Our energy strategy going forward

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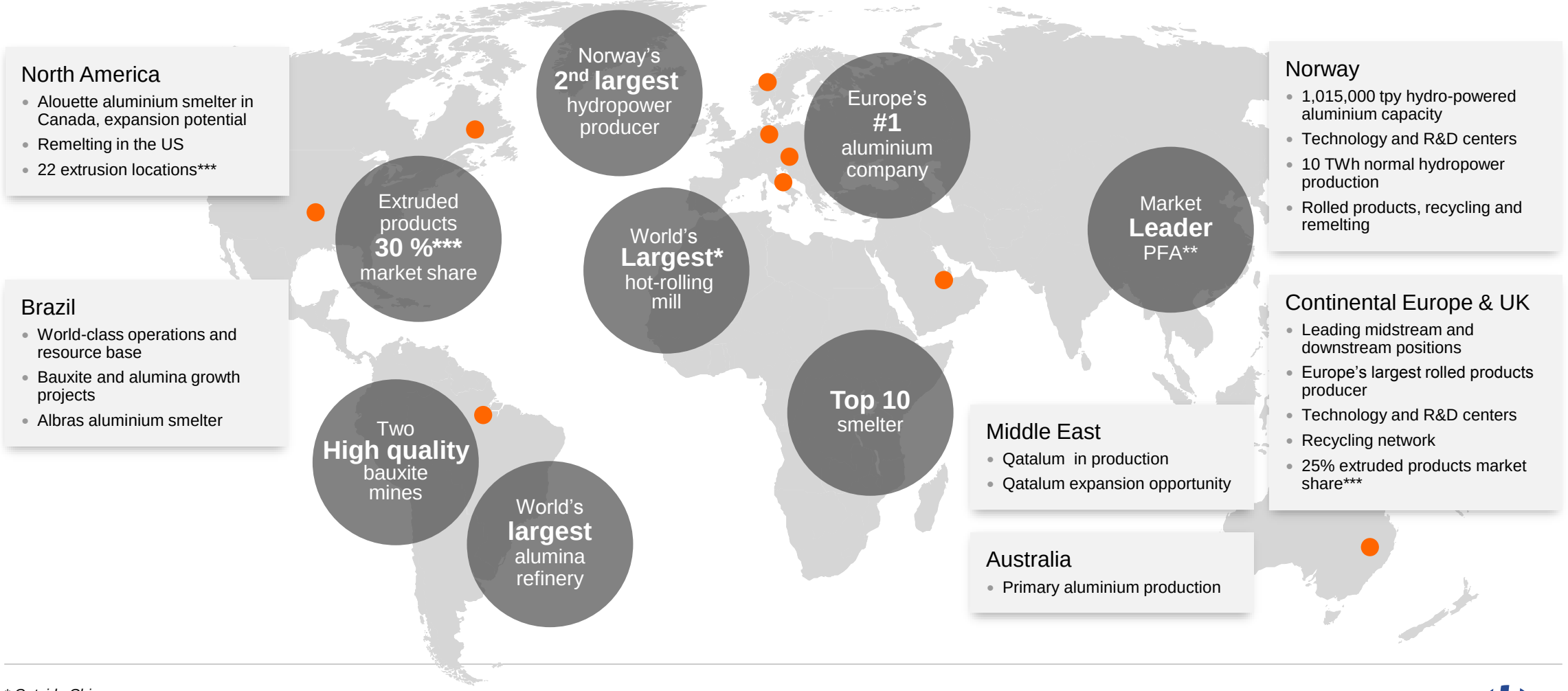
EVP and Head of Energy and Corporate Business Development

Attractively positioned world-class assets with global reach

Now in a first-quartile position on the industry cost curve



North America

- Alouette aluminium smelter in Canada, expansion potential
- Remelting in the US
- 22 extrusion locations***

Brazil

- World-class operations and resource base
- Bauxite and alumina growth projects
- Albras aluminium smelter

Norway

- 1,015,000 tpy hydro-powered aluminium capacity
- Technology and R&D centers
- 10 TWh normal hydropower production
- Rolled products, recycling and remelting

Continental Europe & UK

- Leading midstream and downstream positions
- Europe's largest rolled products producer
- Technology and R&D centers
- Recycling network
- 25% extruded products market share***

Middle East

- Qatalum in production
- Qatalum expansion opportunity

Australia

- Primary aluminium production

** Outside China*
*** Primary Foundry Alloys*
**** Sapa JV*

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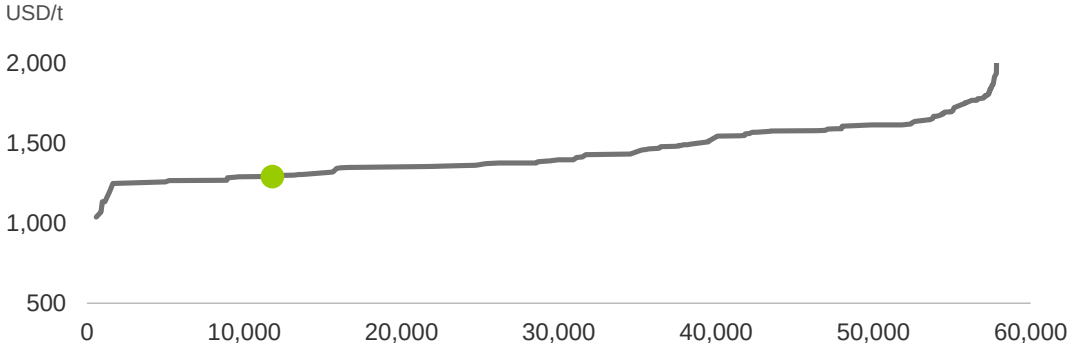
Leading performance compared to aluminium peers

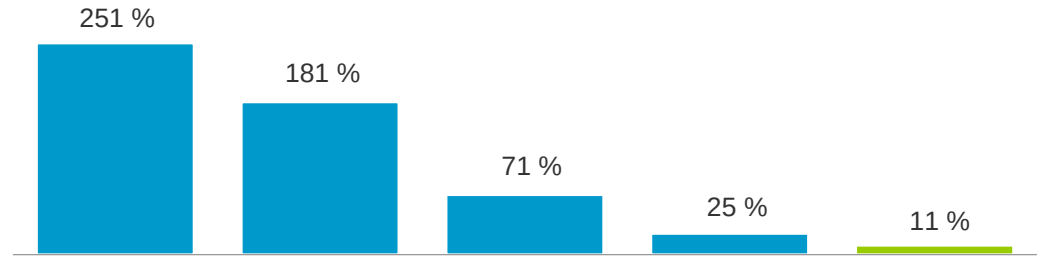
Strong relative position drives value-creation in challenging markets

