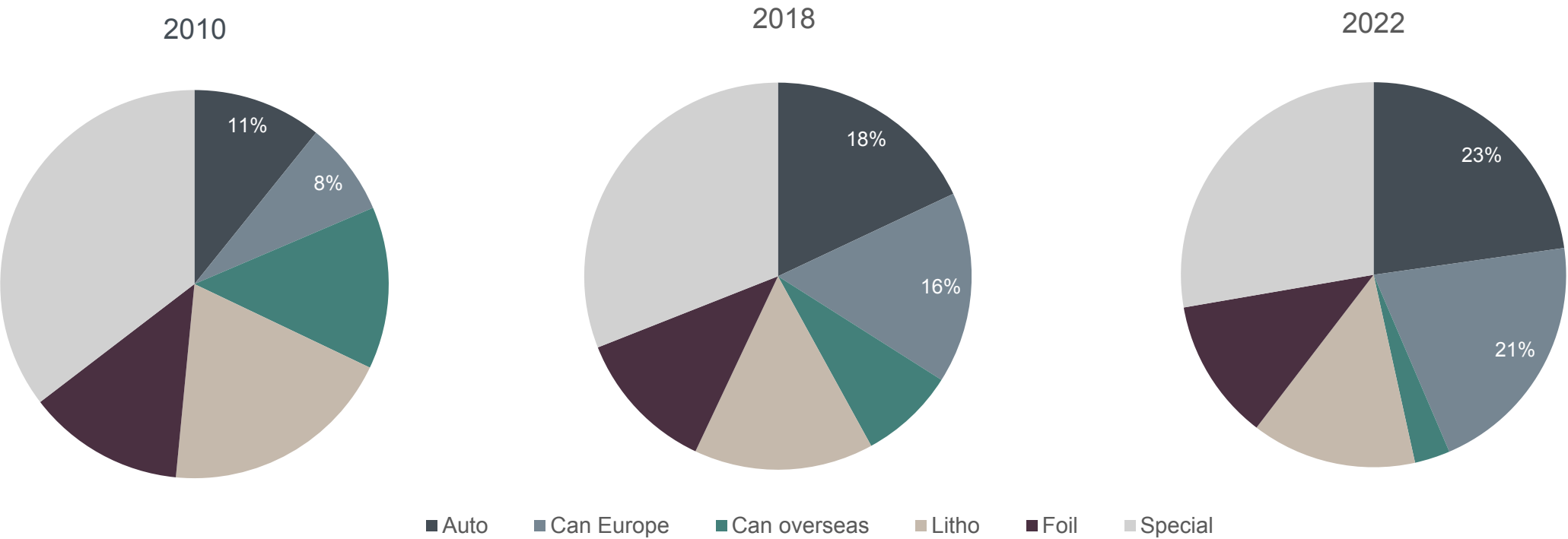
					
Ambition	Automotive Gain No.2 position in European BiW ¹⁾	Foil Strengthen global No. 1 in high-end plain foil	Beverage can Grow into No.2 position in Europe	Lithography Strengthen global No.1 position	Special products Strengthen No.1 positions in Europe
Main customers					
Focus/ Status	Growing more than the market	Focusing product portfolio	Shift to attractive european market	Competitors stepping out	>10% growth in strategic products

Doubling of automotive share with ramp-up of Automotive line 3



Automotive to support high-grading ambitions

Sales by segment

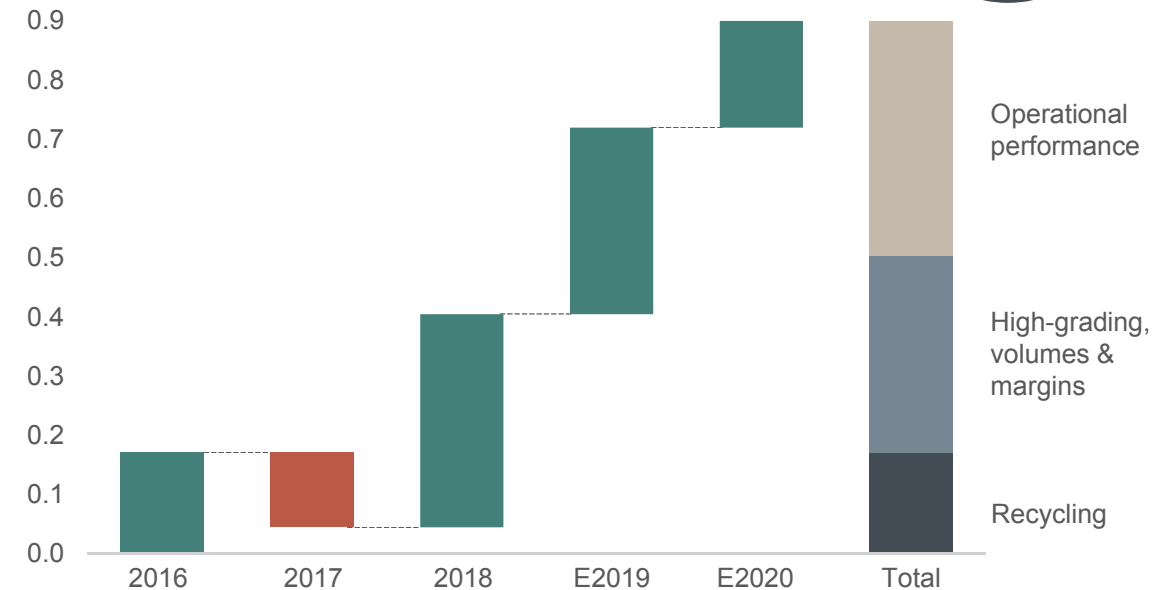


Better Rolled Products improvement ambition

Original target delayed by one year due to operational issues

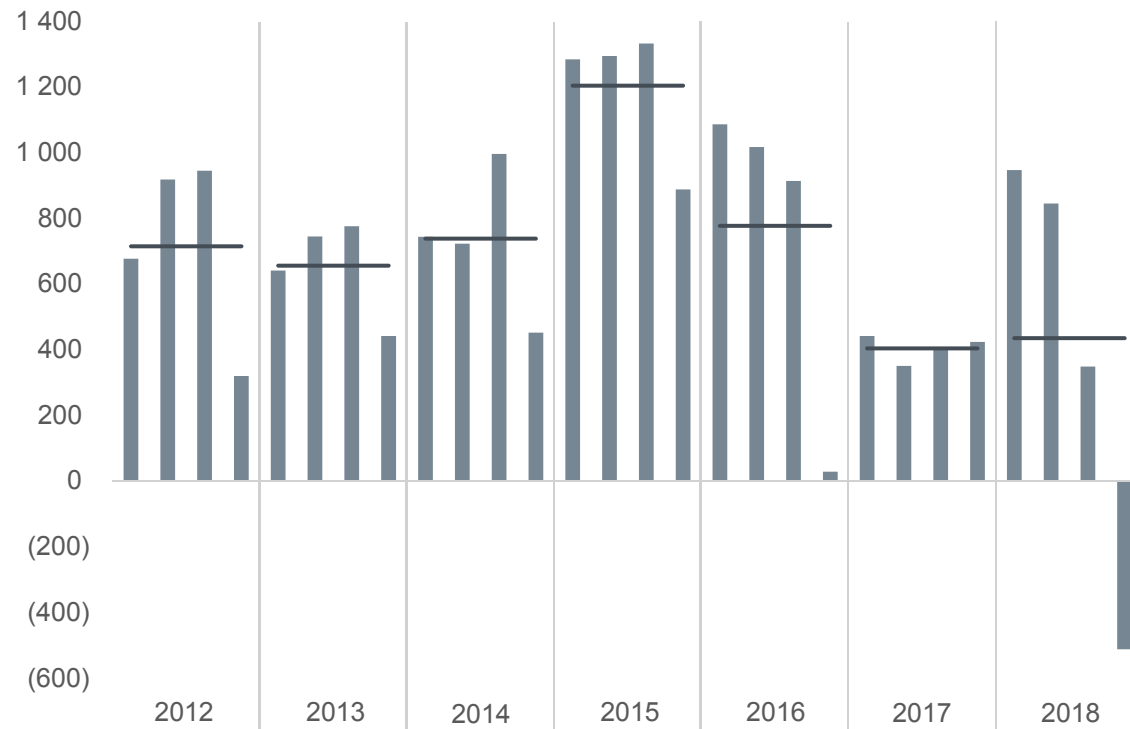
- Original target 0.9 BNOK by 2019 delayed to 2020
 - 0.7 BNOK targeted by 2019
- Better RP Improvements driven by
 - Automotive growth
 - Increased recycling
 - Operational performance
 - Supply chain management
 - Product high-grading
 - Margin and portfolio mix
 - Open and engaged culture

Improvement ambition Rolled Products
BNOK



Rolled Products earnings drivers

Underlying EBIT per tonne, NOK



- Contract structure
 - Margin business based on conversion price
 - LME element passed on to customers
 - Range from spot contracts to multi-year contracts
- High share of fixed costs - volume sensitive
- Annual seasonality driven by maintenance and customer activity
 - Q4 typically the weakest quarter of the year
- Preferred supplier market position in high-end products



