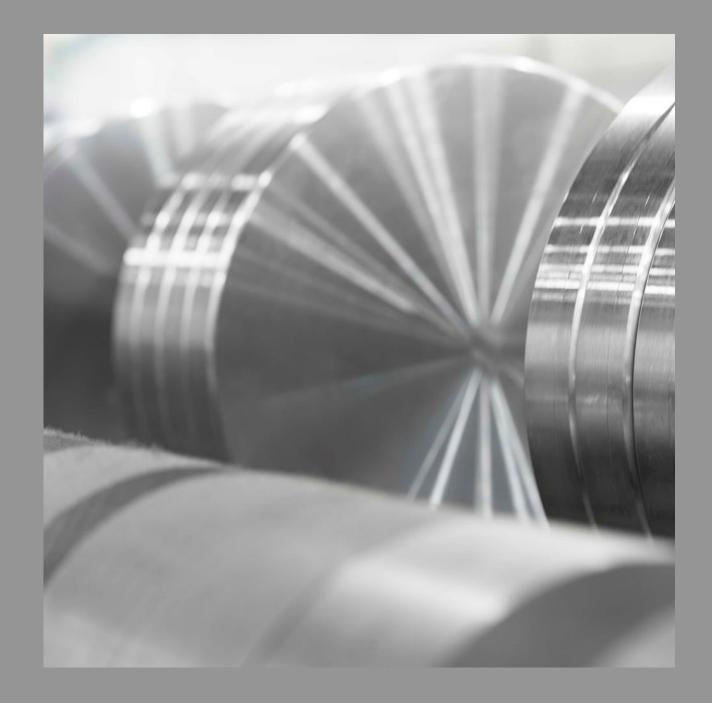


## Fourth quarter 2023 Investor presentation



February 14, 2024

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#### 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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## Changing the aluminium game: Strengthening position in challenging markets

Pål Kildemo Chief Financial Officer

February 14, 2024

## Q42023 | Adjusted EBITDA NOK 3,737 billion

Free cash flow NOK (1.5) billion, adjusted RoaCE 7.1%

Weaker results in challenging markets, managing short term volatility and freeing up cash

Exceeding 2023 improvement targets and commercial ambitions

Growing in recycling by increasing capacity and postconsumer scrap upscaling

Delivering on decarbonization roadmap across the value chain, pushing boundaries with low-carbon Hydro CIRCAL

Proposed cash dividend of 59 percent of adjusted net income (NOK 2.5 per share) and NOK 2 billion share buyback program

## Challenging alumina markets in Q4

Tightening at year-end on industry curtailments

#### Three key events impacting alumina market dynamics

#### Chinese bauxite sourcing 01

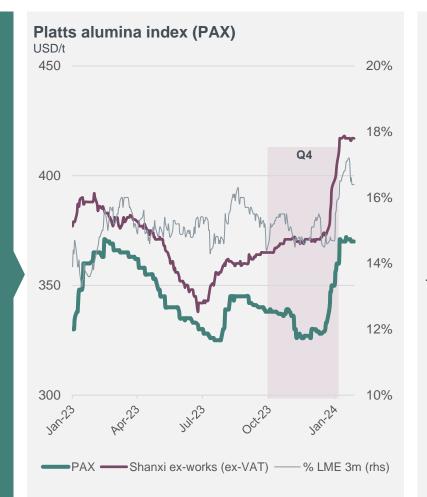
 Domestic bauxite sourcing constraints causing temporary alumina capacity curtailments

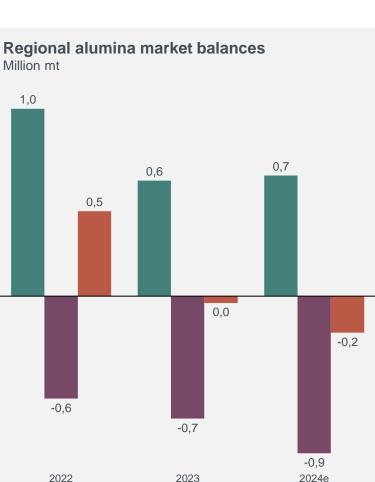
Explosion & fire at fuel depot in 02 Guinea

• Uncertainties over Guinean bauxite shipments to China in the wake of extensive fire damage to the main oil depot in Guinea

#### Industry curtailments 03

· Announced industry curtailment affects the global alumina balance and tightens the market





World ex China China World

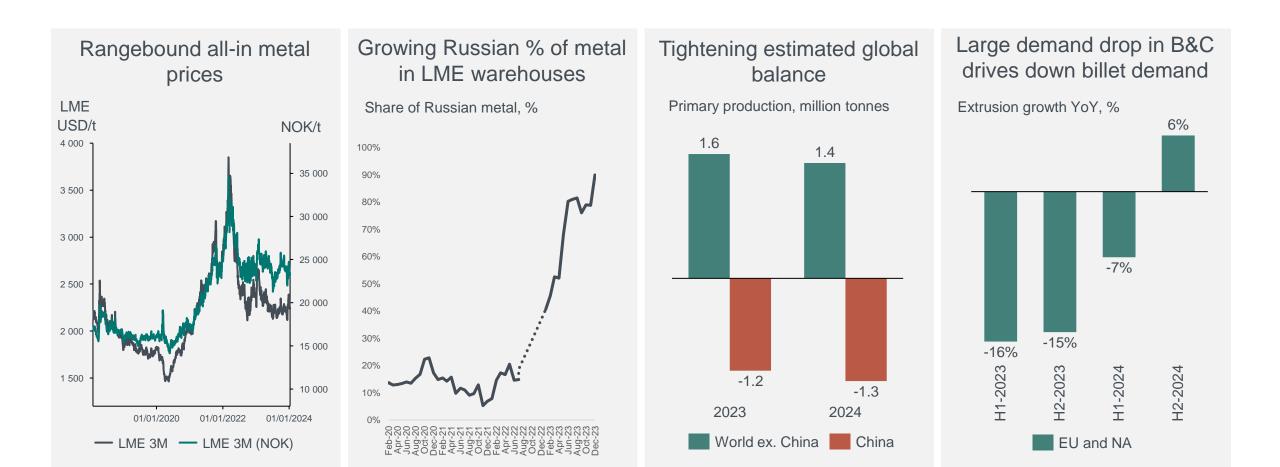
1,0

Hvdrc

## Rangebound aluminium prices, slower decline in demand

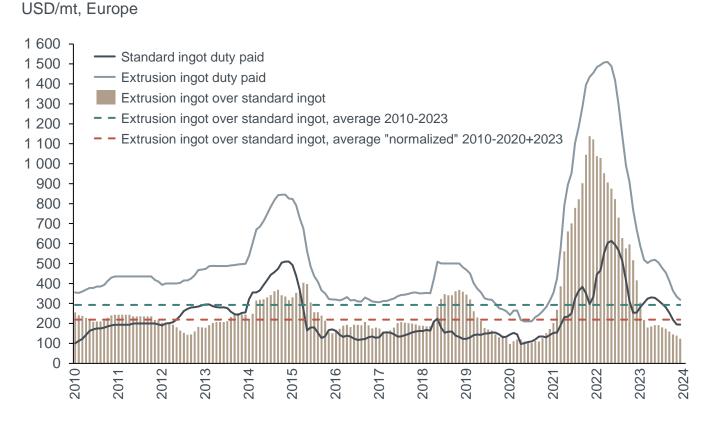


Expected improved market balance in 2024



## Margin pressure and challenging demand impact recycling profitability

### Margin pressure

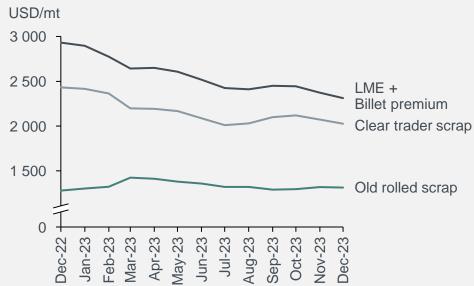


#### **Capacity utilization**

% production vs capacity, recyclers in Metal Markets



Scrap price development



## Managing short-term volatility, freeing up cash

Hvdro

Large NOC release in Q4

## Short and medium-term mitigation



- Electrolysis production curtailed (~130kt Norwegian smelters)
- Volumes shifted between product segments
- · Utilizing short-term flexibility in recyclers
- Strong margin management, and optimizing metal input and cost in recyclers
- Strong margin management

electricity and gas in 2024

50% of exposure in 2024

- · Product portfolio and workforce flexibility
- Utilizing short-term flexibility in recyclers

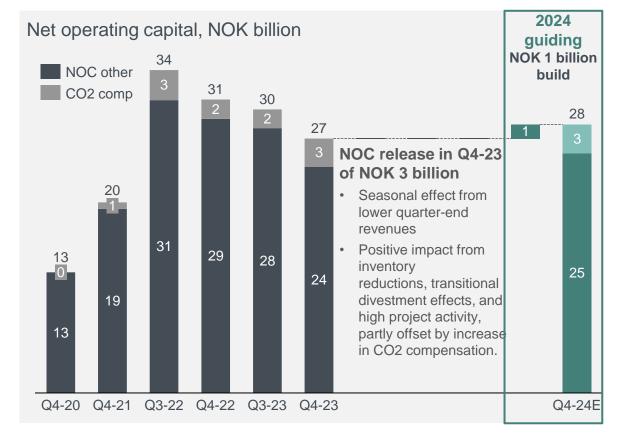


• B&A: hedges for most of exposure to coal, Hedging • MM & Extrusions: hedges for gas and power for program to secure margins

Extrusions

- Integrated margin hedge in place for 2024 and 2025
- USD/BRL hedges in place for Alunorte and Albras