First-quartile aluminium producer

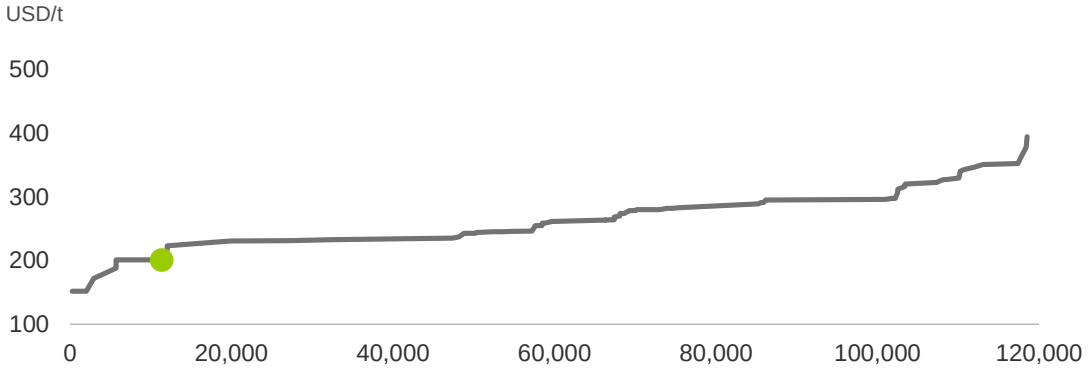


Strongest balance sheet,

Total Debt/Total Equity, 2010-2014

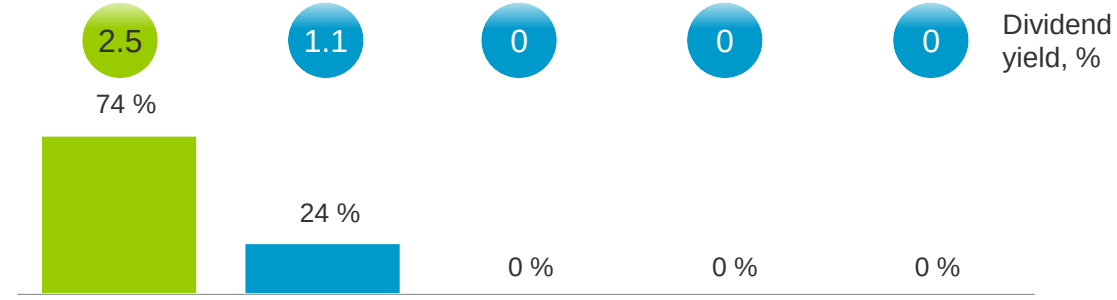


First quartile alumina position



Highest underlying payout ratio and dividend yield

2010-2014



Source: ThomsonOne, CRU, company filings
Total debt/Total Equity= (Long Term Debt + Short Term Debt & Current Portion of Long Term Debt) /Equity attributable to shareholders
Dividend yield = Dividend Per Share / Market Price at Year End
Underlying dividend payout ratio = Dividend Per Share / Underlying Earnings Per Share

Peers Hydro

Aluminium peers included: Alcoa, Century, Chalco, Rusal

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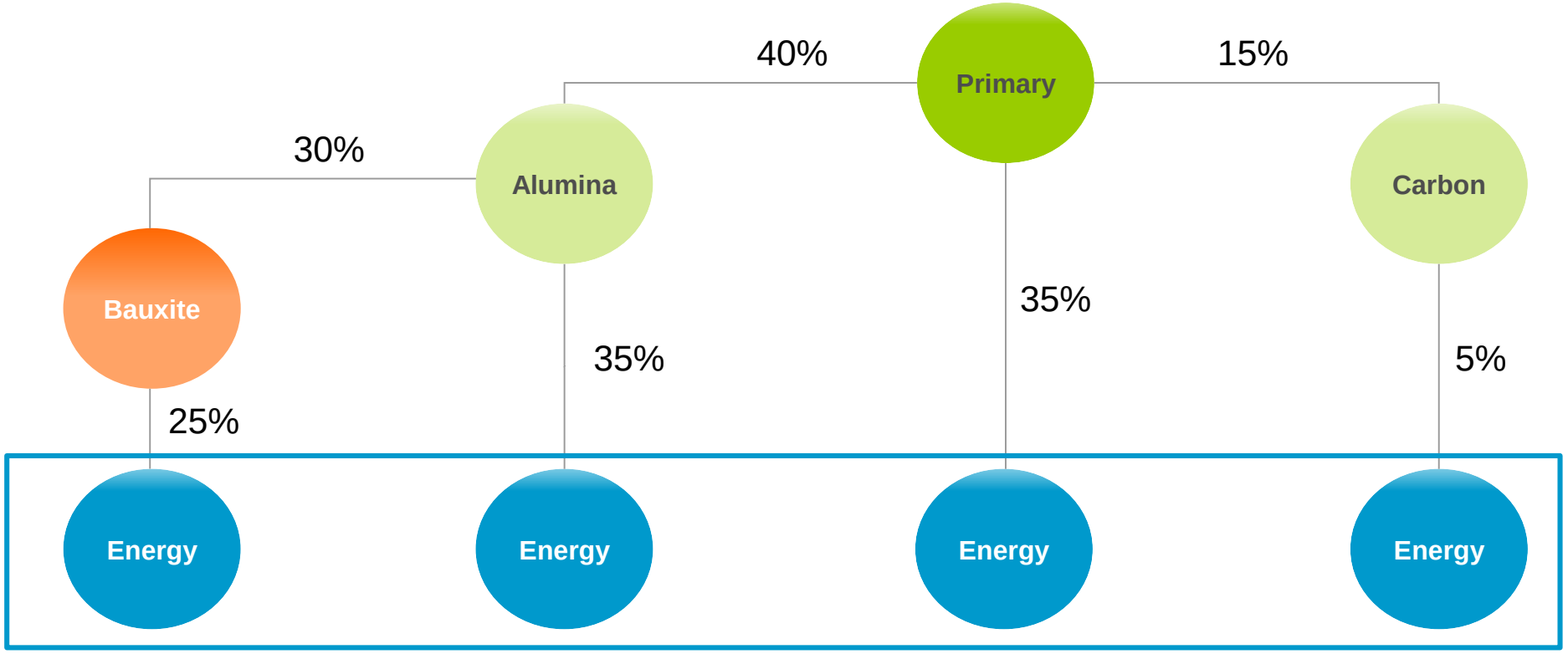
Energy represents ~ 1/3 of smelter cost and ~ 50% of the total value chain cash cost



Total energy cost: ~50%

Percentages indicate share of respective input costs globally

Illustrative figures
Source: CRU

Energy strategic priorities

Better

- Realize full potential of strong asset base and competencies
- Further improve operational and commercial performance
- Provide competitive global energy sourcing and competence

Bigger

- Mature captive growth opportunities
- Raise income potential from market operations and commercial optimization
- Leverage value from Nordic power surplus

Greener

- Capitalize on strong climate position over time
- Capture value of the green certificate scheme in new growth projects
- Promote responsible energy policy in the regions where Hydro operates

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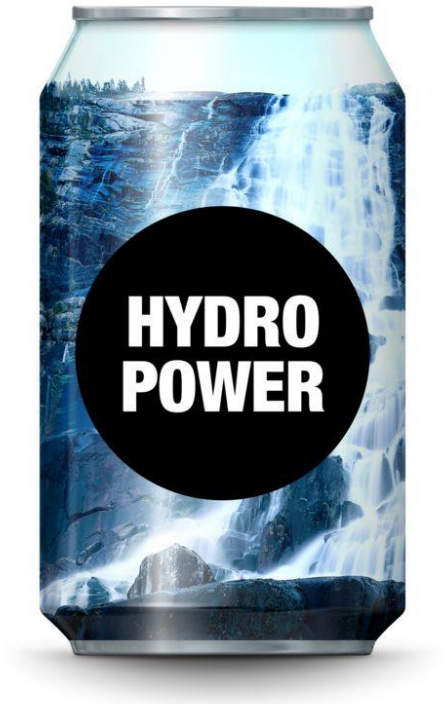
Energy has a dual mission in Hydro