Extruded Solutions

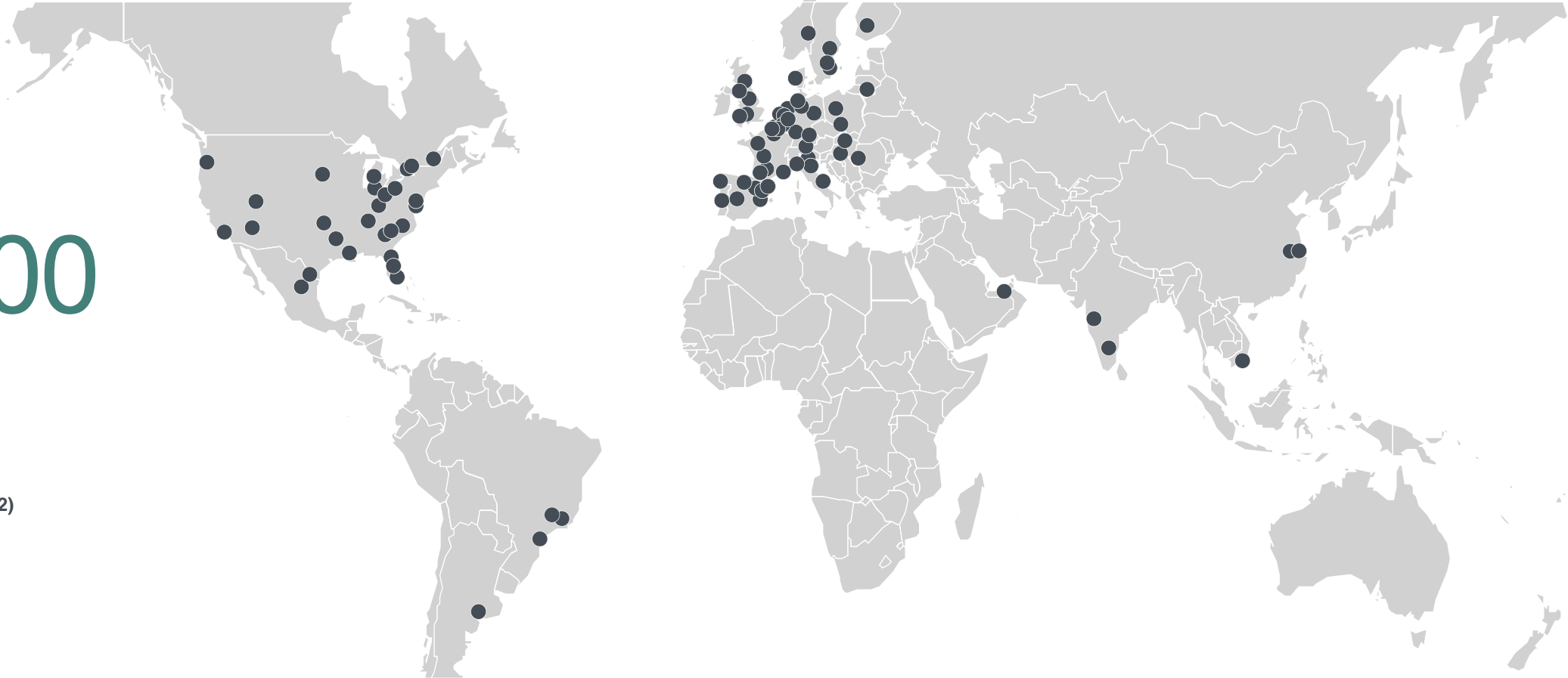
Extruded Solutions – #1 in the global aluminium extrusion industry



Present in
~40
countries

22 400
people ¹⁾

1.4
Million mt sales²⁾



1) As of end-2016
2) 2018

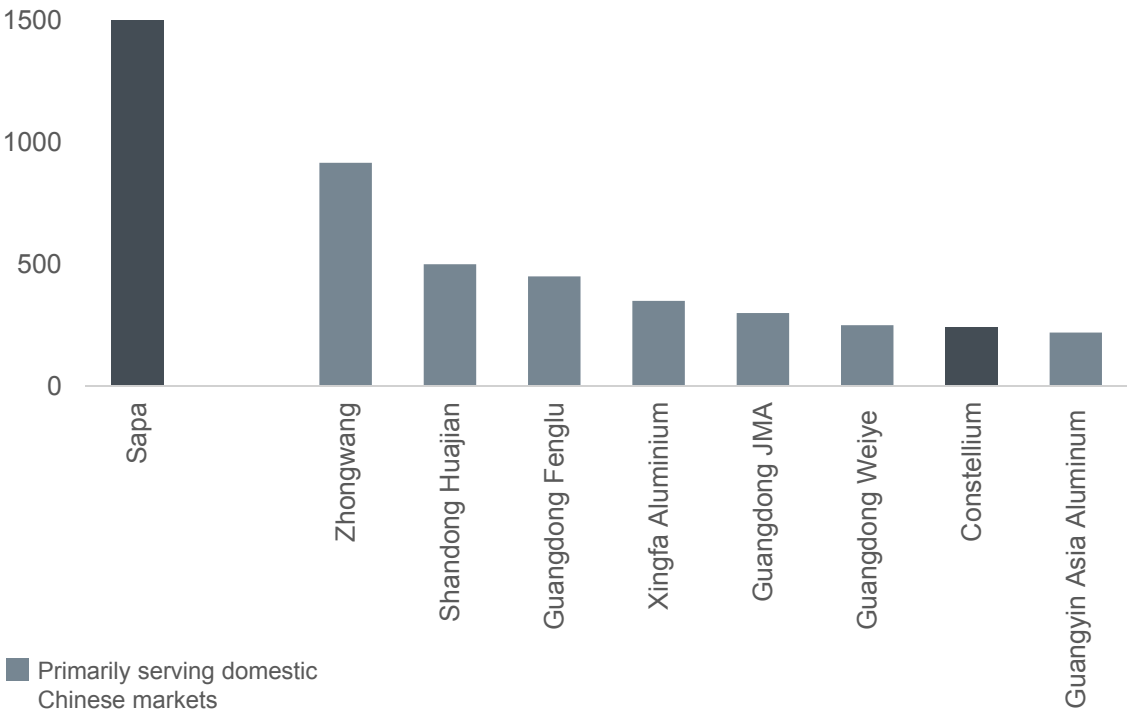
The global extrusion champion – worldwide reach, local presence



Clear leader in a fragmented industry where closeness to customers and markets are key success factors

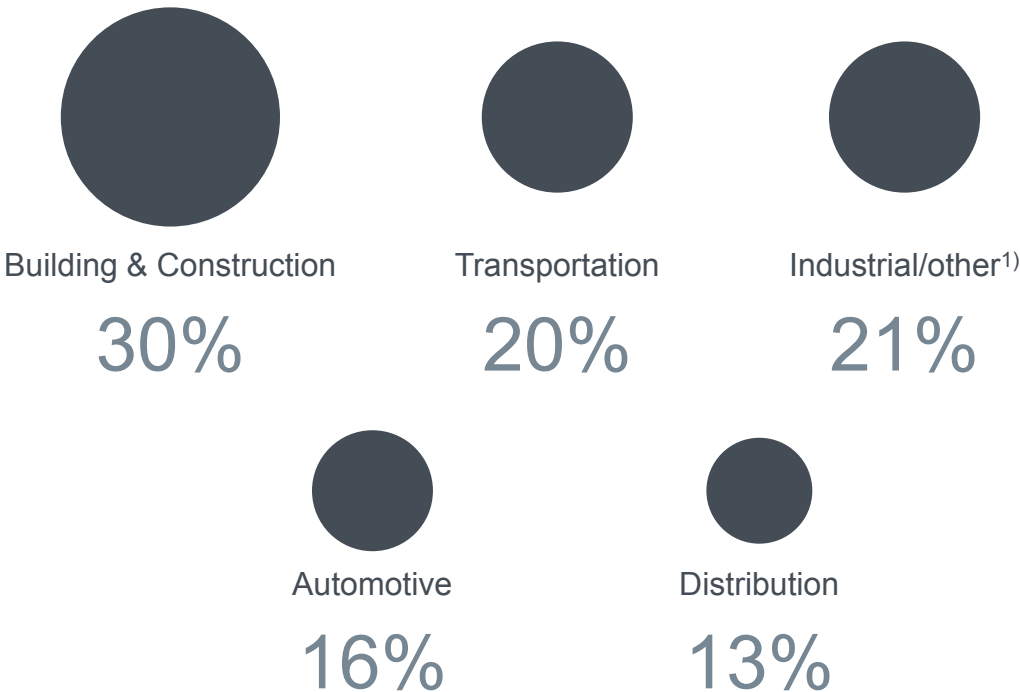
Unrivalled position as #1 extrusions provider globally

Extrusion sales volumes (2016), in thousand mt



Customers in diversified end-markets

(Share of Extruded Solutions sales volumes in 2018)



Source: CRU, Sapa Annual Report 2016
* Including HVAC&R, Heating, ventilation, air conditioning and refrigeration

Organized in four business units to maximize synergies across units



22,700 highly competent people across the world, total turnover of BNOK 64

Extrusion Europe



- Market leader focusing on value-added products
- 20% market share
- 40 locations, 9,700 people

Revenue	EBIT
BNOK 24.9	BNOK 0.7

Extrusion North America



- Uniquely positioned as the only coast-to-coast supplier
- 24% market share
- 23 locations, 6,400 people

Revenue	EBIT
BNOK 25.0	BNOK 1.3

Precision Tubing



- Technology leader in selected market niches
- 35% market share globally
- 17 locations, 3,500 people

Revenue	EBIT
BNOK 7.2	BNOK 0.2

Building Systems

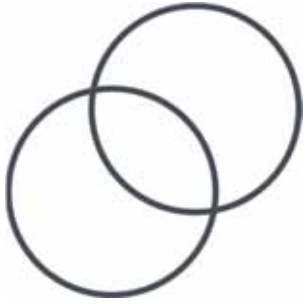


- Leading European player with multi-brand portfolio
- 20% market share in Europe
- Presence in 29 countries, 2,900 people

Revenue	EBIT
BNOK 8.1	BNOK 0.4

Successful value-over-volume strategy

Targeting the high-tech, high-competence segments of extrusion



Simplify and collaborate

Simplification drive to increase focus, reduce complexity and cost



Deliver value-added to our customers

Higher share of value-added solutions to customers through commercial excellence and innovation