## NOK 7 billion cash effective NOC release in 2023



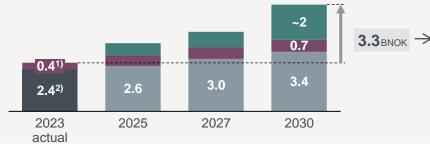
## Exceeding 2023 improvement targets

2030 ambitions strengthened through greener premiums and digitalization

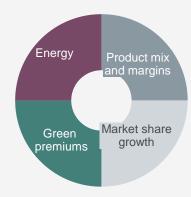


#### **Commercial initiatives**

Ambition increased in 2025 and 2027, and extended with additional NOK 0.4 billion until 2030







Operational

excellence

2.6



### Key achievements 2023:

- 2023 NOK 0.4 billion above target for improvement program
- Added Energy commercial initiative with a NOK 0.4 billion impact
- Fixed cost and procurement strongest drivers for achievement in improvement program
- B&A commercial achievements key contributor in commercial ambitions

### Key levers 2024:

- Improving operational and commercial excellence, enabled by digitalization
- Expanding new products and corresponding margin contributions
- Leveraging on greener premiums



### Hydro 2030:

## Pioneering the green aluminium transition, powered by renewable energy

## Key priorities towards 2030



3

Step up growth investments in Recycling and Extrusions to take lead in the market opportunities emerging from the green transition

Execute on ambitious decarbonization and

to nature positive and a just transition

technology road map and step up to contribute



Step up ambitions within renewable power generation



Shape the market for greener aluminium in partnership with customers

## Growing recycling capacity, and securing scrap, supports 2030 targets



#### Production start at Cassopolis, U.S.

 Increasing annual recycling capacity with 120 kt, and post-consumer scrap use with 40 kt

#### Investing in Torija, Spain recycler

 Increasing annual recycling capacity with 120 kt, and post-consumer scrap use with 70 kt

## Growing and extracting value from post-consumer scrap



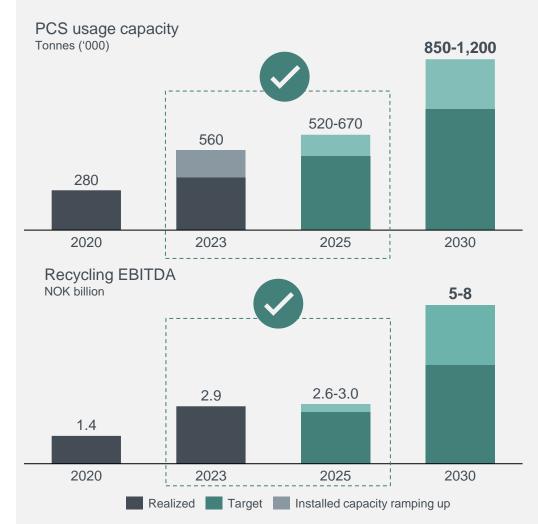
#### Padnos joint venture

 Industrializing HySort in the U.S., enabling more upcycling of 20 kt annual post-consumer scrap

#### **Alumetal integration**

 Implementing identified synergies of EUR 10-15 million by 2027 - Recycled ingot to Norwegian smelters and combining sorting capabilities

### Recycling targets 2030<sup>1)</sup>



1) Range based on capex. High-range include ~70% of further potential capex given market and M&A. Including Alumetal for July 2023

## Executing on ambitious decarbonization roadmap



2018	2025	2030	2050 (or earlier)
	<b>10%</b> carbon emission	<b>30%</b> carbon emission	<b>Zero</b> carbon
	reduction	reduction	emissions
Alunorte fuel switch	HalZero test facility at Herøya,	Testing emission-free plasma	Hydro CIRCAL, from 2.3 to 1.9
	Norway approved	technology	kgCO2/kgAl
<ul> <li>Only days before FSRU is expected to arrive at Barcarena</li> <li>Minimal financial impact of delay</li> </ul>	<ul> <li>Next step in developing emission-free electrolysis technology for new smelter capacity</li> </ul>	<ul> <li>Decarbonization pilot with global potential at casthouse in Sunndal</li> </ul>	<ul> <li>Documented lower-carbon footprint through advances in sourcing, sorting and traceability of post-consumer scrap</li> </ul>

Founded on renewable energy

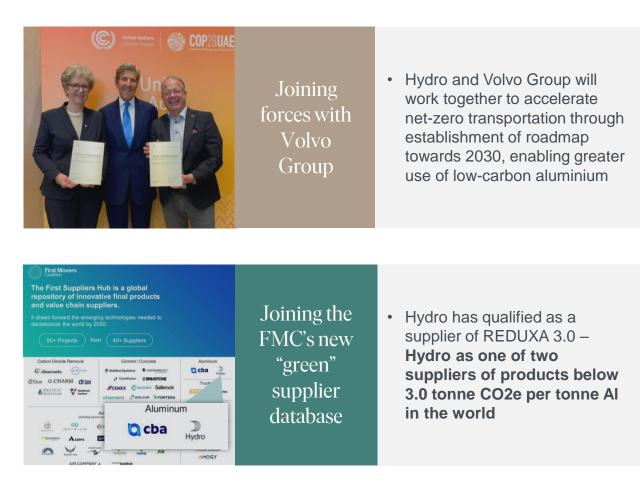




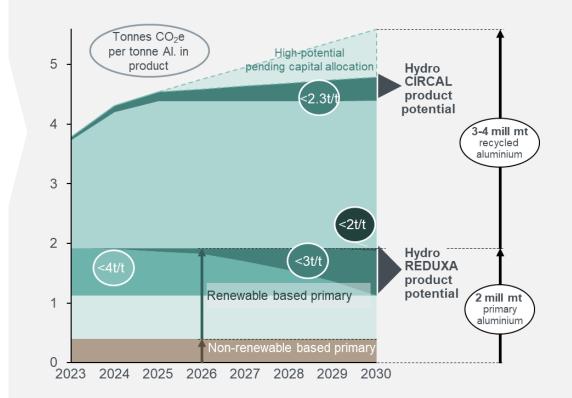
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## Shaping the market for greener aluminium

Joining the First Movers Coalition (FMC)



#### Greener product capability from total aluminium portfolio<sup>1</sup>) Million tonnes capacity potential



## Powering the green aluminium transition

)))) Hydro

Project portfolio with robust return potential



Positive development on resource rent tax onshore wind

 The Norwegian Parliament has reached an agreement on the implementation of a resource rent tax on onshore wind power: 25 percent, effect from January 1, 2024



Concession application for new hydropower plants

- Hydro and Lyse have applied for concession for five new hydropower stations in Røldal-Suldal
- An upgrade and expansion of the current plants could increase capacity by:
  - 800 GWh, gross
  - 650 MW



Hydro Rein and Årdal Energi collaboration

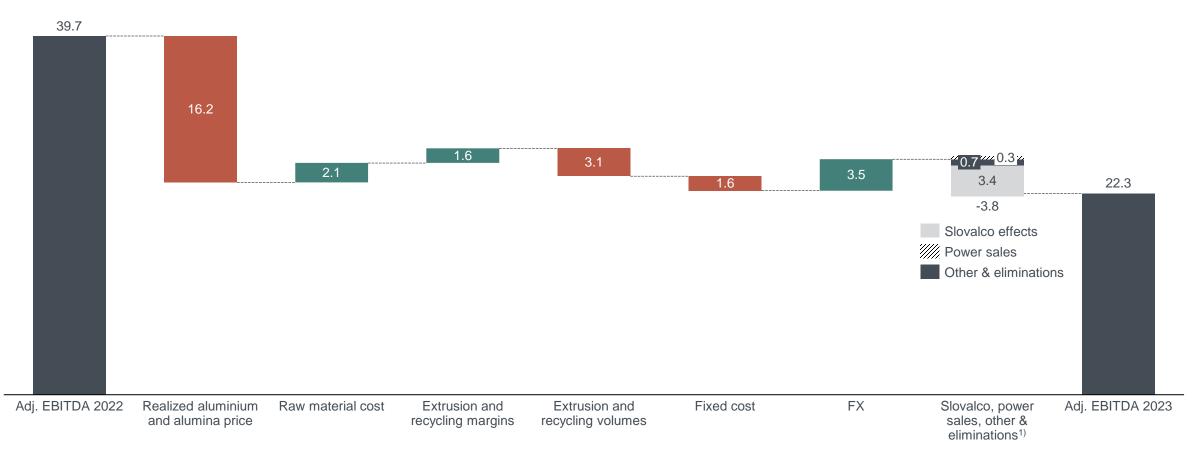
 Hydro Rein has signed a cooperation agreement with Årdal Energi to develop renewable projects in Årdal

## Adj. EBITDA down on lower upstream prices



Marginally offset by FX, lower raw material cost and Extrusions margins

2023 vs 2022

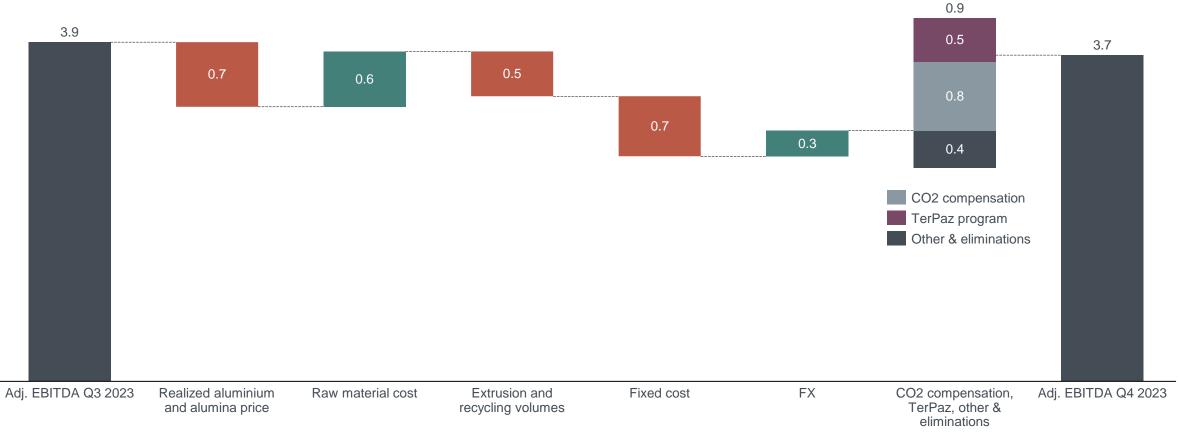


## Adj. EBITDA down on lower prices and Extrusions results



Partially offset by lower raw material cost, CO2 compensation adjustment and TerPaz