Strong, sustainable value creator *and* energy provider throughout the value chain



To own, operate and maximize value of Hydro's energy assets

To provide competitive power sourcing and global energy competence

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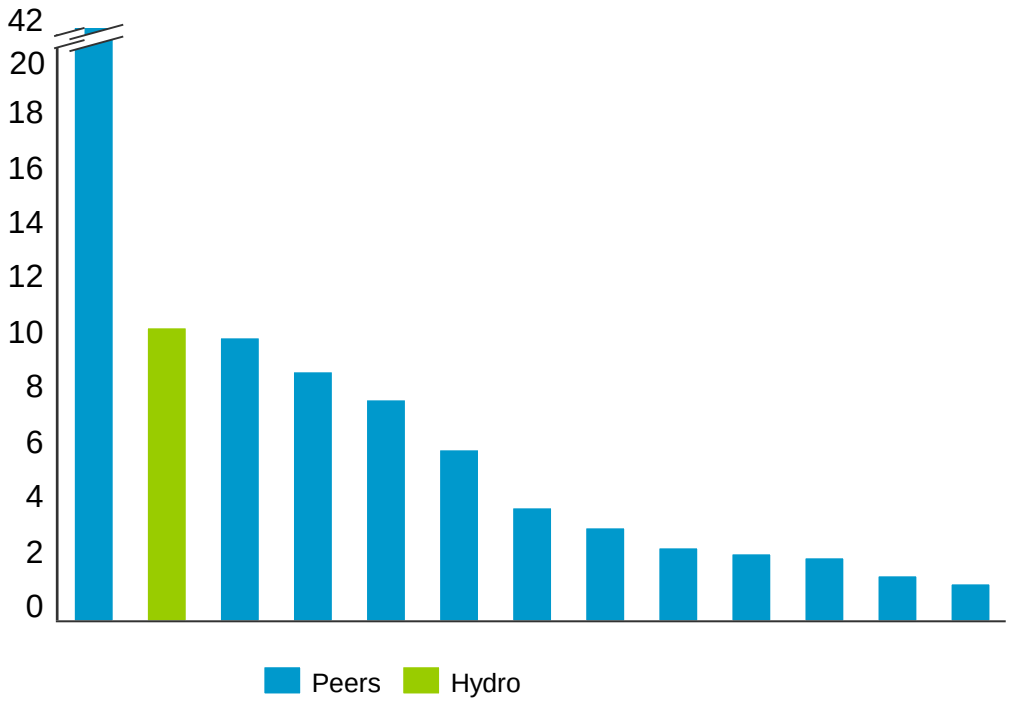
Hydro is second largest hydropower producer in Norway

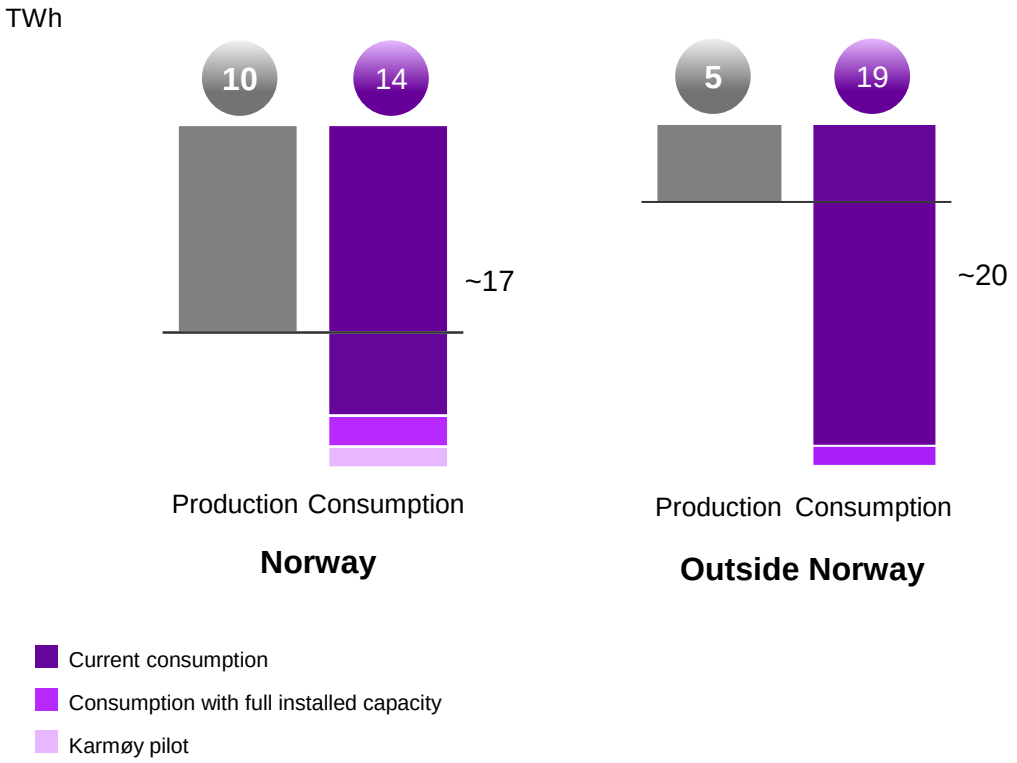
But a net buyer of power globally

Norwegian power producers*

TWh normal production



Power production and consumption in Hydro smelters**



* Equity normal production
** Based on consolidated production in Hydro smelters, mid-2015