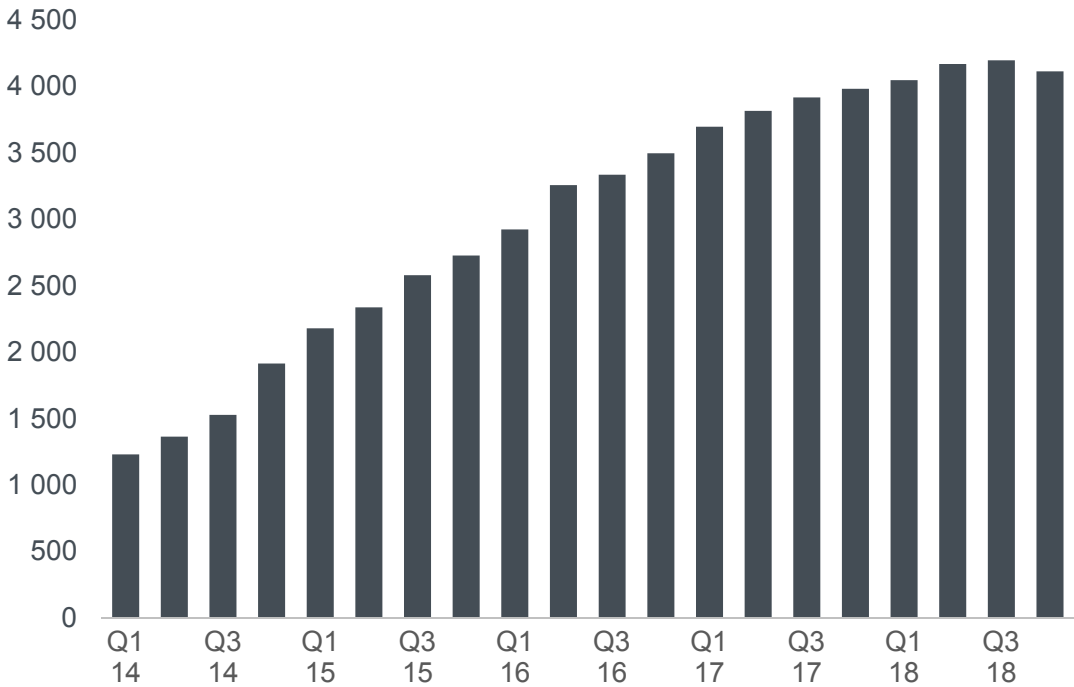
Grow to lift margins and profitability

Lifting margins and creating more customer value through selective growth

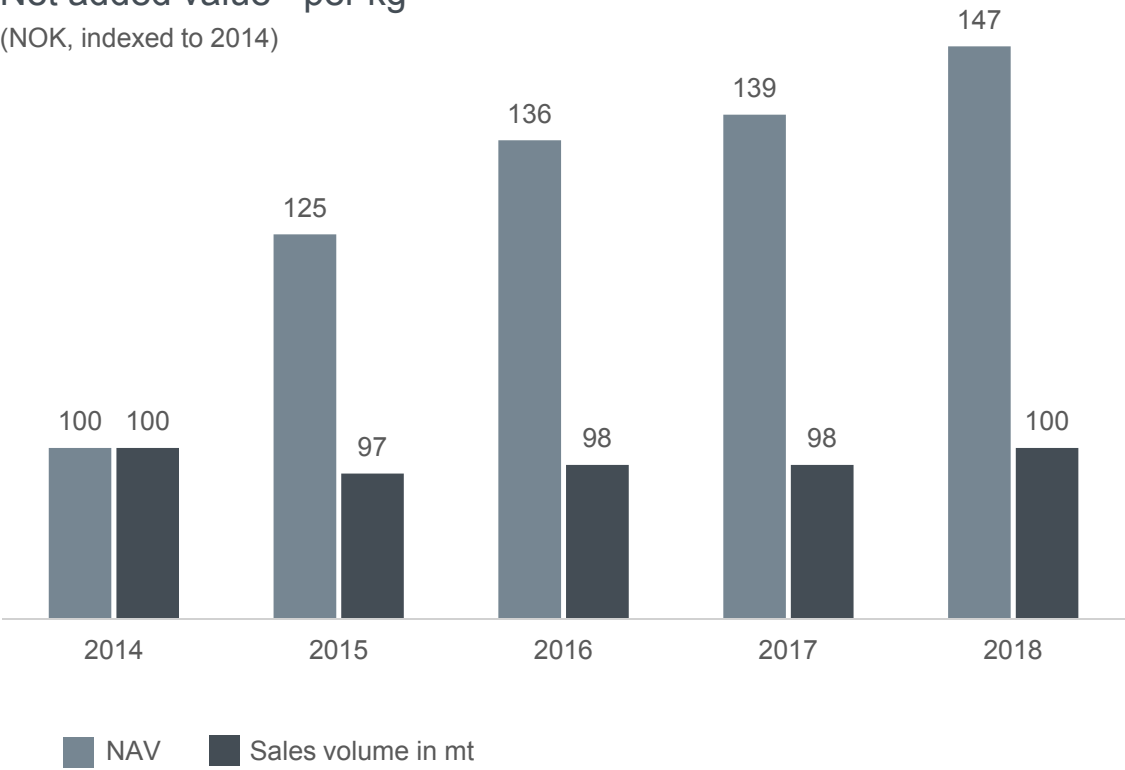
Proven track-record of value creation with further potential



Last 12 months underlying EBITDA
in MNOK



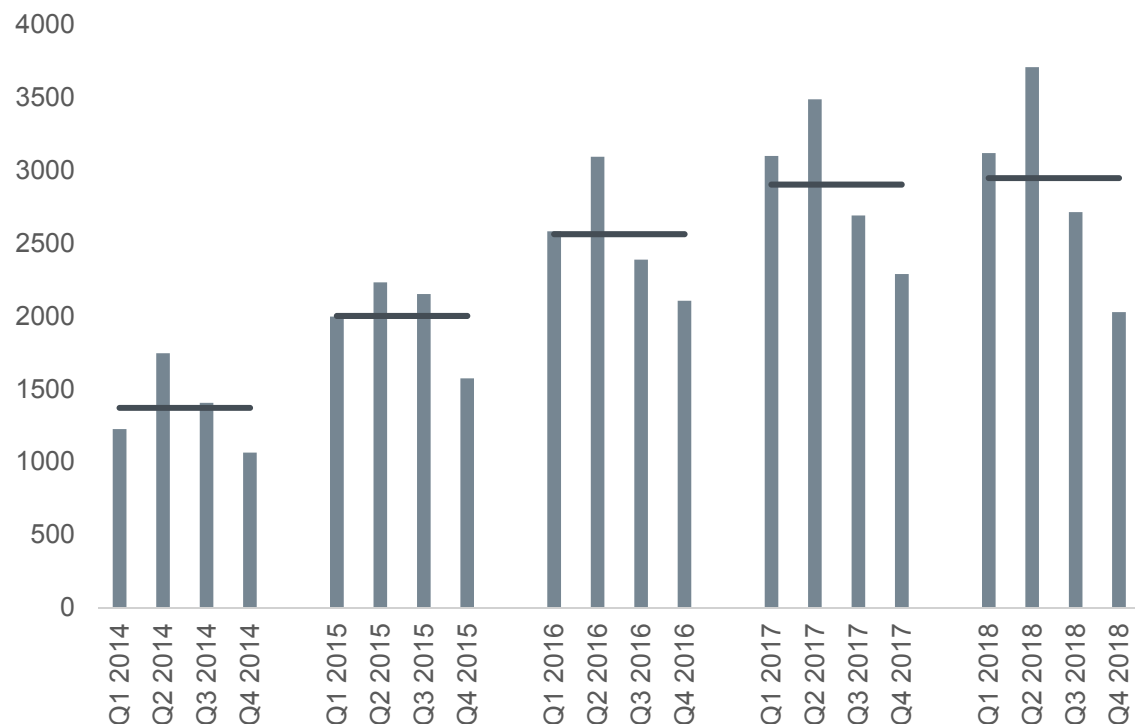
Net added value¹⁾ per kg
(NOK, indexed to 2014)



1) Net Added Value: calculated as operating revenues less cost of material, including freight costs out

Extruded Solutions earnings drivers

Underlying EBITDA per tonne¹⁾, NOK



- Extruded Solutions aims to deliver minimum 10% average annual underlying EBIT growth over the next three years²⁾
- Contract structure
 - Margin business based on conversion price
 - LME element passed on to customers
 - Mostly short-term contract, typically ranging from spot to 12 months, few longer term contracts with floating price or hedging in place
- High share of variable costs – high level of flexibility
- Annual seasonality driven by maintenance and customer activity
 - Stronger Q1 and Q2, weaker Q3 and Q4
- Strong focus on increasing value add to customers
- Preferred supplier market position in high-end products

1) Pro-forma figures

2) Ambition includes smaller bolt-on acquisitions with capex frames for the coming years in line with 2018

04

Additional information

Investor presentation, February 2019

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	CMD 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	47% 2018
Adjusted net debt/Equity	< 55%	Over the cycle	32% 2018
URoACE	Competitive ³⁾	Over the cycle	6.5 % 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)

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 6.0 billion in cash and cash equivalents, end-Q4 2018
 - 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