Q4 2023 vs Q3 2023



## Key financials



NOK million	Q4 2023	Q4 2022	Q3 2023	Year 2022	Year 2023
Revenue	46 754	44 075	44 702	207 929	193 619
Reported EBITDA	4 673	3 930	1 975	39 536	23 291
Adjusting items to EBITDA	(936)	3 254	1 923	128	(1 033)
Adjusted EBITDA	3 737	7 184	3 899	39 664	22 258
Reported EBIT	(2 256)	1 405	(323)	30 715	9 592
Adjusted EBIT	1 231	4 946	1 600	31 179	12 983
Financial income (expense)	(259)	271	378	1 649	(3 046)
Reported Income (loss) before tax	(2 516)	1 676	55	32 365	6 546
Income taxes	(256)	(1 519)	(680)	(7 984)	(3 742)
Reported Net income (loss) from continuing operations	(2 771)	158	(625)	24 381	2 804
Adjusted net income (loss) from continuing operations	754	2 371	345	23 145	7 835
Earnings per share from continuing operations	(1.26)	0.12	(0.18)	11.76	1.77
Adjusted earnings per share from continuing operations	0.50	0.99	0.27	10.70	4.26
Income (loss) from discontinued operations <sup>1)</sup>	-	36	-	36	-

1) Income and expenses in the business to be sold are excluded from such income and expenses in continuing operations and reported separately as losses for discontinued operations. For further information and a specification of the result in the discontinued operations, see Note 4 Discontinued operations and assets held for sale to the interim financial statements

## Hydro Bauxite & Alumina

Results up, mainly driven by lower raw material prices, partly offset by currency effects, lower bauxite production and higher fixed costs

Key figures	Q4 2023	Q4 2022	Q3 2023
Alumina production, kmt	1 571	1 559	1 522
Total alumina sales, kmt	2 487	2 220	2 229
Realized alumina price, USD/mt	349	342	349
Implied alumina cost, USD/mt <sup>1)</sup>	331	337	345
Bauxite production, kmt	2 771	2 824	2 848
Adjusted EBITDA, NOK million	481	101	93
Adjusted EBIT, NOK million	-269	-586	-610
Adjusted RoaCE, % LTM <sup>2)</sup>	-2.5 %	1.8 %	-3.2 %



Realized alumina price minus Adjusted EBITDA for B&A, per mt alumina sales

Adjusted RoaCE calculated as Adjusted EBIT last 4 quarters less 25% tax / Average capital employed last 4 quarters

3) Realized alumina price

#### Implied alumina cost and margin USD/mt<sup>1)</sup>



Implied EBITDA cost per mt<sup>1)</sup>

All-in EBITDA margin per mt

#### Results Q4 23 vs Q4 22

- Lower raw material prices •
- Stronger BRL against USD ٠
- Lower bauxite production •
- Higher fixed costs •

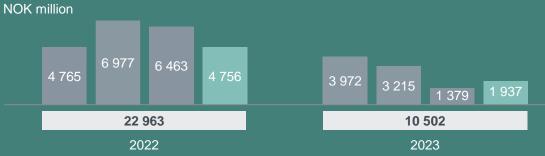
- Alunorte production around nameplate capacity
- Higher alumina price •
- Stable raw materials development •

## Hydro Aluminium Metal

Results down on lower all-in metal prices, reduced contribution from power sales and lower sales volume, partly offset by reduced raw material cost, adjusted CO2 compensation and positive currency effects

Key figures	Q4 2023	Q4 2022	Q3 2023
Primary aluminium production, kmt	514	522	512
Total sales, kmt	541	542	539
Realized LME price, USD/mt <sup>1)</sup>	2 129	2 246	2 146
Realized LME price, NOK/mt <sup>1)</sup>	23 143	22 813	22 456
Realized premium, USD/mt	348	577	432
Implied all-in primary cost, USD/mt <sup>2)</sup>	2,125	2,250	2,225
Adjusted EBITDA, NOK million	1 937	4 756	1 379
Adjusted EBITDA including Qatalum 50% pro rata (NOK million)	2 487	5 256	1 896
Adjusted EBIT, NOK million	1 264	4 097	727
Adjusted RoaCE, % LTM <sup>3)</sup>	13.8 %	35.4 %	18.5 %

#### Adjusted EBITDA



- 1) Includes pricing effects from LME strategic hedge program
- 2) Realized all-in aluminium price minus Adjusted EBITDA margin, including Qatalum, per mt aluminium sold
- 3) Adjusted RoaCE calculated as Adjusted EBIT last 4 quarters less 25% tax / Average capital employed last 4 quarters
- 4) Implied primary costs and margin rounded to nearest USD 25
- 5) Realized LME aluminium price less Adjusted EBITDA margin, incl Qatalum, per mt primary aluminium produced

All-in implied primary cost and margin USD/mt<sup>1,4)</sup>



#### Results Q4 23 vs Q4 22

- Lower all-in metal prices
- Adjusted CO2 compensation
- Reduced raw material cost
- Positive currency effects
- Reduced contribution from power sales
- Lower sales volume

- 67% of primary production for Q1 2024 priced at USD 2255 per mt.<sup>8)</sup>
- ~46% of premiums affecting Q1 2024 booked at USD ~373 per mt. Q1 realized premium expected in the range of USD 275 325 per mt.
- Lower raw material cost
- 6) Realized LME plus realized premiums, including Qatalum
- % of volumes extrusion ingot, foundry alloy, sheet ingot, wire rod of total sales volumes
   Bookings, also including pricing effects from LME strategic hedging program as per 31.
  - Bookings, also including pricing effects from LME strategic hedging program as per 31.12.2023
- 9) Excluding power sales Slovalco and Norwegian smelters and CO2 catch-up Q3 2022 and Q4 2023

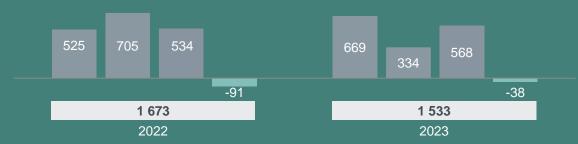
## Metal Markets

Increased results from sourcing and trading activities, and positive inventory valuation and currency effects, partly offset by lower results from recyclers

Key figures	Q4 2023	Q4 2022	Q3 2023
Recycling production, kmt	166	115	176
Metal products sales, kmt <sup>1)</sup>	645	614	652
Adjusted EBITDA Recycling (NOK million)	58	342	274
Adjusted EBITDA Commercial (NOK million)	-97	-434	294
Adjusted EBITDA Metal Markets (NOK million)	-38	-91	568
Adjusted EBITDA excl. currency and inventory valuation effects	-36	160	566
Adjusted EBIT (NOK million)	-229	-134	482
Adjusted RoaCE, % LTM <sup>2)</sup>	10.7 %	31.0 %	13.6 %



NOK million



Includes external and internal sales from primary casthouse operations, remelters and third-party metal sources
 Adjusted RoaCE calculated as Adjusted EBIT last 4 quarters less 25% tax / Average capital employed last 4 quarters



#### Results Q4 23 vs Q4 22

- · Increased results from sourcing and trading activities
- · Positive inventory valuation and currency effects
- Lower results from recyclers on lower margins and Cassopolis ramp-up

- Increased results from sourcing and trading activities
- Positive currency effects
- Continued margin pressure in the recyclers
- Cassopolis ramp up

## Softer extrusion demand in industrial and transport segments

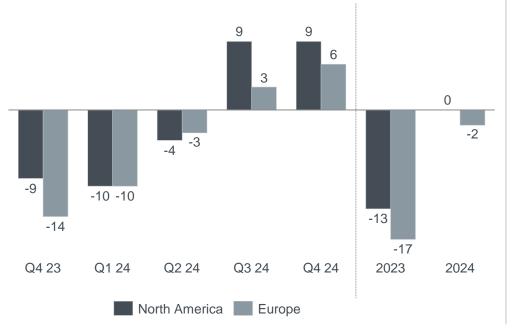


Expected demand improvement in second half of 2024 in both Europe and North America

### External market forecasts\*

Year over Year

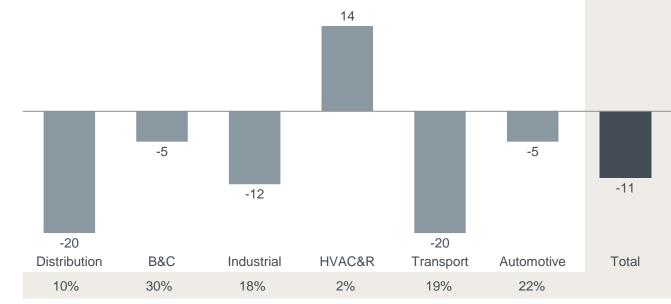
Extrusion market growth per quarter and annually Growth in %