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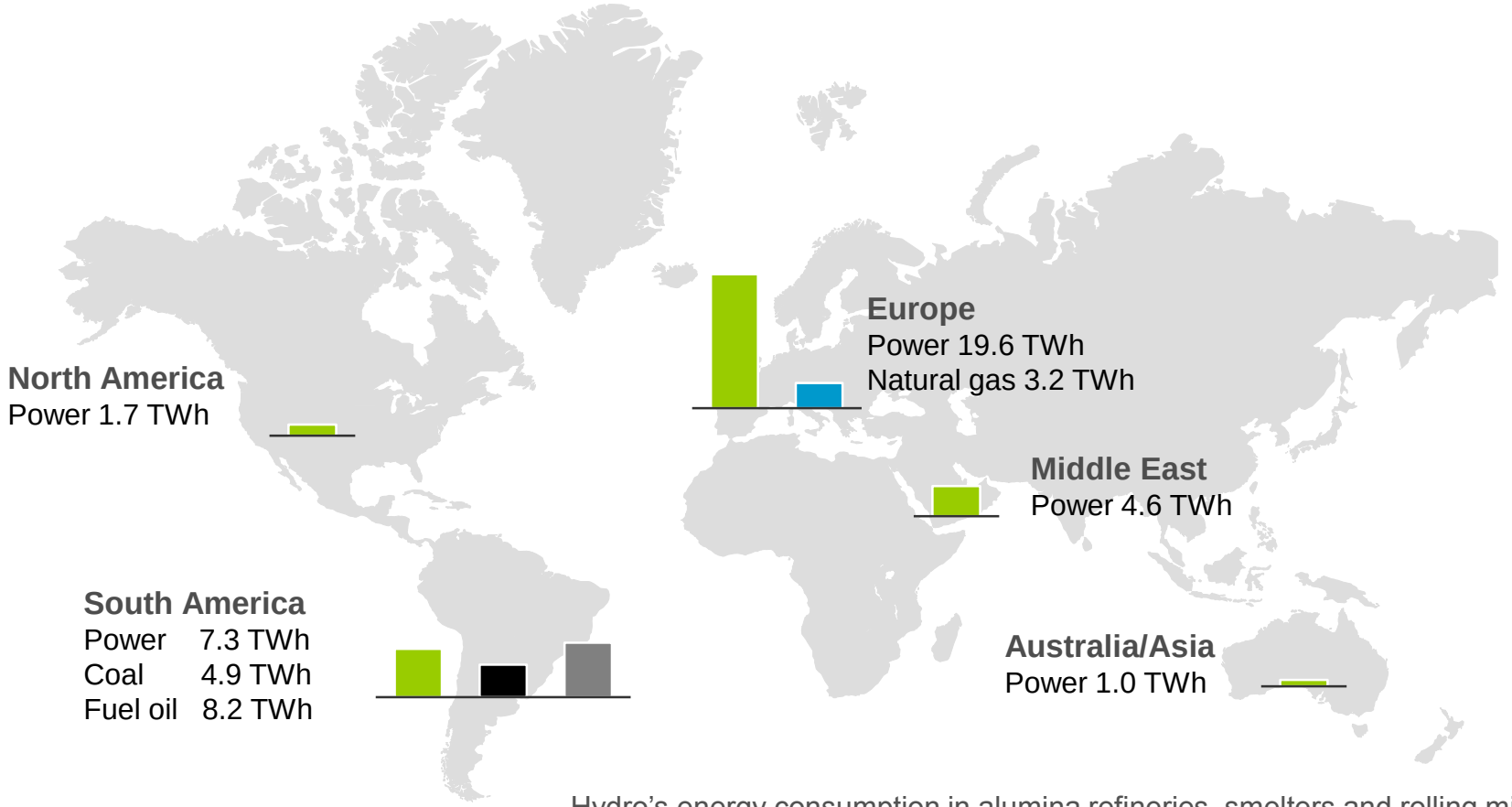
Hydro energy needs are spread across the value chain, global regions and energy carriers



Hydro's energy consumption in alumina refineries, smelters and rolling mills

Based on consolidated figures mid-2015

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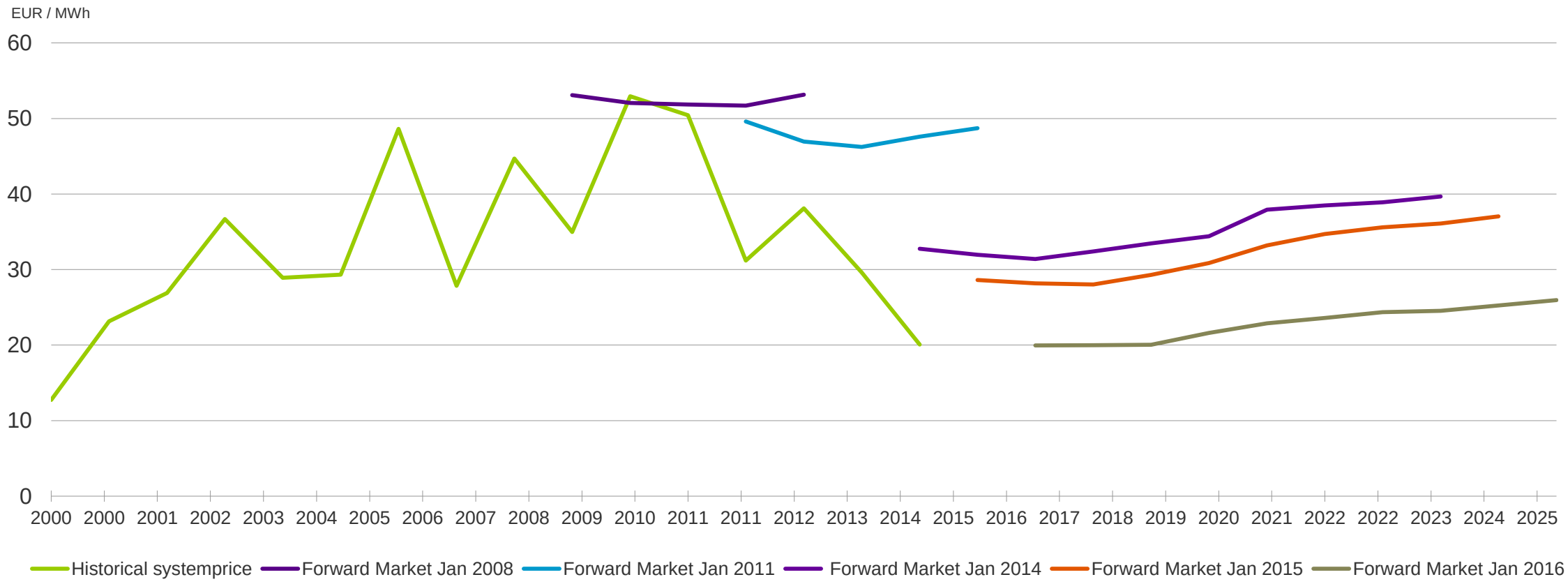
01

Power Markets

Nordic power prices decline over the last years

Downward trend also reflected in forward curve



Source: Nordpool Spot
Prices expressed in yearly averages

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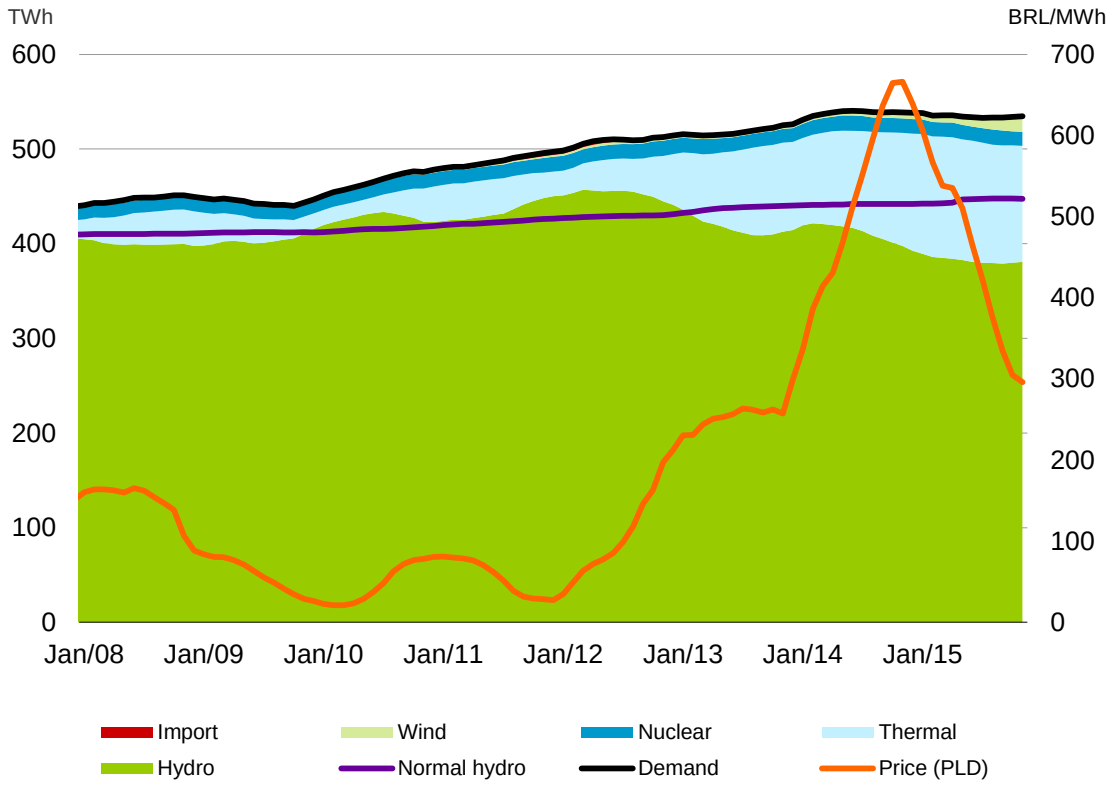
Interconnected Brazilian hydropower-based system