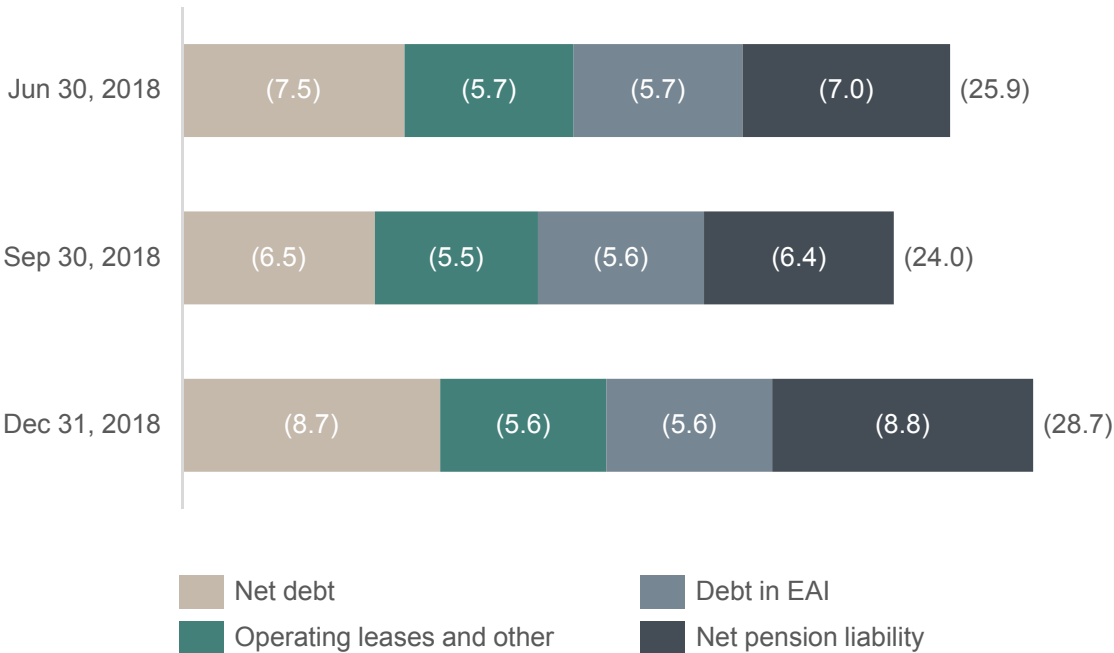
Maintaining a solid balance sheet and investment-grade credit rating



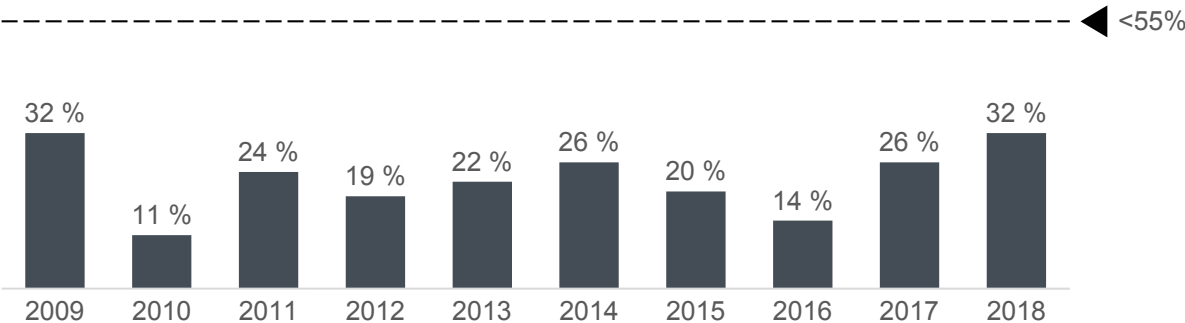
Funds from operations determine the balance sheet structure

Adjusted net debt

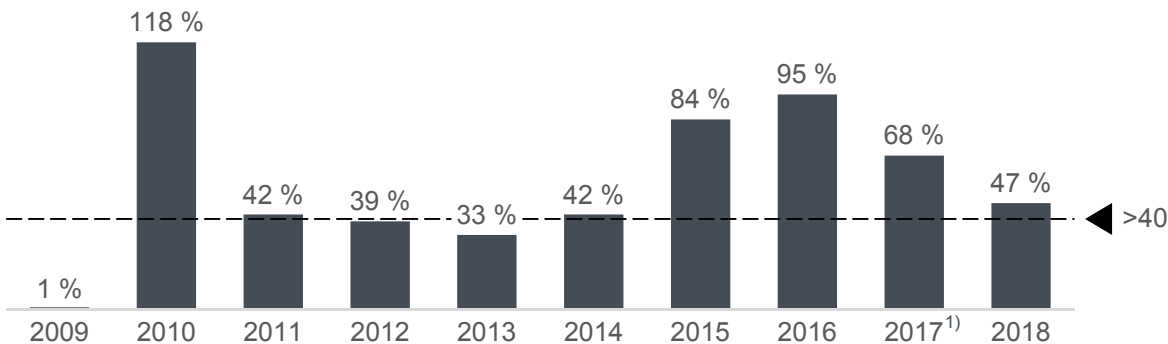
Global demand base metals



Adjusted net debt / Equity



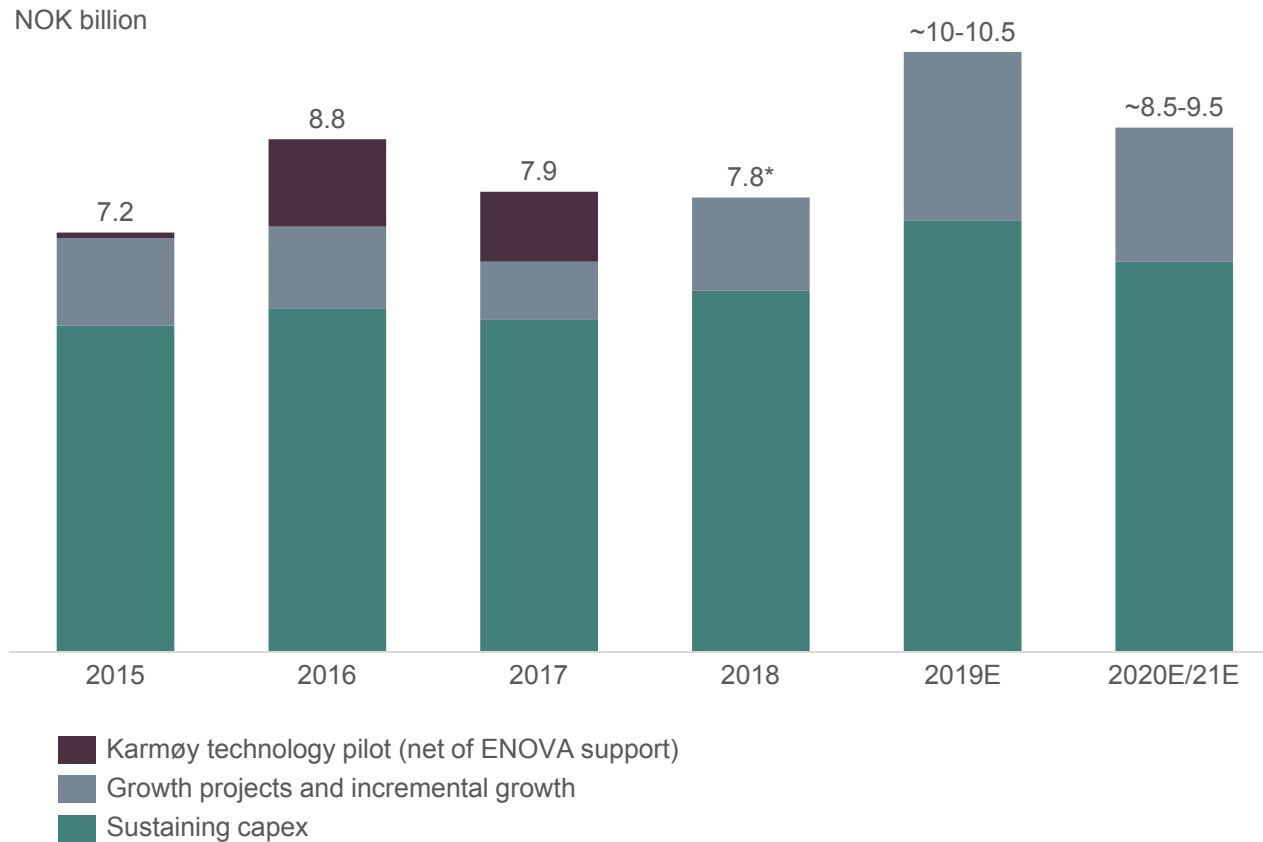
Funds from operations / Adjusted net debt



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

Growth capex focused on incremental growth and productivity improvements

Majority of sustaining capex allocated upstream



- Sustaining projects for 2018-2021:
 - Pipeline replacement in B&A
 - PM rectifiers and asset integrity Albras
 - Smelter relining
 - Alunorte robustness
- Ongoing growth projects:
 - Husnes upgrade and restart
 - Capacity creep and Industry 4.0 in PM
 - Selected customer-driven growth in ES
 - Productivity improvements across the portfolio
- Capex related to specific growth projects will be announced when decision is made

*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



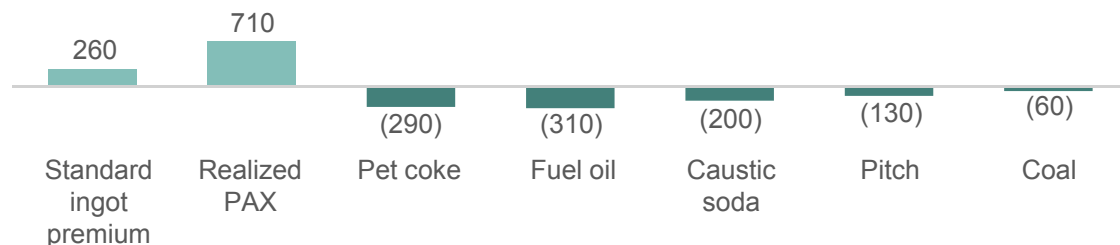
Sensitivities affected by the Alunorte and Albras curtailments