## Extrusion sales volumes



Hydro Extrusions segment sales volume Growth in %

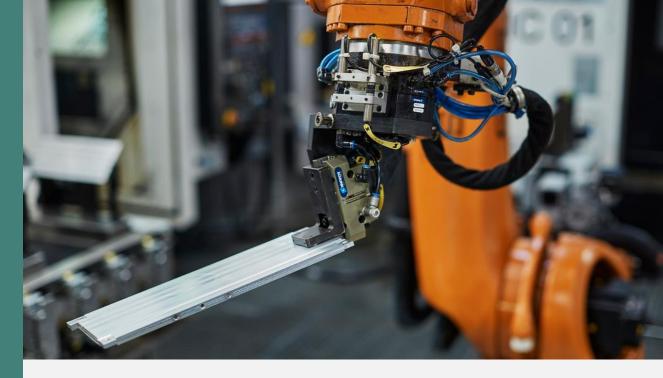


Share of Q4 2023 Hydro Extrusions sales

## Hydro Extrusions

Stable results, lower sales volume and higher costs, offset by higher sales margins and currency

Key figures	Q4 2023	Q4 2022	Q3 2023
External sales volumes, kmt	236	265	260
Adjusted EBITDA, NOK million	923	939	1 322
Adjusted EBIT, NOK million	90	168	548
Adjusted RoaCE, % LTM <sup>1)</sup>	8.8%	11.4 %	9.1 %



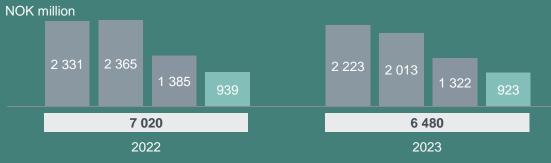
#### Results Q4 23 vs Q4 22

- Lower sales volumes
- Higher sales margins
- Higher variable costs
- Positive currency and metal effects

#### Outlook Q1 24 vs Q1 23

- Continued strong margins
- Lower sales volumes
- Higher fixed and variable costs
- · Market uncertainty remains

#### Adjusted EBITDA



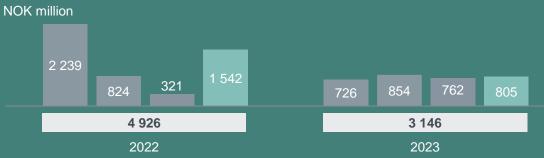
 Adjusted RoaCE calculated as Adjusted EBIT last 4 quarters less 25% tax / Average capital employed last 4 quarters. Previous periods have been restated following a change to the capital employed definition.

## Hydro Energy

**Adjusted EBITDA** 

Lower results due to lower prices and lower gain on price area differences, partly offset by higher production and no loss from internal contract

Key figures	Q4 2023	Q4 2022	Q3 2023
Power production, GWh	2 440	2 002	2 216
Net spot sales, GWh <sup>3)</sup>	101	511	24
Southwest Norway spot price (NO2), NOK/MWh	818	1 719	664
Adjusted EBITDA, NOK million	805	1 542	762
Adjusted EBIT, NOK million	755	1 493	712
Adjusted RoaCE, % LTM <sup>1),2)</sup>	13.0 %	29.5 %	20.2 %



- Adjusted RoaCE calculated as Adjusted EBIT last 4 quarters less tax/ Average capital employed last 4 quarters
   40% tax rate applied for 2022 and 50% for 2023
- 3) Volume affected by disrupted delivery from a long-term power purchase agreement in the northern part of the Nord Pool area. The non-delivered volume were 0.5 TWh in the quarter



#### Results Q4 23 vs Q4 22

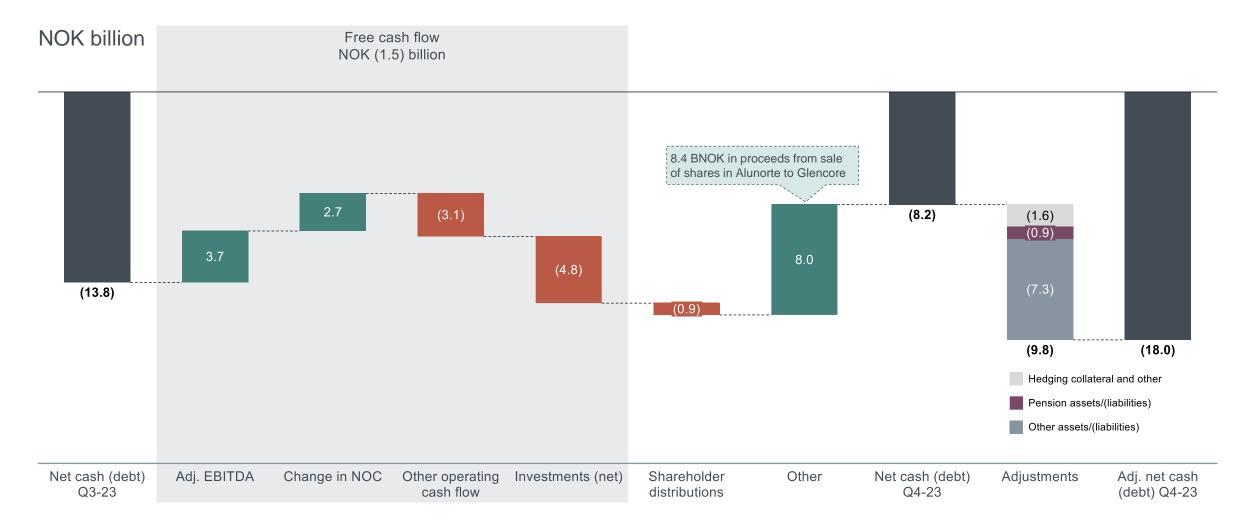
- Higher production
- Lower net spot sales mainly due to no purchase volumes from Aluminium Metal buy-back contract and Markbygden PPA delivery disruption<sup>3</sup>
- · Lower prices and lower gain on area price differences
- Lower trading and hedging results

- · Lower prices and lower gain on area price differences
- Continued price and volume uncertainty

## Net debt decrease driven by sale of shares in Alunorte



Negative FCF due to taxes and investments offsetting EBITDA contribution and NOC release



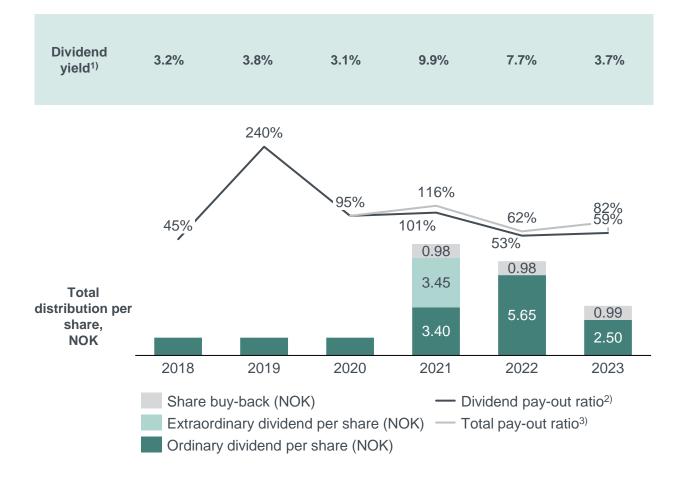
## Board of Directors propose higher distribution than guided, on large NOC release in Q4



Healthy working capital release and a robust balance sheet enables another year of solid shareholder distribution

#### Shareholder distribution proposal

- NOK 2.5 cash dividend per share
  - Representing payout of NOK ~5 billion
  - ~59% of adjusted net income
- NOK 2 billion for new share buyback program
- In total ~81.5% of adjusted net income and NOK ~7 billion
- Average five-year payout ratio<sup>4)</sup> of ~74%
  - ~87% including share buy-backs<sup>5)</sup>
- Payment conditional upon AGM approval May 7, 2023



- 1) Based on share price at year end
- 2) Dividend per share divided by adjusted earnings per share from continuing operations.
- 3) Distributed share of underlying net income including share buy-backs
- 4) Average dividend per share divided by average adjusted earnings per share from continuing operations for last five years.
- 5) Average total distribution per share divided by average adjusted earnings per share from continuing operations for last five years.

## Our priorities

1

## Health and safety first

2

Maintain robustness and mitigate weaker markets

### Deliver on Recycling, Extrusions, and Renewable growth ambitions

3

5

Execute on decarbonization and technology road map

4

Seize opportunities in greener aluminium at premium pricing

Pioneering the green aluminium transition, powered by renewable energy





## Additional slides

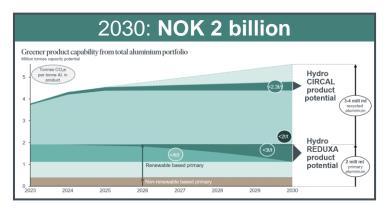


# Position, Strategy and Ambitions

## Why invest in Hydro



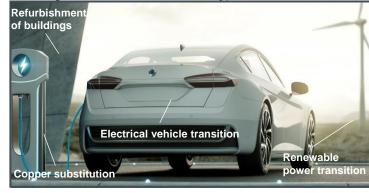
### Greener earnings uplift potential 2030



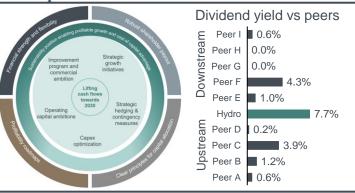
Robust positioning with ambition to strengthen competitiveness



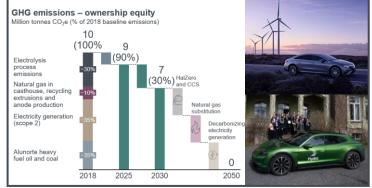
Portfolio of profitable growth projects as key enablers for the green transition