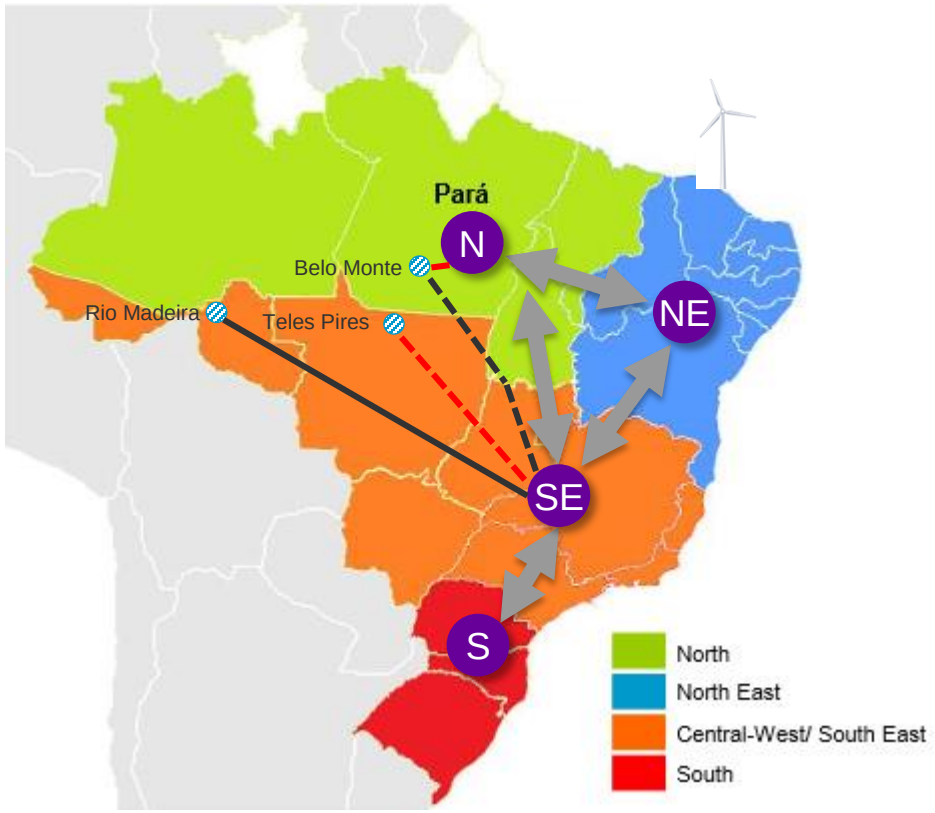
Thermal power has increased in importance during recent dry years

Brazilian power balance and price development

Rolling 12 month data



Interconnected power system, Brazil

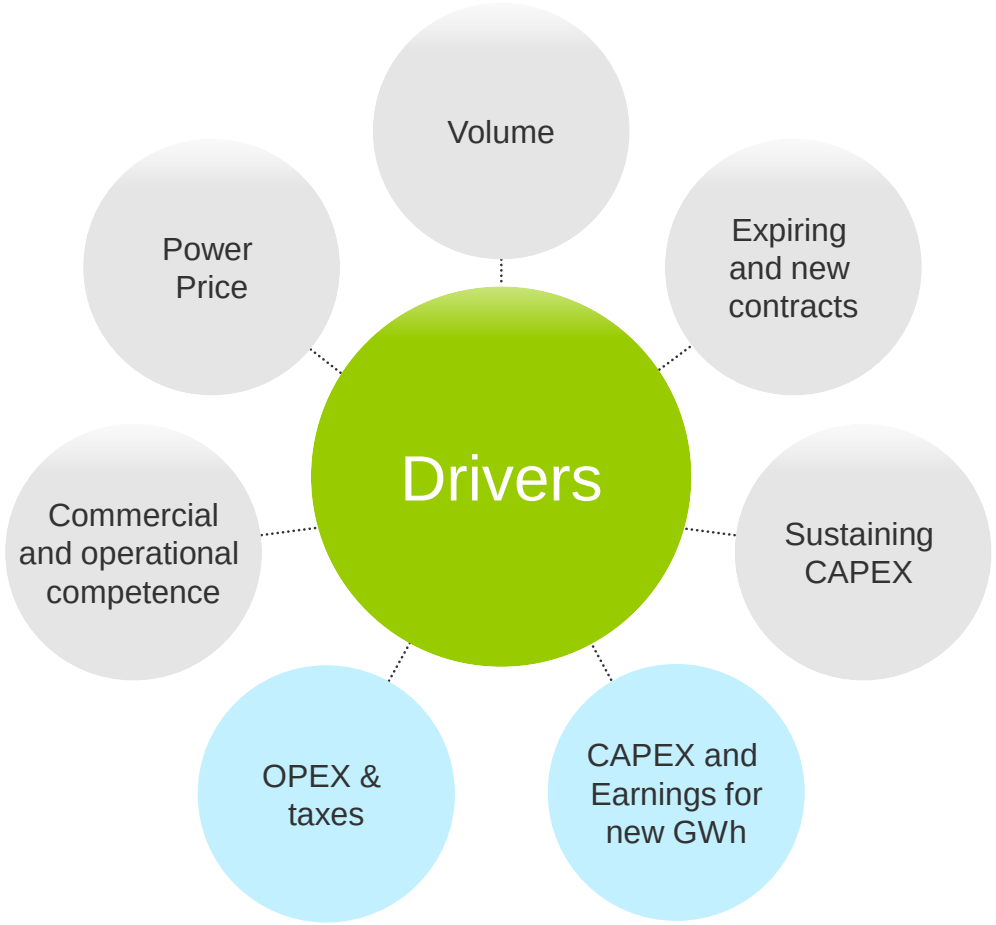


*Source: ONS, EPE, ANEEL.