Sensitivities with full production

Aluminium price sensitivity +10%, NOK million



Other commodity prices, sensitivity +10%, NOK million



Currency sensitivities +10%

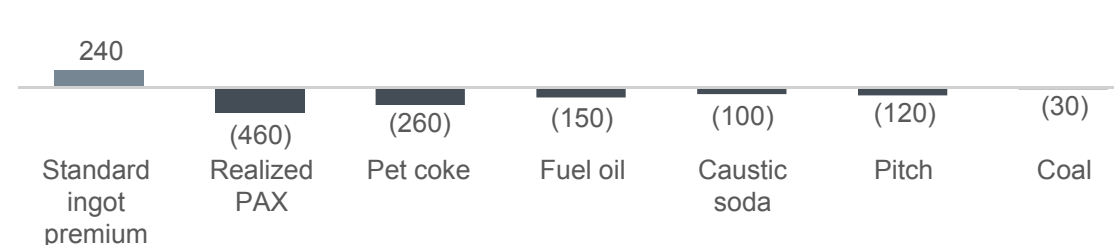
NOK million	USD	BRL	EUR
UEBIT	3 960	(1 060)	(250)

Sensitivities with 50% production

Aluminium price sensitivity +10%, NOK million



Other commodity prices, sensitivity +10%, NOK million



Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	2 690	(1 060)	(240)

Annual sensitivities based on Q4 18 realized prices as a starting point LME USD 2 040 per mt, standard ingot premium (Europe duty paid) 130 USD/t, realized PAX 510 USD/t, fuel oil USD 550 per mt, petroleum coke USD 370 per mt, caustic soda USD 410 per mt, coal USD 85 per mt, USD/NOK 8.4, BRL/NOK 2.2, EUR/NOK 9.6. LME and PAX sensitivities reflect financial exposures to movement in the respective prices, net of LME/PAX indexed costs. The net exposures might deviate from the net physical position. B&A and PM sensitivities reflect internal pricing of alumina assuming planned 2018 PAX exposure before the curtailment. The 50% sensitivities are simplified estimates based on full year 50% curtailment of Alunorte and Albras, ignoring any effects from the Force Majeure clauses.

BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated. Fixed costs in B&A and PM assumed constant between the production scenarios.

1) U NI sensitivity calculated as U EBIT sensitivity after 30% tax

Bauxite & Alumina sensitivities

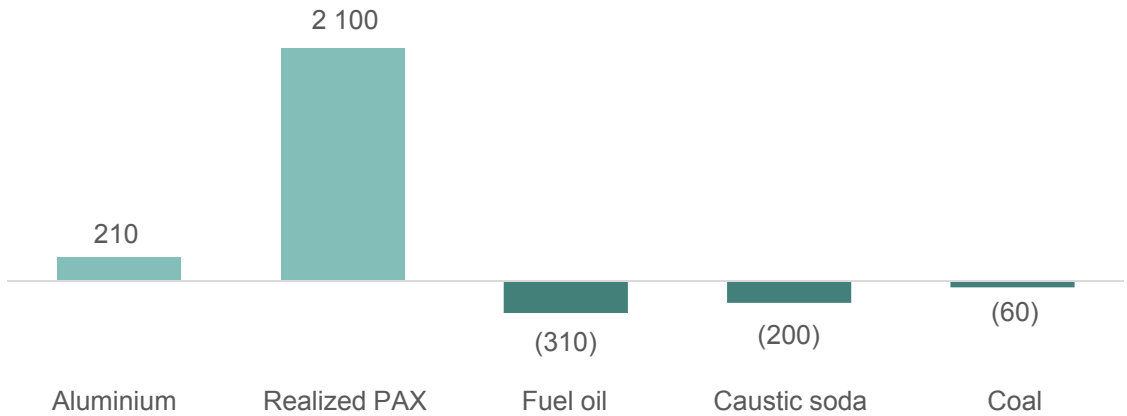


Sensitivities affected by the Alunorte curtailment

Sensitivities with full production

Annual sensitivities on underlying EBIT if +10% in price

NOK million



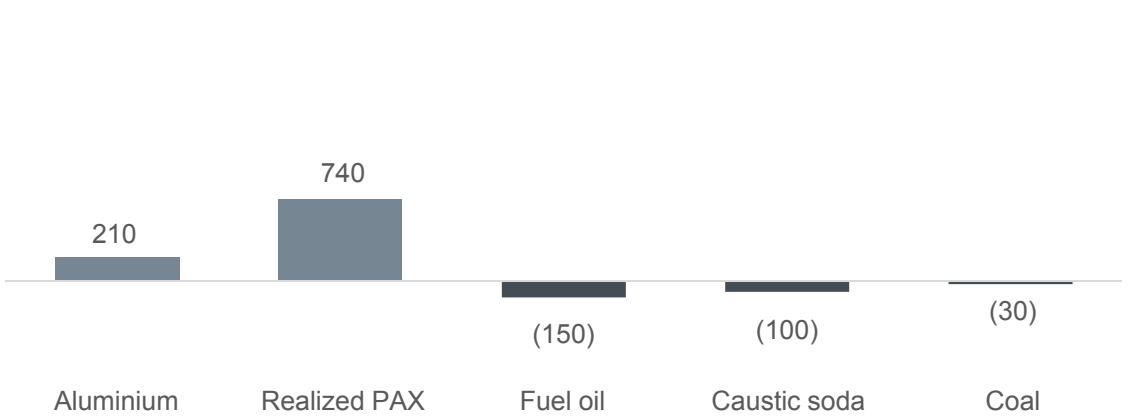
Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	1 840	(720)	-

Sensitivities with 50% production

Annual sensitivities on underlying EBIT if +10% in price

NOK million



Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	760	(720)	-

Annual sensitivities based on Q4 18 realized prices as a starting point LME USD 2 040 per mt, standard ingot premium (Europe duty paid) 130 USD/t, realized PAX 510 USD/t, fuel oil USD 550 per mt, petroleum coke USD 370 per mt, caustic soda USD 410 per mt, coal USD 85 per mt, USD/NOK 8.4, BRL/NOK 2.2, EUR/NOK 9.6.. LME and PAX sensitivities reflect financial exposures to movement in the respective prices, net of LME/PAX indexed costs. The net exposures might deviate from the net physical position. B&A and PM sensitivities reflect internal pricing of alumina assuming planned 2018 PAX exposure before the curtailment. The 50% sensitivities are simplified estimates based on full year 50% curtailment of Alunorte and Albras, ignoring any effects from Force Majeure clauses.
BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated. Fixed costs in B&A and PM assumed constant between the production scenarios.

Primary Metal sensitivities

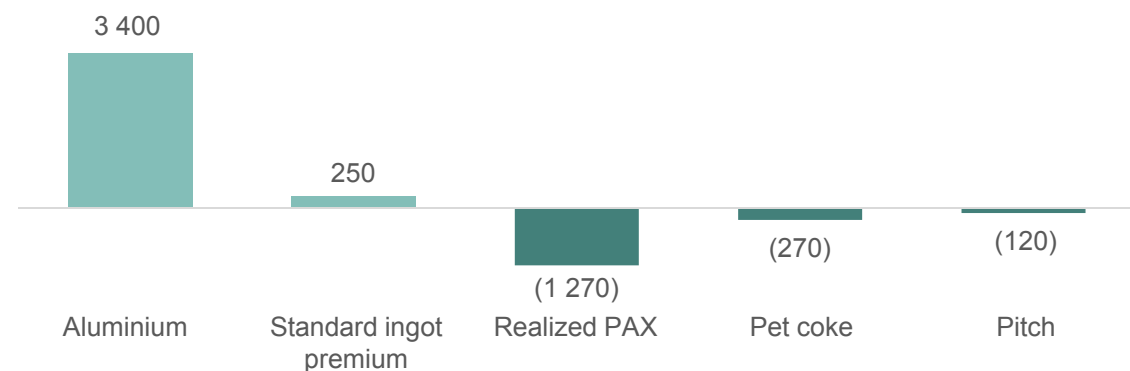


Sensitivities affected by the Albras curtailment

Sensitivities with full production

Annual sensitivities on underlying EBIT if +10% in price

NOK million



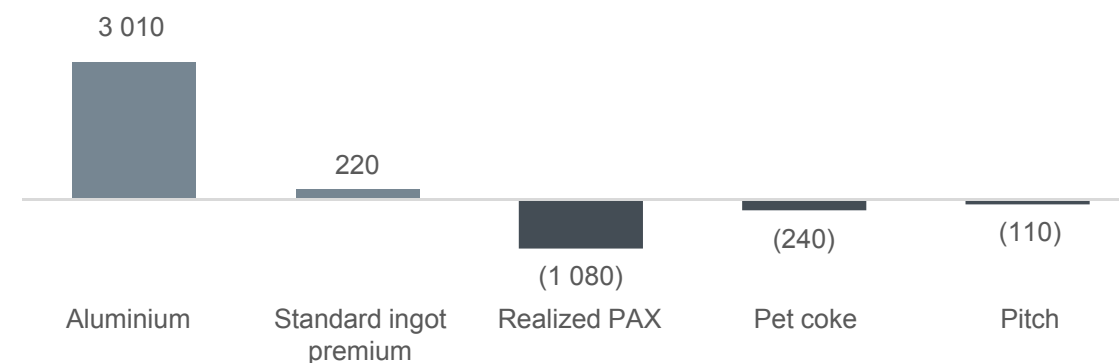
Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	1 700	(340)	(260)

Sensitivities with 50% production

Annual sensitivities on underlying EBIT if +10% in price

NOK million



Currency sensitivities +10%

NOK million	USD	BRL	EUR
UEBIT	1 500	(340)	(250)

Annual sensitivities based on Q4 18 realized prices as a starting point LME USD 2 040 per mt, standard ingot premium (Europe duty paid) 130 USD/t, realized PAX 510 USD/t, fuel oil USD 550 per mt, petroleum coke USD 370 per mt, caustic soda USD 410 per mt, coal USD 85 per mt, USD/NOK 8.4, BRL/NOK 2.2, EUR/NOK 9.6. LME and PAX sensitivities reflect financial exposures to movement in the respective prices, net of LME/PAX indexed costs. The net exposures might deviate from the net physical position. B&A and PM sensitivities reflect internal pricing of alumina assuming planned 2018 PAX exposure before the curtailment. The 50% sensitivities are simplified estimates based on full year 50% curtailment of Alunorte and Albras, ignoring any effects from Force Majeure clauses.

BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated. Fixed costs in B&A and PM assumed constant between the production scenarios.

Business area sensitivity parameters



Bauxite & Alumina

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

Primary Metal

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 - 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	-	-	-	80	80
Total impact	Extruded Solutions	47	(151)	211	352	459
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	199	390
Net foreign exchange (gain)/loss	Hydro	333	306	257	408	1 303
Items excluded from underlying income (loss) before tax	Hydro	178	32	877	607	1 693
Calculated income tax effect	Hydro	(54)	(8)	(105)	(188)	(355)
Items excluded from underlying net income (loss)	Hydro	125	24	772	418	1 338

Operating segment information



Underlying EBIT

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	189	174	153	711	756	662	413	1 872	741	364	685	493	1 227	3 704	2 282
Primary Metal	318	702	637	601	900	1 486	1 298	1 377	823	755	861	(677)	2 258	5 061	1 762
Metal Markets	167	75	117	152	24	244	91	185	178	237	(3)	275	510	544	686
Rolled Products	248	242	211	6	106	84	95	95	232	212	82	(113)	708	380	413
Extruded Solutions	183	270	157	167	281	329	209	284	734	957	497	202	777	1 103	2 390
Energy	398	301	285	359	423	284	368	457	278	417	652	500	1 343	1 531	1 846
Other and Eliminations	(2)	(145)	(83)	(167)	(207)	(159)	(28)	(715)	161	(229)	(97)	(145)	(397)	(1 108)	(310)
Total	1 501	1 618	1 477	1 829	2 284	2 930	2 446	3 555	3 147	2 713	2 676	534	6 425	11 215	9 069

Underlying EBITDA

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	640	659	664	1 258	1 334	1 248	1 057	2 551	1 370	937	1 193	877	3 221	6 190	4 377
Primary Metal	792	1 186	1 125	1 068	1 392	1 991	1 795	1 900	1 349	1 309	1 424	(176)	4 172	7 078	3 906
Metal Markets	191	98	141	175	47	268	114	209	201	262	22	301	604	638	786
Rolled Products	446	432	407	222	307	297	312	325	456	438	314	133	1 507	1 240	1 340
Extruded Solutions	183	270	157	167	281	329	209	728	1 155	1 383	931	645	777	1 547	4 114
Energy	453	352	336	412	476	337	424	519	339	479	716	566	1 553	1 757	2 100
Other and Eliminations	12	(134)	(76)	(160)	(200)	(151)	(21)	(708)	169	(223)	(90)	(135)	(359)	(1 081)	(280)
Total	2 716	2 862	2 753	3 143	3 637	4 319	3 889	5 524	5 038	4 586	4 510	2 210	11 474	17 369	16 344

Operating segment information



EBIT

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	189	174	153	680	756	662	413	1 872	741	364	166	493	1 196	3 704	1 763
Primary Metal	408	668	591	619	797	1 538	1 282	1 112	917	776	954	(524)	2 285	4 729	2 123
Metal Markets	235	91	131	172	(13)	282	59	158	305	270	(107)	419	629	485	886
Rolled Products	179	428	255	91	450	84	(22)	-	78	353	223	(319)	953	512	336
Extruded Solutions	209	319	172	190	313	273	215	1 722	687	1 109	286	(150)	889	2 522	1 931
Energy	394	291	295	364	423	284	368	457	278	417	652	507	1 343	1 531	1 853
Other and Eliminations	79	8	(220)	(151)	(316)	(176)	7	(810)	295	(303)	(117)	(89)	(285)	(1 295)	(214)
Total	1 693	1 978	1 376	1 964	2 410	2 946	2 323	4 511	3 301	2 986	2 057	335	7 011	12 189	8 679

EBITDA

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	640	659	664	1 513	1 334	1 248	1 057	2 551	1 370	937	674	877	3 475	6 190	3 858
Primary Metal	882	1 152	1 079	1 086	1 289	2 043	1 779	1 635	1 443	1 330	1 517	(23)	4 199	6 747	4 267
Metal Markets	259	114	154	195	9	306	82	182	329	295	(82)	445	723	579	986
Rolled Products	376	618	451	307	651	296	196	230	302	580	455	(73)	1 752	1 372	1 263
Extruded Solutions	209	319	172	190	313	273	215	2 166	1 108	1 534	720	293	889	2 966	3 655
Energy	450	341	346	416	476	337	424	519	339	479	716	573	1 553	1 757	2 107
Other and Eliminations	92	19	(74)	(143)	(310)	(168)	13	(803)	302	(296)	(110)	(80)	(107)	(1 268)	(183)
Total	2 908	3 222	2 792	3 563	3 762	4 335	3 766	6 481	5 193	4 860	3 890	2 011	12 485	18 344	15 953

Operating segment information



Total revenue

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	4 212	4 572	4 925	5 834	5 911	5 858	5 612	8 040	6 309	6 877	6 749	8 613	19 543	25 421	28 548
Primary Metal	7 694	8 006	7 900	7 262	8 641	9 575	8 958	9 291	10 170	10 083	9 984	9 196	30 862	36 466	39 434
Metal Markets	11 248	11 239	10 649	10 117	12 149	13 604	11 862	12 991	13 898	14 205	13 230	12 903	43 254	50 606	54 237
Rolled Products	5 737	5 985	5 648	5 262	6 277	6 569	6 435	6 434	6 797	7 145	6 791	6 223	22 632	25 715	26 955
Extruded Solutions								14 153	15 911	16 980	15 976	15 218		14 153	64 085
Energy	1 620	1 670	1 576	2 314	1 955	1 750	1 831	2 169	1 762	2 163	2 488	2 267	7 180	7 705	8 681
Other and Eliminations	(10 373)	(11 080)	(10 525)	(9 539)	(11 906)	(12 765)	(11 900)	(14 276)	(14 877)	(16 198)	(15 452)	(16 034)	(41 517)	(50 847)	(62 562)
Total	20 138	20 391	20 174	21 250	23 026	24 591	22 799	38 803	39 971	41 254	39 766	38 386	81 953	109 220	159 377

External revenue

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	2 443	2 699	2 997	3 921	3 382	3 417	3 293	5 095	3 509	3 640	3 016	4 232	12 059	15 188	14 396
Primary Metal	1 175	1 312	1 459	1 582	1 700	1 944	1 865	2 068	2 018	1 993	2 312	1 505	5 529	7 578	7 829
Metal Markets	10 133	10 169	9 678	9 440	11 094	12 080	10 675	10 414	10 901	10 905	10 575	10 121	39 420	44 264	42 502
Rolled Products	5 795	5 831	5 637	5 205	6 153	6 629	6 380	6 375	6 870	7 011	6 773	6 287	22 469	25 538	26 940
Extruded Solutions								14 083	15 932	16 877	15 934	15 280		14 083	64 023
Energy	575	364	394	1 093	687	514	582	767	738	823	1 151	961	2 426	2 550	3 673
Other and Eliminations	17	15	8	10	9	6	3	-	4	6	5	(1)	50	18	14
Total	20 138	20 391	20 174	21 250	23 026	24 591	22 799	38 803	39 971	41 254	39 766	38 386	81 953	109 220	159 377

Operating segment information



Internal revenue

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	1 769	1 873	1 929	1 914	2 528	2 441	2 320	2 944	2 800	3 237	3 733	4 381	7 484	10 234	14 152
Primary Metal	6 519	6 693	6 441	5 680	6 941	7 631	7 093	7 223	8 152	8 090	7 672	7 691	25 333	28 888	31 605
Metal Markets	1 116	1 070	971	677	1 054	1 523	1 187	2 577	2 997	3 301	2 656	2 781	3 834	6 341	11 735
Rolled Products	(58)	153	11	57	124	(61)	55	59	(72)	134	18	(64)	163	178	15
Extruded Solutions								70	(21)	103	42	(62)		70	61
Energy	1 044	1 306	1 182	1 221	1 267	1 236	1 249	1 403	1 024	1 340	1 337	1 306	4 753	5 155	5 007
Other and Eliminations	(10 390)	(11 095)	(10 533)	(9 549)	(11 915)	(12 772)	(11 903)	(14 276)	(14 881)	(16 204)	(15 457)	(16 033)	(41 567)	(50 865)	(62 576)
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Share of profit /(loss) in equity accounted investments

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Primary Metal	(37)	10	74	48	98	231	159	258	210	280	238	(5)	96	745	722
Metal Markets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rolled Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extruded Solutions	209	319	172	190	313	273	215	12	17	11	14	10	889	812	53
Energy	-	-	-	-	-	-	-	(7)	(10)	(11)	(4)	(11)	-	(7)	(35)
Other and Eliminations	(3)	(6)	10	(1)	(1)	(13)	(3)	(7)	3	5	(20)	35	-	(24)	24
Total	170	323	256	236	409	491	371	256	221	286	229	30	985	1 527	765