Resilient financial framework and competitive shareholder distribution

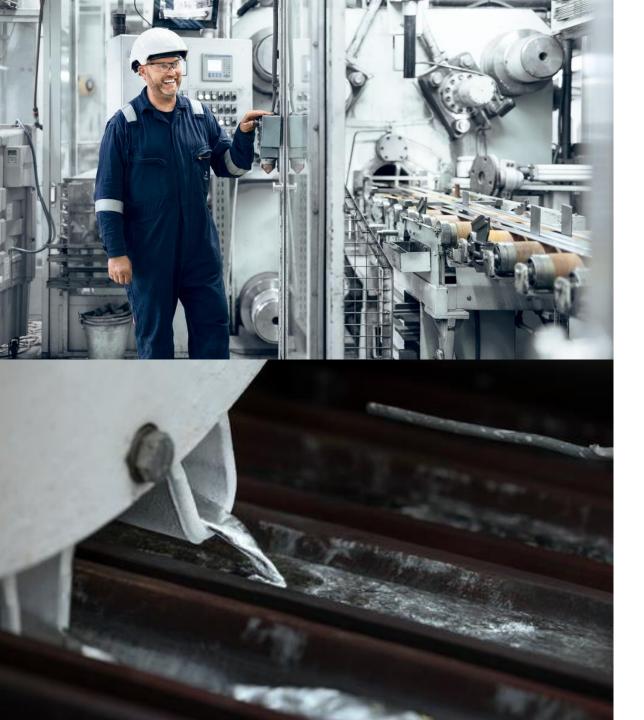


## Pathway to net-zero aluminium products supported by partnerships



## Good track record on relative shareholder value creation





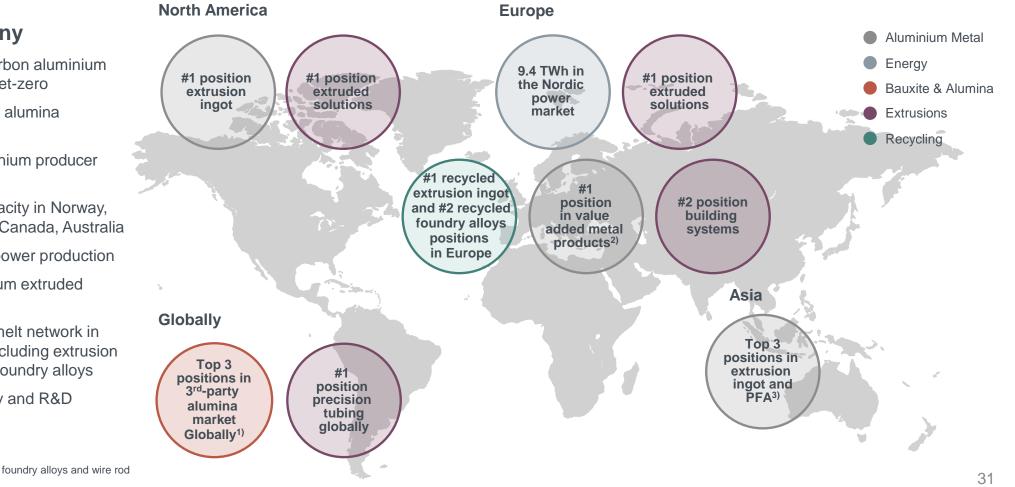
## Hydro has a unique position to succeed in the new reality

118 years of industrial experience, solving global challenges through innovation, technological advances and strong commercial mindset

- Market leading position in low-carbon aluminium with a concrete roadmap towards zero
- Unique position with captive renewable energy resources and competence
- Low and robust cost position and strong track record on shareholder value creation
- Preferred supplier and sustainability partner on the way to zero, integrated value chain enables traceability "under one roof"
- Strong positions within the main markets in the EU and North America

## Strong global presence throughout the aluminium value chain

Built on market understanding, customer closeness and competence



#### The complete aluminium company

- Market leader in low-carbon aluminium with clear roadmap to net-zero
- High-quality bauxite and alumina production in Brazil
- The fourth largest aluminium producer outside China
- Primary production capacity in Norway, Qatar, Slovakia, Brazil, Canada, Australia
- 9.4 TWh captive hydropower production
- World leader in aluminium extruded profiles
- Broad recycling and remelt network in Europe and the U.S., including extrusion ingot and scrap-based foundry alloys
- Unparalleled technology and R&D organization

1) Outside China

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

3) Primary Foundry Allovs

Hydro

## Unique value proposition in aluminium

Combined offering of primary and recycled aluminium with a full product spectrum and with tailor-made alloys



#### Providing products with low emissions

Primary aluminium produced on renewable energy



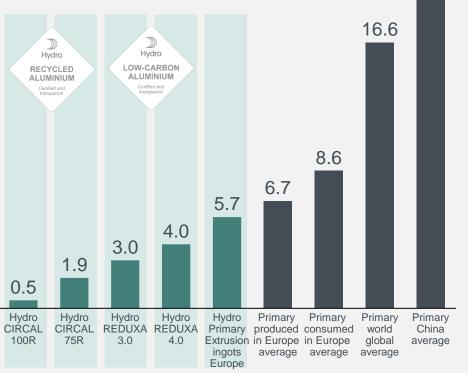
lower than the world global primary average **Recycled aluminium from Hydro** 



More than 8 times for 75R. and 33 times for 100R lower than the world global primary average

20.3





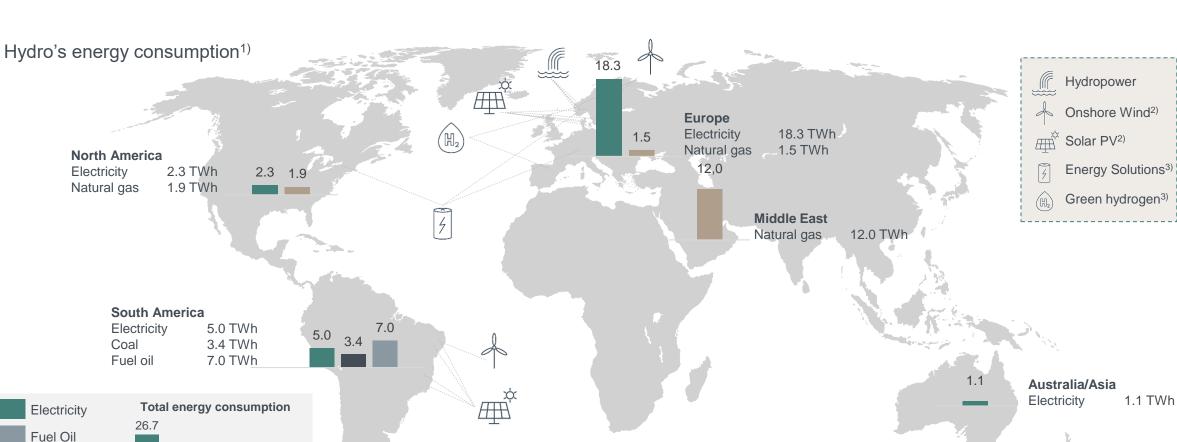
## Uniquely positioned with an integrated value chain



Hydro's control of integrated value chain drives key decarbonization capabilities					
Business	Bauxite & Alumina	Aluminium Metal	Recycling	Energy	Extrusions
Strong starting point	1 <sup>st</sup> quartile CO <sub>2</sub> e emissions	Primary production with CO2e content 65% lower than global average	Leading in PCS recycling for extrusion ingots Advanced sorting technology	Captive renewable power Leader in industrial PPAs	World's largest extrusion company with integrated recycling capacity EcoDesign driving circularity
Ambitious roadmap	1 <sup>st</sup> decile by 2025	Advanced HalZero and CCS technology to further reduce smelting emissions	Increasing PCS recycling up to 850-1,200 kt by 2030	Renewables developer, including batteries and hydrogen	Greener local energy sourcing Increased recycling

Certified, traceable, low-carbon aluminium

## Pioneering the green aluminium transition, powered by renewable energy



1) Based on equity-adjusted 2022 values for Norsk Hydro's bauxite mines, alumina refineries, smelters, remelters and extrusion plants.

15.4

2) Only projects in operation and under construction or announced. 3) Only pilot projects

7.0

**North America** 

Electricity

26.7

Coal

Electricity

Natural gas

Fuel Oil

Coal

Fuel oil

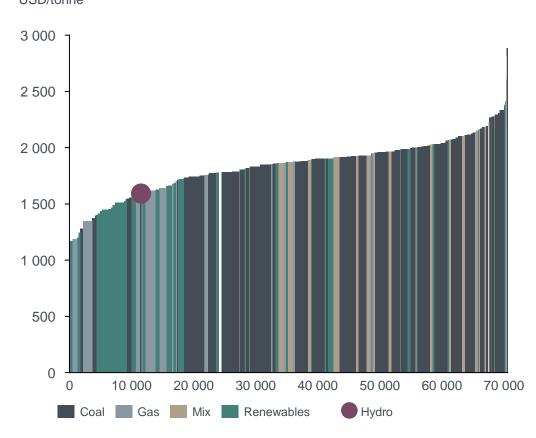
Electricity

Natural gas

**Hydro** 

## Long term renewable power contracts ensure robustness

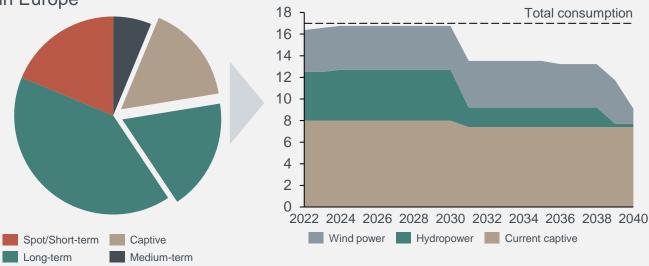
Smelter business operating cost curve 2023 USD/tonne