02

Energy in Hydro

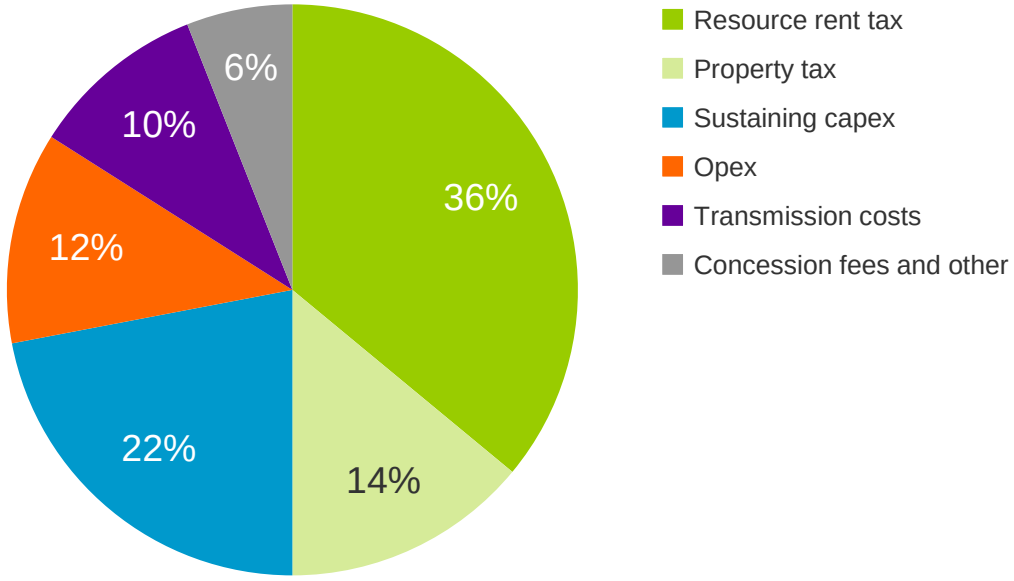
Value creation in Energy dependent on wide array of factors



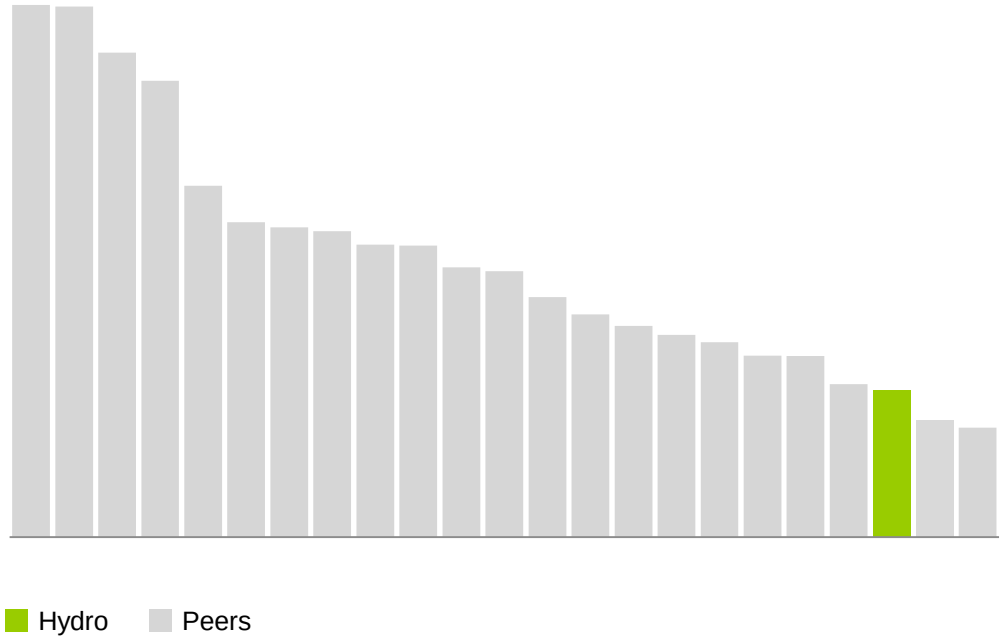
Competitive production costs driven by economies of scale and operational improvements

Taxes and fees account for a large share of costs, making sustainable framework conditions crucial