Operating segment information

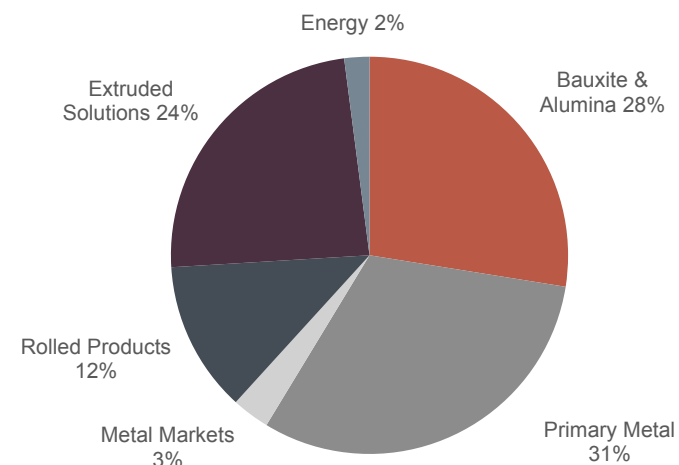


Return on average capital employed ¹⁾ (RoaCE)

	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) %	5.6%	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	26.8%	18.6%	19.6 %	5.4 %	21.9 %	22.3 %	4.3 %	20.8%	20.8%	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⁾	6.0%	13.4%						7.4%	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	6.0%	11.2%	6.5 %	7.5 %	4.9 %	1.1 %	(0.5) %	6.5%	9.6%	5.1 %	9.2 %	5.2 %	2.3 %	0.9 %

Capital employed – upstream focus

NOK million	Dec 31, 2018
Bauxite & Alumina	29 675
Primary Metal	33 583
Metal Markets	3 324
Rolled Products	13 232
Extruded Solutions	25 783
Energy	2 204
Other and Eliminations	(8 232)
Total	99 579



Graph excludes BNOK (8.2) 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

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

Operating segment information



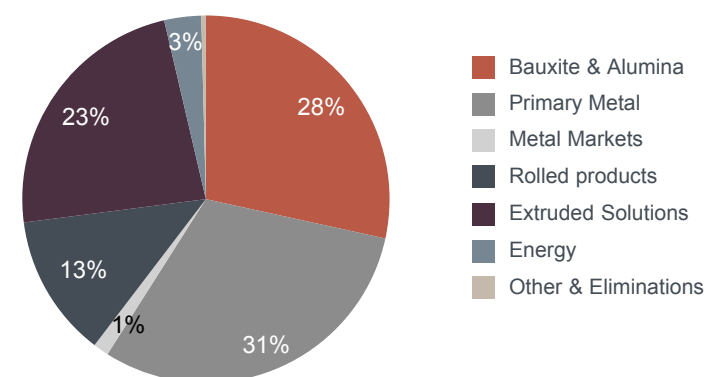
Depreciation, amortization and impairment

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Bauxite & Alumina	451	485	511	833	577	586	644	679	630	573	509	384	2 279	2 486	2 095
Primary Metal	474	484	488	467	492	505	504	526	546	575	583	548	1 913	2 026	2 253
Metal Markets	24	24	24	23	23	24	24	24	24	25	25	26	94	95	101
Rolled Products	197	189	196	216	201	212	217	230	223	227	231	246	799	860	927
Extruded Solutions								444	421	425	434	443		444	1 723
Energy	55	51	51	53	53	54	56	60	58	59	61	63	210	223	239
Other and Eliminations	13	11	146	8	6	7	7	7	7	7	7	10	178	28	30
Total	1 215	1 244	1 416	1 599	1 352	1 389	1 450	1 970	1 909	1 891	1 851	1 719	5 474	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	Q4 2018	Q4 2017	Q3 2018	Year 2017	Year 2018
Revenue	38 386	38 803	39 766	109 220	159 377
Share of the profit (loss) in equity accounted investments	30	256	229	1 527	765
Other income, net	264	2 358	169	2 947	772
Total revenue and income	38 680	41 417	40 163	113 693	160 913
Raw material and energy expense	25 164	24 411	25 667	69 848	102 523
Employee benefit expense	5 926	5 578	5 650	13 285	23 176
Depreciation, amortization and impairment	1 719	1 970	1 851	6 162	7 369
Other expenses	5 537	4 948	4 939	12 209	19 167
Earnings before financial items and tax (EBIT)	335	4 511	2 057	12 189	8 679
Financial income	45	142	64	481	255
Financial expense	(766)	(919)	(486)	(1 596)	(2 315)
Income (loss) before tax	(386)	3 735	1 634	11 075	6 619
Income taxes	(207)	(135)	(710)	(1 891)	(2 139)
Net income (loss)	(593)	3 600	925	9 184	4 480
Net income (loss) attributable to non-controlling interests	(57)	100	174	401	67
Net income (loss) attributable to Hydro shareholders	(536)	3 499	751	8 783	4 413
Earnings per share attributable to Hydro shareholders	(0.26)	1.71	0.37	4.30	2.16

NOK million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Net income (loss)	2 382	2 077	1 119	1 008	1 838	1 562	2 184	3 600	2 076	2 073	925	(593)	6 586	9 184	4 480
Underlying net income (loss)	822	1 126	958	968	1 580	2 214	1 785	2 816	2 201	2 096	1 696	(175)	3 875	8 396	5 819
Earnings per share	1.12	0.95	0.53	0.52	0.86	0.73	1.00	1.71	1.02	1.03	0.37	(0.26)	3.13	4.30	2.16
Underlying earnings per share	0.39	0.52	0.46	0.48	0.75	1.04	0.82	1.33	1.06	1.02	0.74	(0.06)	1.84	3.95	2.75

Balance sheets



NOK million	Dec 31 2018	Sep 30 2018	Jun 30 2018	Mar 31 2018	Dec 31 2017 ¹⁾
Cash and cash equivalents	5 995	6 846	5 682	9 371	11 828
Short-term investments	975	1 176	1 136	1 031	1 311
Accounts receivable	20 527	21 727	23 442	22 785	19 983
Inventories	26 483	23 916	22 337	20 626	20 711
Other current assets	801	738	978	818	798
Property, plant and equipment	71 299	66 251	66 683	69 945	72 933
Intangible assets	11 443	10 695	11 660	12 133	12 712
Investments accounted for using the equity method	11 570	11 094	11 140	10 551	11 221
Prepaid pension	5 162	6 857	6 322	5 933	5 750
Other non-current assets	7 444	5 962	5 780	5 588	6 028
Total assets	161 699	155 261	155 159	158 781	163 273
Bank-loans and other interest-bearing short-term debt	8 543	6 607	4 969	5 269	8 245
Trade and other payables	20 381	19 906	21 351	20 621	19 571
Other current liabilities	5 630	5 897	4 976	4 852	5 521
Long-term debt	7 080	7 886	9 377	8 746	9 012
Provisions	5 707	5 358	5 532	5 652	5 828
Pension liabilities	15 648	14 416	14 665	14 911	15 118
Deferred tax liabilities	3 037	3 952	3 456	3 522	3 501
Other non-current liabilities	4 746	3 756	3 673	4 084	4 269
Equity attributable to Hydro shareholders	85 990	83 012	82 676	86 233	87 032
Non-controlling interests	4 936	4 472	4 486	4 891	5 178
Total liabilities and equity	161 699	155 261	155 159	158 781	163 273

Operational data



Bauxite & Alumina	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Alumina production (kmt)	1 517	1 554	1 635	1 635	1 523	1 576	1 605	1 693	1 277	829	821	786	6 341	6 397	3 712
Sourced alumina (kmt)	531	615	512	883	600	645	667	610	900	985	907	1 163	2 541	2 522	3 954
Total alumina sales (kmt)	2 073	2 078	2 221	2 472	2 129	2 196	2 251	2 344	2 071	1 842	1 711	1 983	8 843	8 920	7 607
Realized alumina price (USD) ¹⁾	219	240	240	257	309	295	297	398	371	430	460	463	240	326	429
Implied alumina cost (USD) ²⁾	183	201	204	197	235	228	237	265	287	367	376	409	197	242	358
Bauxite production (kmt) ³⁾	2 682	2 609	2 777	3 063	2 400	2 943	3 043	3 049	2 326	1 348	1 286	1 254	11 132	11 435	6 214
Sourced bauxite (kmt) ⁴⁾	1 924	2 233	2 108	2 235	1 675	1 809	2 013	2 103	1 317	1 250	905	1 730	8 499	7 601	5 202
Underlying EBITDA margin ¹¹⁾	15.2%	14.4%	13.5%	21.6%	22.6%	21.3%	18.8%	31.7%	21.7%	13.6%	17.7%	10.2%	16.5%	24.3%	15.3%