#### Source: CRU, Hydro analysis

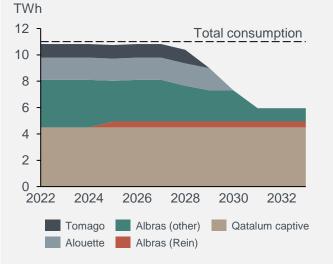
1) Net ~8 TWh captive assumed available for smelters. 2) Hydro Share: Qatalum captive (50%), Alouette (20%), Tomago (12.4%), Albras (51%). 3) Total Alunorte and Paragominas – all consumption sourced through Hydro

Power sourcing for smelters in Europe



TWh

Power sourcing for Hydro JV smelters<sup>2</sup>) Power sourcing for Hydro B&A<sup>3</sup>)



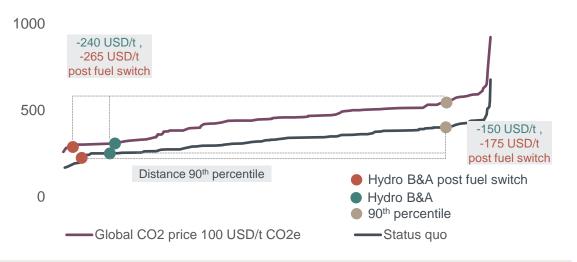
TWh Total consumption 5 4 3 2 1 0 2026 2022 2024 2028 2030 2032 Paragominas - Rein Alunorte - Rein Paragominas (short-term) Alunorte (short-term)

Power sourcing for Hydro smelters in Norway<sup>1)</sup>

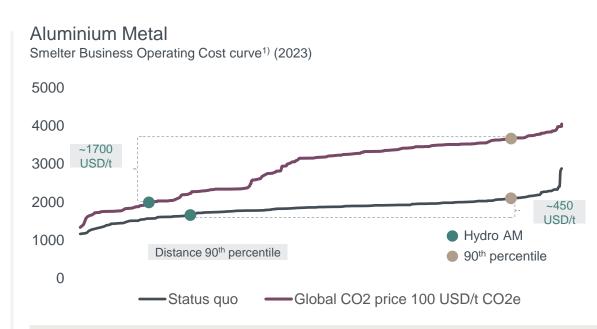
## Steeper cost curve, low-carbon demand and robust position drive margin potential



#### Bauxite & Alumina Alumina Business Operating Cost curve (2023)



- Competitively positioned on the global cost curve at the 30<sup>th</sup> percentile
- Fuel switch & electrical boilers lower costs, and reduce carbon emissions by 30% by 2025
- Global carbon price would improve relative competitive position in Hydro B&A

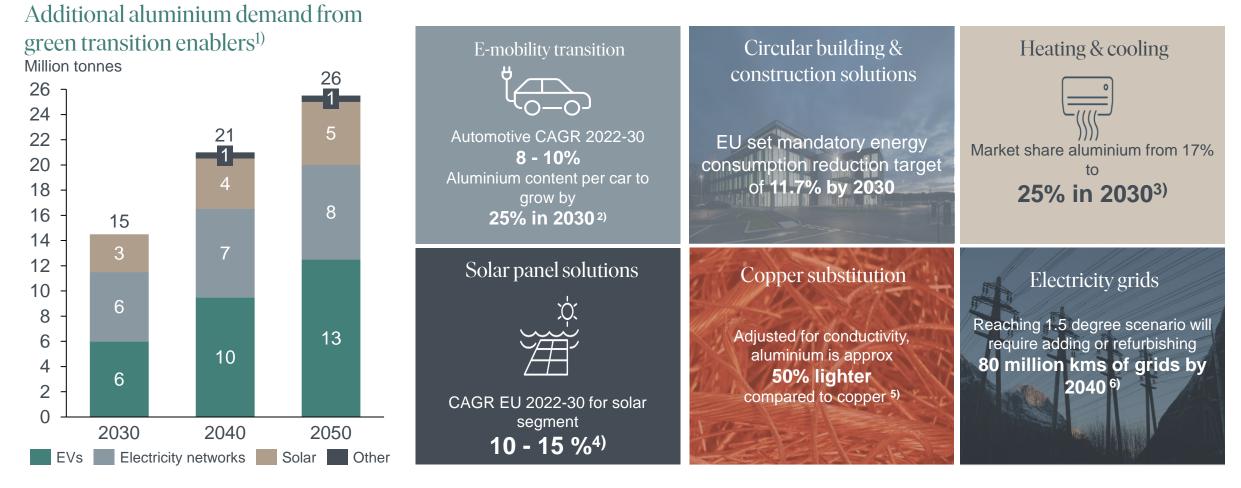


- Competitive relative position on the global cost curve at the 20th percentile
- Strong portfolio of low-carbon smelters
- Global carbon price would improve relative competitive position in Aluminium Metal

# Aluminium is a key enabler for the entire green transition



2030 energy transition will require 15-22 million tonnes aluminium, increasing to 25-42 million tonnes by 2050



1) Additional demand related to green transition technologies in STEPS scenario. Sources: 2) Ducker 3) Hydro analysis 4) BNEF 5) CRU 6) IEA

## Shifting gear to capture opportunities in a new reality



Key steps for Hydro to lead the green aluminium transition towards 2030



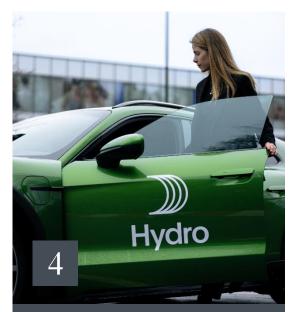
Step up growth investments in Recycling and Extrusions to take lead in the market opportunities emerging from the green transition



Step up ambitions within renewable power generation



Execute on ambitious decarbonization and technology road map and step up to contribute to nature positive and a just transition



Shape the market for greener aluminium in partnership with customers

# Step up growth investments in Extrusions

### 1 2 3 4



 Increase market share in high-growth, noncommoditized segments leveraging innovation and solution offerings



• Develop and grow capacity and capabilities through investments in new presses, fabrication, value added services, and recycling



 Commercial opportunities from sustainability, through segmentation and greener offerings



 Increase digitalization and standardization to drive procurement excellence and reduce energy consumption



**Extrusions EBITDA** 

NOK billion (real 2023)

10.0-12.0 25% 2.0-4.0 40% 8.0 20% 1.5 6.5 15% Underlying market recovery & growth EBS & Procurement Commercial Growth uplift 2023 2025 2030 target target1) (nominal)

1) Target 2025 in nominal terms as communicated in 2021. Range target for 2030 in real terms

# Step up growth investments in Recycling





Strengthen scrap sorting capabilities, secure feedstock



Expand global asset base across the value chain

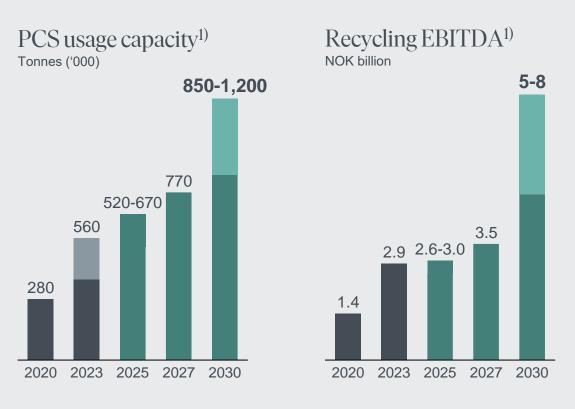


Diversify product portfolio, develop innovative solutions



Shape market for recycled products in partnership with customers





Realized Targ

Target Installed capacity ramping up

1) Range based on capex. High-range include ~70% of further potential capex given market and M&A. Including Alumetal for July 2023

# Step up our ambitions and efforts in renewable power generation

### 1 2 3 4

Secure access to renewable power through hydropower system upgrades and expansions



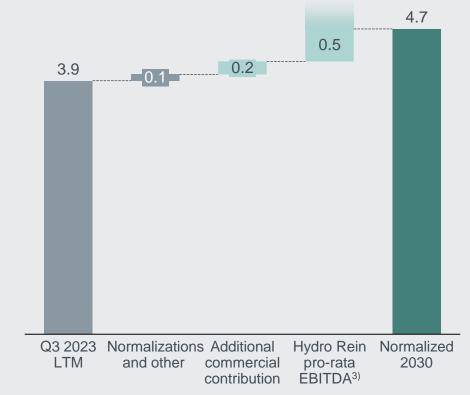
- Grow and upgrade existing hydropower plants to capture peak prices, increasing value of flexibility
- Expand market operations and commercial ambitions based on hydropower reservoir capacity, balancing power from wind and solar, and commercial positions

Hydro Rein to deliver onshore wind and solar projects, main focus in the Nordics and Europe



- Pursue profitable projects through JV owned by Hydro and Macquarie Asset Management
- Current portfolio<sup>1)</sup> add 2.4 TWh to Rein's captive power and 5.3 TWh long term PPAs to Hydro
- Sustainable and attractive riskadjusted returns of eIRR 10-20%

## EBITDA 2030 Hydro Energy Classic and Hydro Rein NOK billion<sup>2)</sup>



1) Projects in construction and secured 2) Commercial contribution in AEBITDA Q3-23 LTM of NOK 0.5 billion included 3) Hydro's share of joint venture EBITDA from assets. Level pending margins, farm downs, growth, debt level/other funding

# Execute on ambitious decarbonization and technology road map, step up to contribute to nature positive and a just transition