Average operating cost, incl. tax/fees, by category
2007-2014



Total operating costs for Norwegian power producers*
NOK/GWh

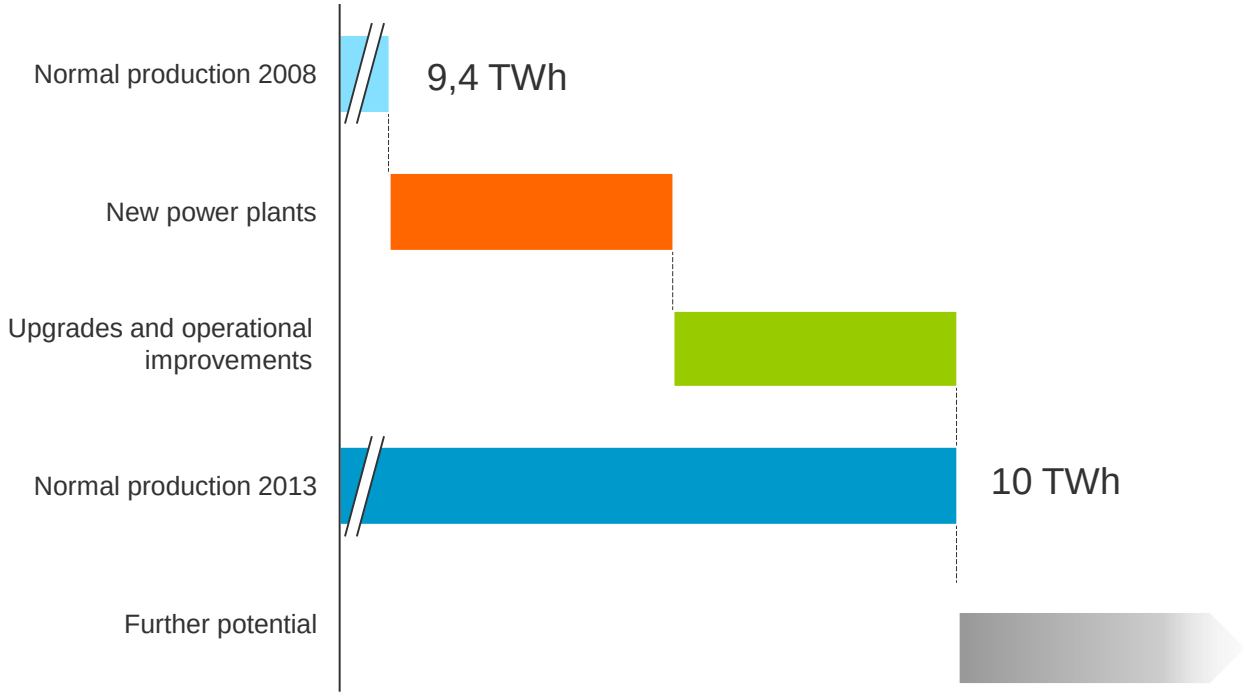


* Based on PA Benchmarking survey

Delivering value from growth

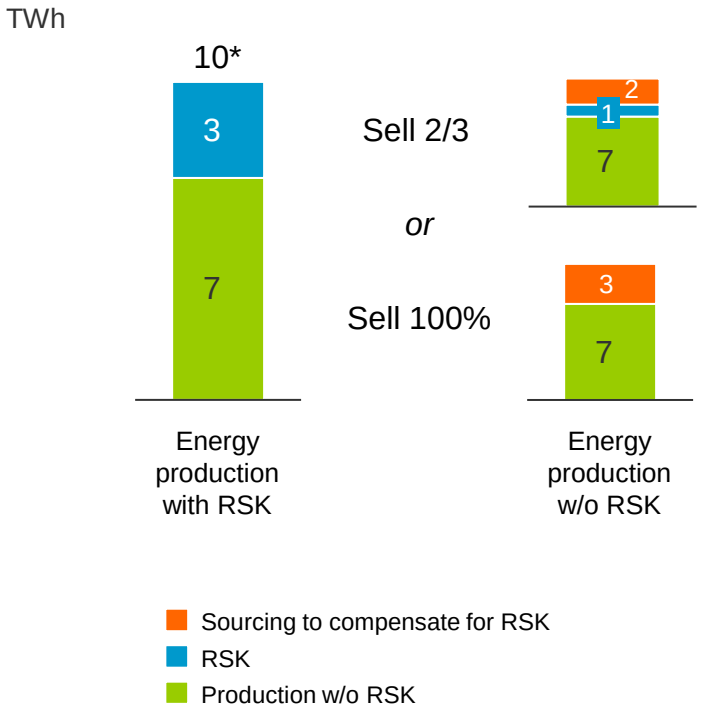
Driven by capacity additions, debottlenecking and operating competence

- The normal production in Hydro's power plants raised from 9.4 in 2008 to 10 TWh in 2013
  - New power plants since 2008
    - Holsbru, Vasstøl, and Vigeland acquisition
  - Improved power plant efficiency from replacement of turbine runners
  - Improved optimization through competence
    - E.g. handling flooding situation to minimize water losses and ensure safe operations
- Further potential
  - New power plants under construction
    - Midtlæger, Mannsberg
  - Utilizing regulatory frameworks supporting renewable power generation
  - Turbine runners as part of rehabilitations
  - Further improving long-term optimization

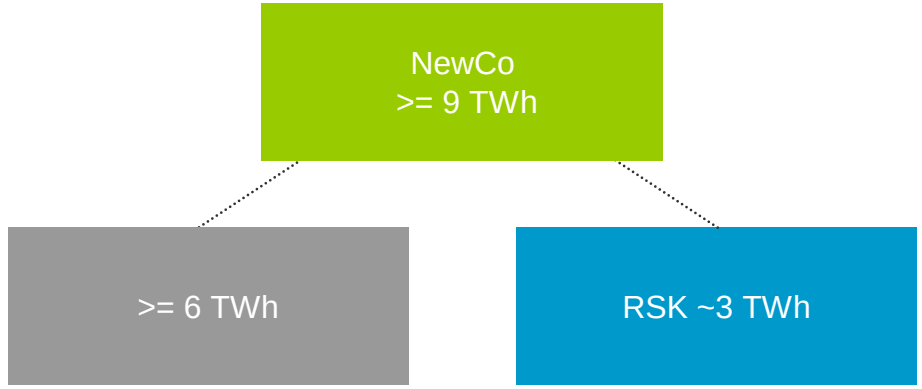


Broad optionality to maintain asset value within the reversion regime

Sell to a publicly-owned entity



Merge into a larger publicly-owned asset with one or several owners



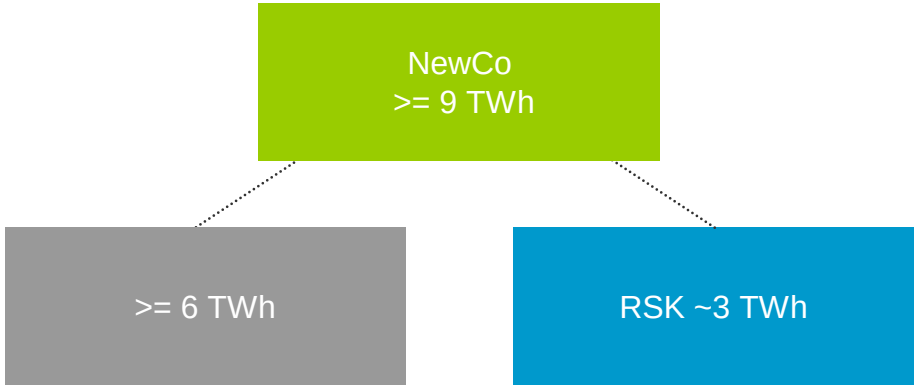
- Retain full production as part of a larger asset
- Max 1/3 Hydro (private) ownership
- No reversion after such a transaction
- Need partner(s) with min 6 TWh to maintain equity volume

The diagrams on this slide are simplified for illustration purposes
* Normal production

Broad optionality to maintain asset value within the reversion regime

- Law proposal from government on industrial ownership published 9 November
- Proposal for hydropower JVs:
  - Maximum 1/3 private ownership maintained
  - Allow private owners access to physical power
  - Pro-rata power offtake in line with ownership share
- The new law would allow Hydro to maintain access to physical power through restructuring RSK assets into 1/3 ownership position in company with liability

Merge into a larger publicly-owned asset with one or several owners



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Providing competitive global energy sourcing and competence

Commercial competence, analytical capability and market insight

B&A	Primary Metal	Rolled Products
Assist with energy sourcing strategies		
Analyze energy markets and provide insight		
Optimize power portfolio		
Lead power sourcing negotiations		
Improve security of power supply and manage grid agendas		
• Fuel switch evaluations • New power contracts for B&A operations • Overall energy matrix optimization • Increased Energy presence in Brazil to lead the sourcing processes and explore commercial opportunities • Norsk Hydro Energia Ltda established as a vehicle for the power market operations	• 3.75 TWh power sourcing secured for the Norwegian smelter portfolio 2021-30 • 330 GWh power sourcing for the Norwegian smelter portfolio 2031-40	• Execution of hedging strategy • New power contract secured for 2018-25 for Rheinwerk smelter • Gas/power sourcing for rolling mills