Primary Metal ⁵⁾	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Realized aluminium price LME, USD/mt	1 497	1 546	1 612	1 647	1 757	1 902	1 921	2 092	2 140	2 183	2 194	2 041	1 574	1 915	2 140
Realized aluminium price LME, NOK/mt ⁷⁾	12 950	12 826	13 375	13 659	14 798	16 265	15 496	17 066	16 929	17 292	17 905	17 038	13 193	15 888	17 282
Realized premium above LME, USD/mt ⁶⁾	288	270	251	240	266	273	261	259	295	364	367	362	263	265	346
Realized premium above LME, NOK/mt ⁶⁾⁷⁾	2 488	2 243	2 082	1 993	2 236	2 330	2 106	2 116	2 335	2 881	2 999	3 025	2 201	2 197	2 791
Realized NOK/USD exchange rate ⁷⁾	8.65	8.30	8.30	8.29	8.42	8.55	8.07	8.16	7.91	7.92	8.16	8.35	8.38	8.30	8.08
Implied primary cost (USD) ⁸⁾	1 225	1 175	1 275	1 325	1 350	1 375	1 425	1 575	1 725	1 775	1 750	2 000	1 250	1 425	1 825
Implied all-in primary cost (USD) ⁹⁾	1 550	1 500	1 550	1 550	1 675	1 700	1 725	1 850	2 075	2 175	2 150	2 350	1 550	1 725	2 175
Primary aluminium production, kmt	514	518	526	526	516	523	527	528	514	492	497	490	2 085	2 094	1 993
Casthouse production, kmt	534	547	541	523	521	551	548	550	531	523	507	496	2 146	2 169	2 058
Total sales, kmt ¹⁰⁾	552	596	573	528	577	579	568	554	578	549	516	503	2 248	2 278	2 145
Underlying EBITDA margin ¹¹⁾	10.3%	14.8%	14.2%	14.7%	16.1%	20.8%	20.0%	20.4%	13.3%	13.0%	14.3%	(1.9)%	13.5%	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
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 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Remelt production (1 000 mt)	144	146	125	133	143	152	136	137	150	153	126	135	548	568	563
Third-party Metal Products sales (1 000 mt)	72	74	78	80	79	80	74	86	70	77	83	73	304	319	304
Metal Products sales excl. ingot trading (1 000 mt) ¹⁾	736	777	720	660	735	759	707	720	745	746	685	682	2 893	2 921	2 859
Hereof external sales excl. ingot trading (1 000 mt)	664	694	652	616	672	675	639	589	580	563	543	532	2 627	2 575	2 217
External revenue (NOK million)	10 133	10 169	9 678	9 440	11 094	12 080	10 675	10 414	10 901	10 905	10 575	10 121	39 420	44 264	42 502
Rolled Products	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Rolled Products external shipments (1 000 mt)	229	238	231	213	241	239	236	224	245	251	235	220	911	940	951
Rolled Products – Underlying EBIT per mt, NOK	1 086	1 017	914	29	442	351	400	424	949	844	349	(512)	777	404	435
Underlying EBITDA margin ²⁾	7.8%	7.2%	7.2%	4.2%	4.9%	4.5%	4.8%	5.0%	6.7%	6.1%	4.6%	2,1%	6.7%	4.8 %	5.0%
Extruded Solutions³⁾	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Extruded Solutions external shipments (1 000 mt)				310	355	359	339	318	362	373	343	318	1 365	1 372	1 396
Extruded Solutions – Pro-forma underlying EBIT per mt, NOK				829	1 973	2 328	1 505	893	2 028	2 566	1 449	635	1 381	1 699	1 712
Underlying EBITDA margin ²⁾				5.3%	7.7%	8.2%	6.5%	5.2%	7.3%	8.1%	5.8%	4,2%	6.6%	6.9%	6,4%
Energy	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Year 2016	Year 2017	Year 2018
Power production, GWh	3 160	2 674	2 946	2 551	2 869	2 369	2 509	3 089	2 433	2 550	2 888	2 822	11 332	10 835	10 693
Net spot sales, GWh	1 795	1 393	1 699	1 176	1 409	996	1 168	1 633	763	961	1 315	1 166	6 063	5 206	4 204
Nordic spot electricity price, NOK/MWh	229	223	235	311	280	257	266	294	372	373	484	460	250	274	423
Southern Norway spot electricity price (NO2), NOK/MWh	212	213	212	296	278	252	258	287	361	369	475	455	233	269	415
Underlying EBITDA margin ²⁾	28.0%	21.1%	21.3%	17.8%	24.4%	19.3%	23.1%	23.9 %	19.2%	22.2%	28.8%	24.9%	21.6%	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) Q4 2016, FY 2017 and historical operational data based on pro forma figures

Pro forma information



Summary consolidated underlying financial and operating results

NOK million	Q4 2018	Q4 2017	Q3 2018	2018	2017	2016
Revenue	38 386	38 803	39 766	159 377	148 920	130 630
EBIT	335	3 048	2 057	8 679	11 927	8 229
Items excluded from underlying EBIT	199	508	620	390	510	(698)
Underlying EBIT	534	3 555	2 676	9 069	12 437	7 531
EBITDA	2 011	5 016	3 890	15 953	19 294	15 331
Underlying EBITDA	2 210	5 524	4 510	16 344	19 786	14 633

Extruded Solutions

NOK million	Q4 2018	Q4 2017	Q3 2018	2018	2017	2016
Revenue	15 218	14 153	15 976	64 085	57 769	53 327
EBIT	(150)	258	286	1 931	2 265	2 109
Items excluded from underlying EBIT	352	25	211	459	65	(224)
Underlying EBIT ¹⁾	202	284	497	2 390	2 330	1 885
EBITDA	293	703	720	3 655	3 917	3 739
Underlying EBITDA	645	728	931	4 114	3 982	3 516
Sales volumes to external market (kmt)	318	318	343	1 396	1 372	1 365

1) Underlying EBIT includes certain effects of the acquisition such as increased depreciation and amortization following fair value adjustment related to long-lived assets.

Extruded Solutions, information by business area



Historical Sapa information (100% basis) Q1 2016 – Q3 2017 and FY 2016

Extruded Solutions, fully consolidated in Hydro in 2018 and Q4 2017 ¹⁾

Precision Tubing	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	2016	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
Volume (kmt)	37	40	37	35	36	38	36	150	35	37	41	41	38	157
Operating revenues (NOKm)	1 620	1 664	1 549	1 543	1 651	1 734	1 601	6 376	1 645	1 700	1 910	1 873	1 722	7 205
Underlying EBITDA (NOKm)	144	169	135	161	180	193	157	608	138	168	120	121	98	507
Underlying EBIT (NOKm)	86	112	76	103	123	136	97	376	66	103	55	50	30	237

Building Systems	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	2016	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
Volume (kmt)	19	21	18	19	20	21	19	77	19	20	21	18	19	78
Operating revenues (NOKm)	1 869	1 939	1 680	1 685	1 830	2 044	1 765	7 173	1 960	2 057	2 124	1 919	2 045	8 145
Underlying EBITDA (NOKm)	110	210	104	109	155	219	118	533	137	167	198	130	155	650
Underlying EBIT (NOKm)	75	166	67	74	119	183	85	381	85	116	146	70	99	430

Other and eliminations	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	2016	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
Underlying EBITDA (NOKm)	(116)	(33)	(64)	(37)	(63)	(43)	(41)	(249)	(35)	(45)	(46)	(21)	(118)	(230)
Underlying EBIT (NOKm)	(127)	(41)	(69)	(28)	(69)	(49)	(42)	(266)	(45)	(55)	(58)	(35)	(130)	(278)

Extrusion Europe	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	2016	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
Volume (kmt)	148	157	142	130	154	155	142	577	134	159	160	138	129	586
Operating revenues (NOKm)	5 366	5 468	4 932	4 565	5 553	5 999	5 460	20 331	5 541	6 600	6 664	5 867	5 719	24 850
Underlying EBITDA (NOKm)	349	425	276	221	390	416	290	1 271	240	417	504	263	201	1 385
Underlying EBIT (NOKm)	223	304	154	97	274	292	164	778	59	246	333	98	27	705

Extrusion North America	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	2016	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
Volume (kmt)	150	155	149	131	150	151	148	585	134	152	157	152	137	598
Operating revenues (NOKm)	5 265	5 234	5 183	4 617	5 514	5 753	5 369	20 299	5 211	5 882	6 519	6 541	6 091	25 033
Underlying EBITDA (NOKm)	414	362	361	199	437	466	390	1 335	248	448	606	439	310	1 802
Underlying EBIT (NOKm)	315	263	260	89	330	353	284	927	119	325	481	314	176	1 295

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".

Historical information for Sapa



Sapa JV (100 % basis), underlying (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	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Year 2015	Year 2016
Sales volume (1000 mt)	359	367	350	322	353	358	341	312	349	366	340	310	355	359	339	1 363	1 365
Revenues*	11 311	11 496	11 561	11 842	14 051	14 484	13 895	12 821	13 905	14 071	13 140	12 210	14 323	15 309	13 983	55 252	53 327
Underlying EBITDA	440	641	492	343	705	799	734	491	901	1 132	812	653	1 100	1 252	912	2 729	3 498
Underlying EBIT	155	350	201	(55)	392	483	404	128	571	804	487	335	778	914	588	1 407	2 197
Underlying net income (loss)	69	263	110	(44)	238	291	240	139	365	540	315	334	562	658	419	907	1 553

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

NOK million	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Year 2015	Year 2016
Reported EBIT	(3)	168	198	(679)	201	65	174	88	655	920	497	350	856	781	604	528	2 420
Reported net income (loss)	(103)	89	107	(719)	89	14	109	34	418	639	344	379	625	545	430	246	1 779

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	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Year 2015	Year 2016
Reported EBIT	(3)	168	198	(679)	201	65	174	88	655	920	497	350	856	781	604	528	2 420
Items excluded from EBIT:																	
Unrealized derivative effects	73	36	66	(79)	(145)	(158)	(95)	208	83	116	51	82	78	(133)	15	(189)	333
Restructuring cost and other items	(231)	(218)	(70)	(546)	(47)	(260)	(135)	(249)	-	-	(42)	(67)	-	-	-	(690)	(109)
Total items excluded from EBIT**	(159)	(182)	(4)	(624)	(191)	(418)	(230)	(41)	83	116	9	15	78	(133)	15	(879)	223
Underlying EBIT	155	350	201	(55)	392	483	404	128	571	804	487	335	778	914	588	1 407	2 197

1) Historical revenues have been reclassified

2) Negative figures represent a net cost to be added to get from reported EBIT to Underlying EBIT

Next events

First quarter results
April 30, 2019

Second quarter results
July 23, 2019

For more information see
www.hydro.com/ir

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