Forcefully deliver on net-zero roadmap, decarbonizing value chain from mine-tocomponents

- Net-zero scope 1 and 2 GHG emissions by 2050 or earlier
- On track to meet 30 percent reduction in scope 1 and 2 CO2e by 2030
- 30% reduction of upstream scope 3 GHG emissions per tonne aluminium by 2030
- 850-1200 kTonnes post-consumer scrap recycling capacity by 2030



Contribute to a nature positive future through initiatives on biodiversity, emissions reduction and supply chain management

- No Net Loss of biodiversity for Hydro's bauxite mine, from a 2020 baseline
- No Net Loss of biodiversity for new projects
- 1:1 reforestation on track
- 50% reduction in material non-GHG emissions by 2030
- Eliminate landfill of all recoverable waste by 2040

### Social



Improve lives and livelihoods wherever Hydro operates by supporting a just transition

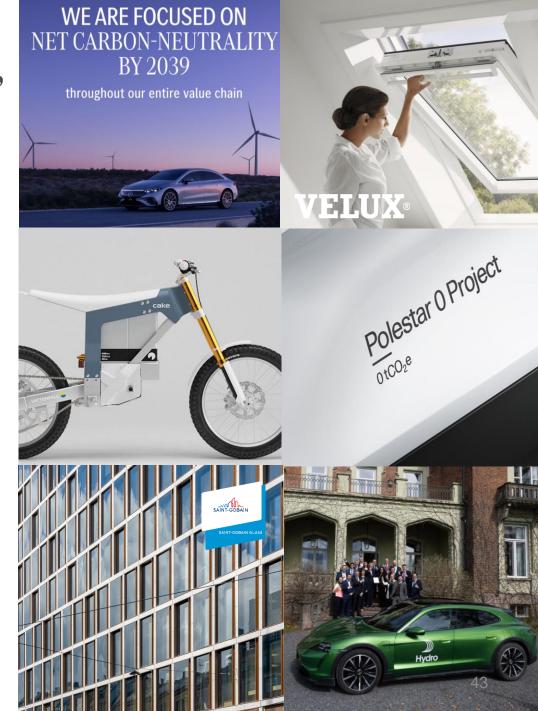
- On track to deliver on target of empowering 500,000 people with skills and education by 2030
- Significant social projects completed in Brazil
- Transparency and traceability of key product sustainability data by 2025 or earlier

# Shape market for greener aluminium, in partnership with customers

Utilize Hydro's combined strengths as a fully integrated company from mine to metal

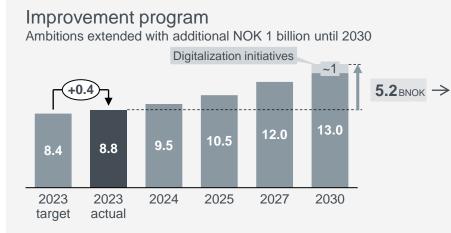
Partner with strategic customers to grow market for greener aluminium

Partner with Original Equipment Manufacturers to champion joint decarbonization targets



# Extended improvement ambitions

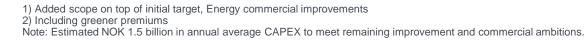
Strengthening future competitiveness and positioning with additional potential from digitalization, greener premiums and commercial improvements in Energy

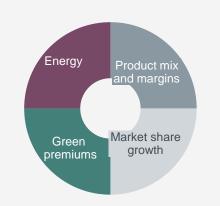




Ambition increased in 2025 and 2027, and extended with additional NOK 0.4 billion until 2030







Operational

excellence

2.6

New digitalization

Fixed cost 0.2

Procurement

~1.0

1.4



# Extending the improvement ambitions to 2030



Targeting NOK 14.0 billion in accumulated improvements and NOK 6.1 billion in commercial ambitions by 2030

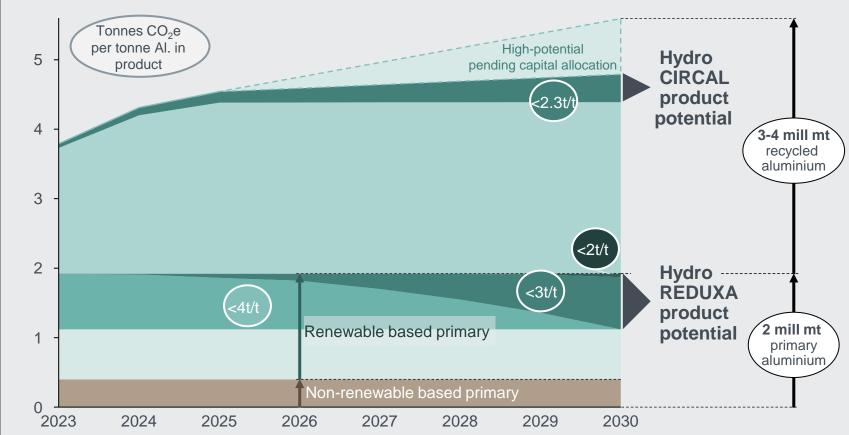


# Hydro is pioneering the green aluminium transition

# Greener earnings uplift potential 2030 NOK 2 billion<sup>1</sup>)

)))) Hydro

Greener product capability from total aluminium portfolio<sup>1)</sup> Million tonnes capacity potential



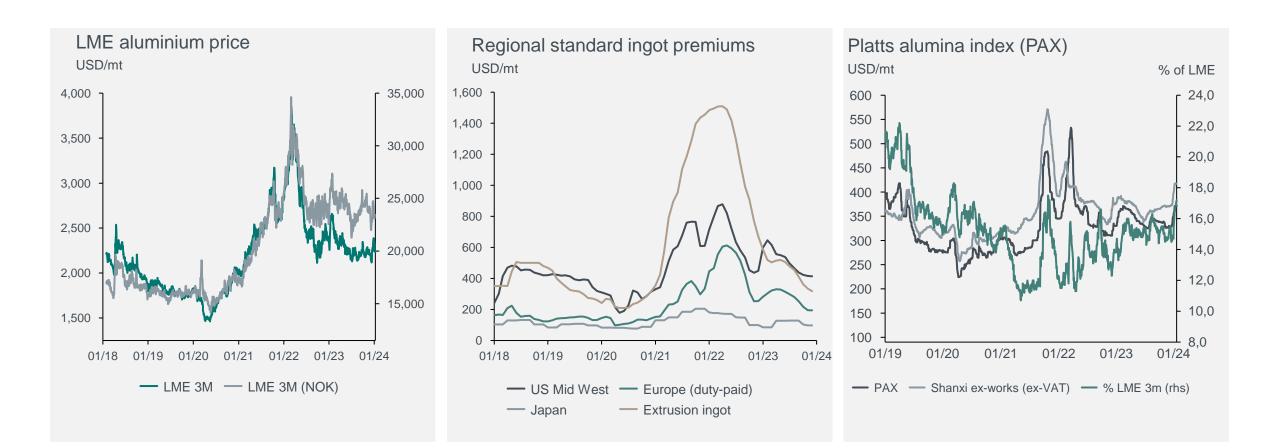
1) Based on 2030 EU ETS cost and relative CO<sub>2</sub> reduction vs Hydro REDUXA 4.0 at current industry traded upcharge. Hydro REDUXA and CIRCAL potential based on estimated certification capacity. Primary capacity based on equity share renewable power. Hydro CIRCAL products have post-consumer scrap content > 75% 40



# Market and trends

## Revenue drivers through Q4 2023

Source: Bloomberg, Norges Bank, LME, Fastmarkets, Platts



**Hydro** 

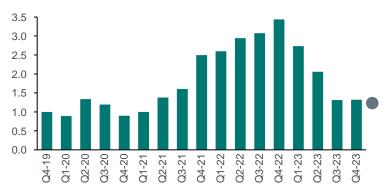
## Market raw material costs in Q4 2023



### Petroleum coke FOB USG (indexed)



### Caustic soda (indexed)



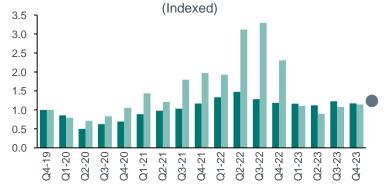
Indication of current market prices

Source: Thomson Reuters, PACE, IHS Markit, Platts, ANP, CRU

### Pitch FOB USG (indexed)



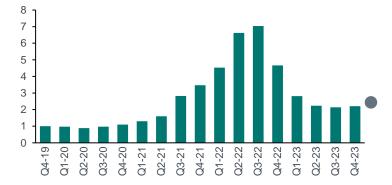
### Fuel oil A1 and Henry Hub NG spot price



### Alumina PAX index (indexed)



### Steam coal (indexed)



Henry Hub Natural Gas Spot Price (indexed)

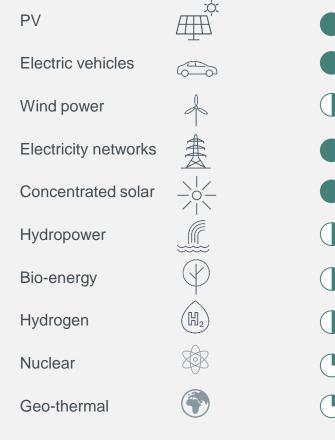
Fuel Oil A1 (indexed)