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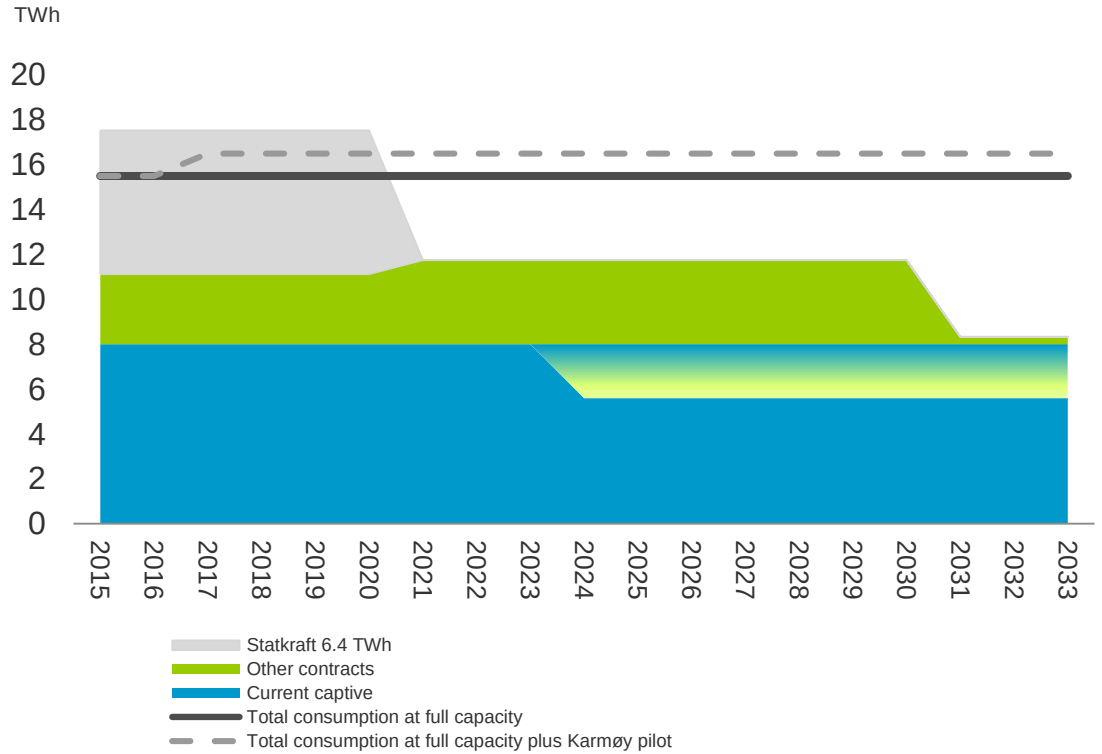
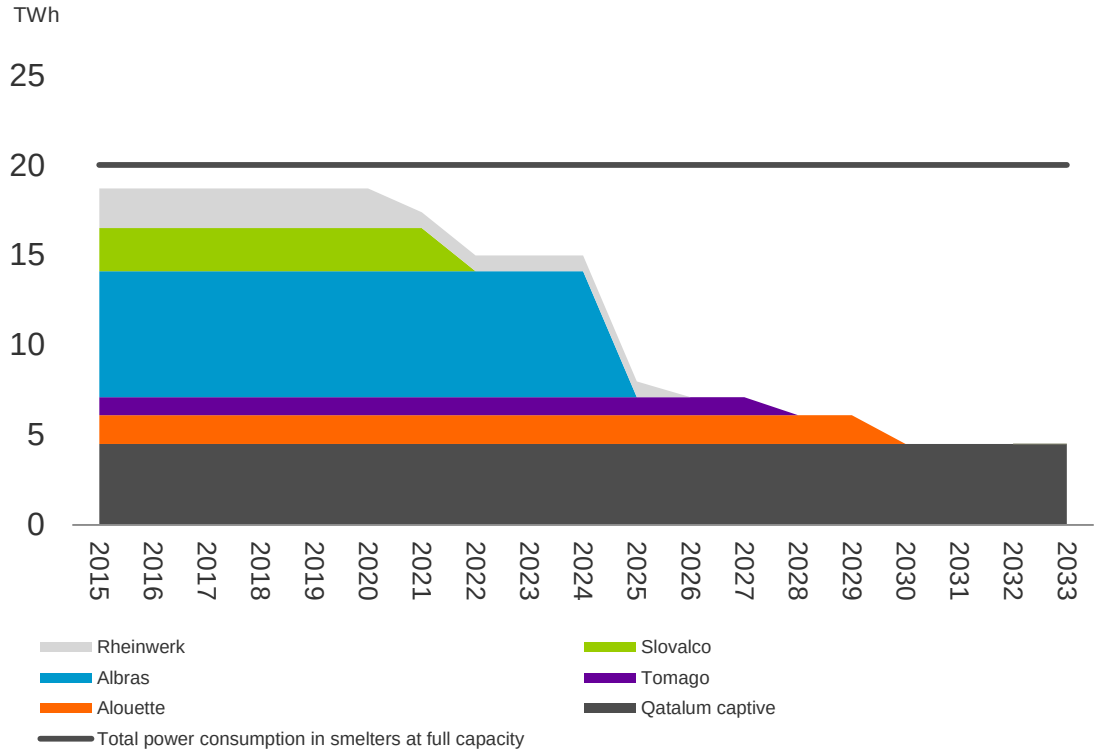
Improving smelter cost position with competitive power sourcing

Utilizing moderate pricing environment in Norway and abroad

Sourcing platform for fully-owned smelters, Norway*



Sourcing platform for JVs and Rheinwerk smelter**



* Net 8 TWh captive assumed available for smelters

** Albras and Slovalco on 100% basis

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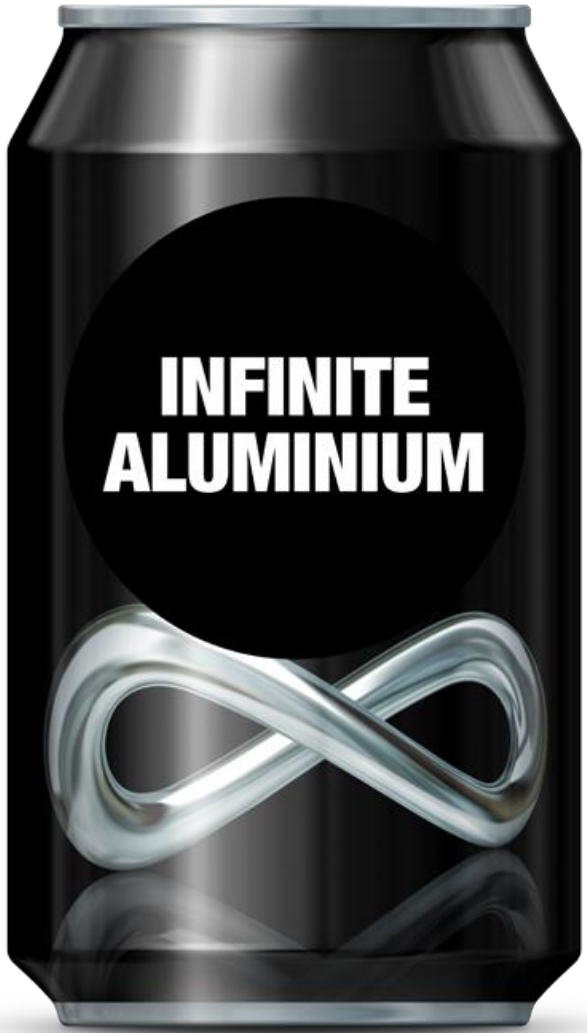
Energy mid-term goals

Creating shareholder value by maximizing value of own hydropower assets and ensuring reliable and competitive energy supply for Hydro

Ambitions	Target	Timeframe
• Improve safety performance – injury free environment	TRI <2	2020
• Robust industrial ownership for RSK – maintain physical power offtake post 2022	3,0 TWh	2022
• Deliver additional production volumes through upgrades/sustaining investments	~0,1 TWh	2020
• Secure new competitive sourcing contracts in Norway post 2020	4-6 TWh	2020
• Support competitive energy supply as well as energy policy and framework development for other business areas	Progress	Continuous

Better **Bigger** *Greener*

HYDRO



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