# Macro trends and favorable properties drive aluminium demand

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



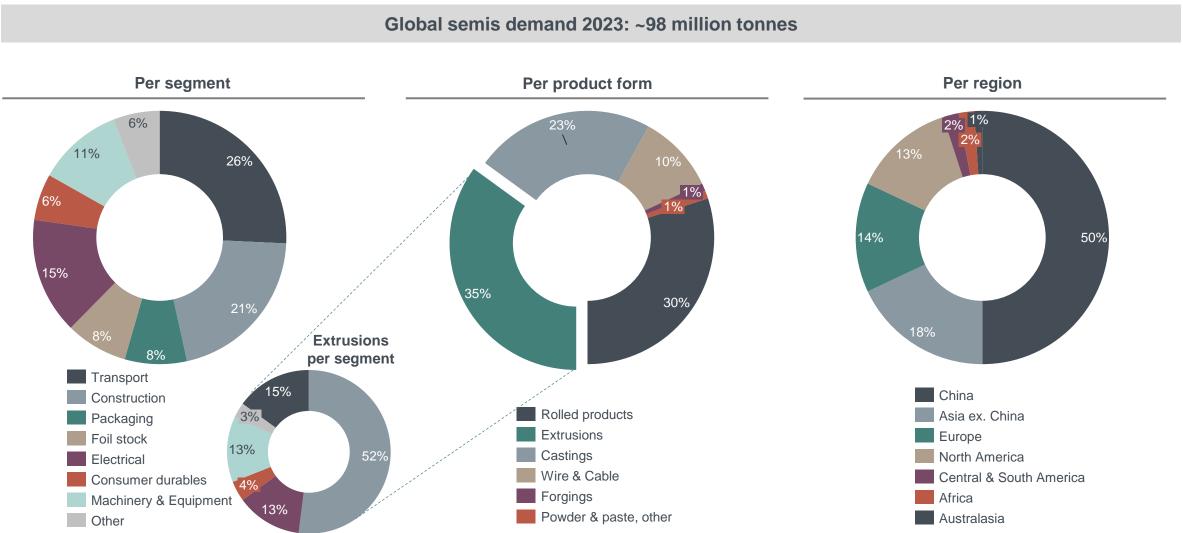
Importance of aluminium within key green transition technologies<sup>1</sup>



# Transport & construction key semis demand segments



Source: CRU, Hydro Analysis

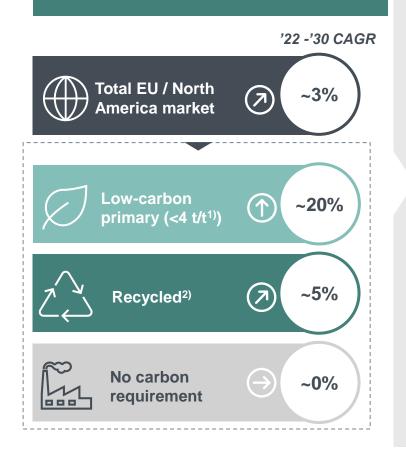


# Highest growth for low-carbon and recycled material



Low-carbon and recycled aluminium to make up majority of EU and North America market by 2030

Greener demand growth is outpacing the rest of the market



### Estimated demand based on currently stated ambitions

Europe and North America low-carbon<sup>1)</sup> and recycled aluminium demand by sector (million tonnes) - estimate

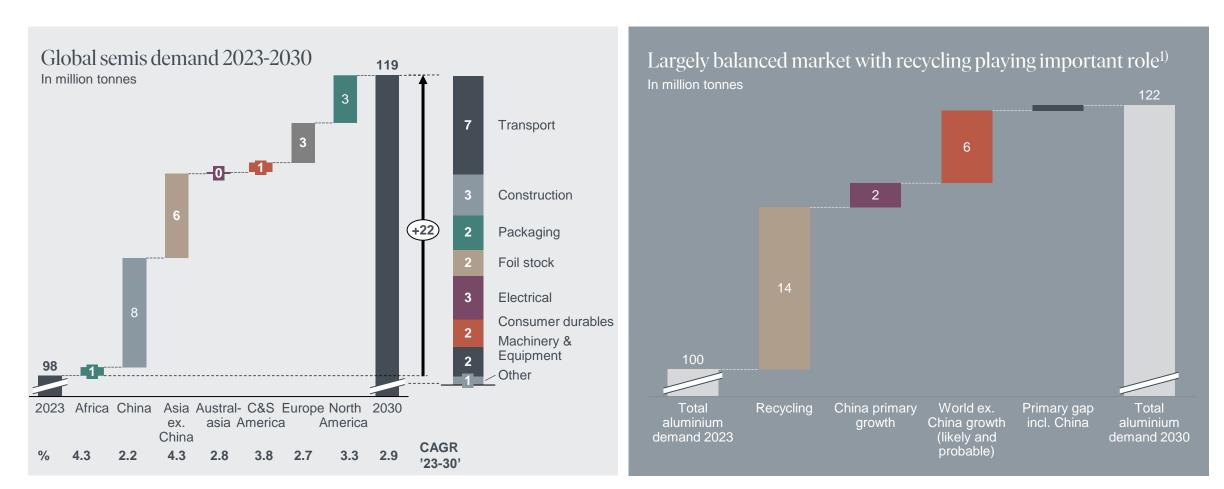
		<u>GAGR</u> ('22-'30)	Share of low-carbon <sup>1)</sup> and recycled
	18	~6%	50-60%
	Other	~3%	35-45%
	Consumer dur.	~5%	70-80%
	Electrical	~9%	30-40%
11	Packaging and foil stock	~3%	60-70%
	Construction	~6%	60-70%
	Transport	~10%	40-50%
2022	2030	_	

### Examples of front runners with ambitious 2030 targets Specific aluminium Scope 3 reduction targets commitments 10% of primary at CO<sub>2</sub>e neutral value chain <3 t/t Vestas. 45% per MWh generated lightsource bp 52% per MW constructed 10% of primary at PEPSICO <3 t/t 10% of primary at <3 t/t Max. 2.0 kg carbon 50% for absolute **VELUX** emitted / kg emissions BOUYGUES 30% for absolute emissions 20% for absolute emissions VINCI CO<sub>2</sub>e neutral balance sheet Mercedes-Benz CO<sub>2</sub>e neutral (2039) 10% of primary at 25% per vehicle (2025) <3 t/t 22% per vehicle 30% per vehicle (()) RENAULT

# Largely balanced markets towards 2030

)))) Hydro

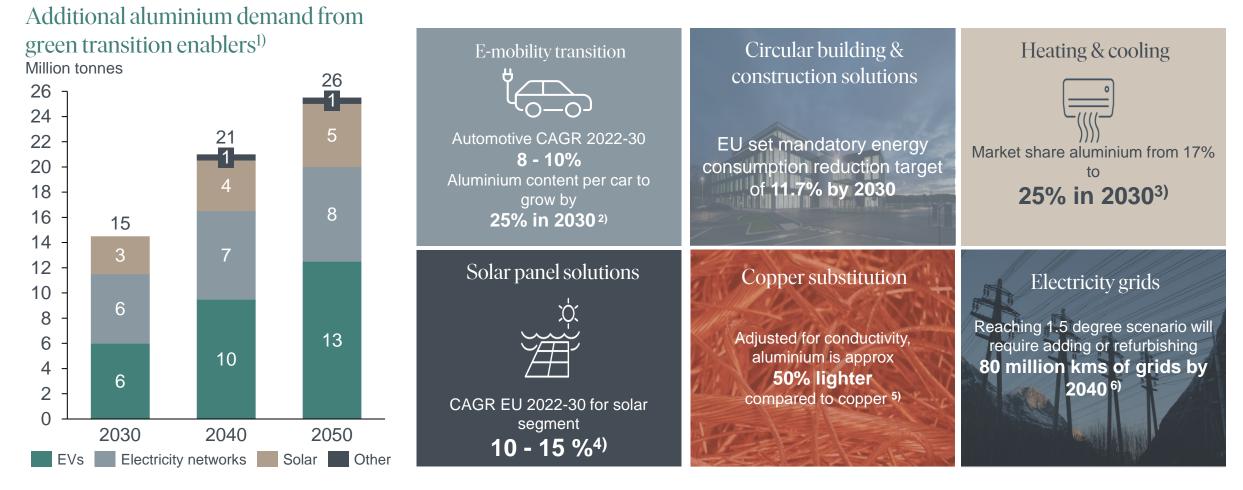
Healthy demand outlook driven by transport and electrical



# Aluminium is a key enabler for the entire green transition



2030 energy transition will require 15-22 million tonnes aluminium, increasing to 25-42 million tonnes by 2050



1) Additional demand related to green transition technologies in STEPS scenario. Sources: 2) Ducker 3) Hydro analysis 4) BNEF 5) CRU 6) IEA

### Source: IEA, Ducker, analysis based on EU27+UK

1990

1980

## EV transition driving strong growth in aluminium demand

EV sales penetration, %

While EV share of sales is growing exponentially

Key choices on component design and material selection are being matured now

### Aluminium content per car growing Aluminium in car, kg

350

300

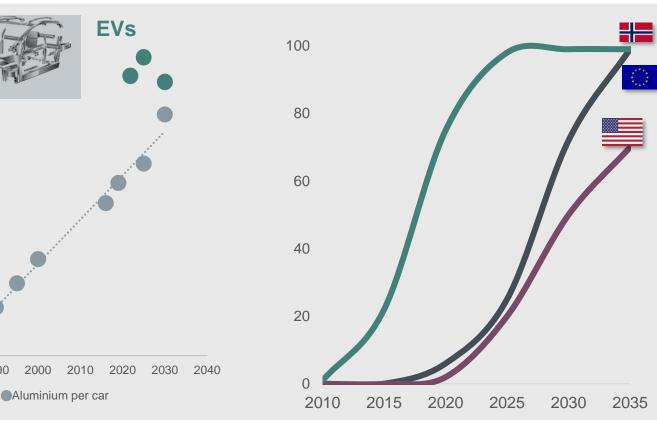
250

200

150

100

50



Average aluminium content per car will grow from **205 kg/car in 2022** to **256 kg/car in 2030** 

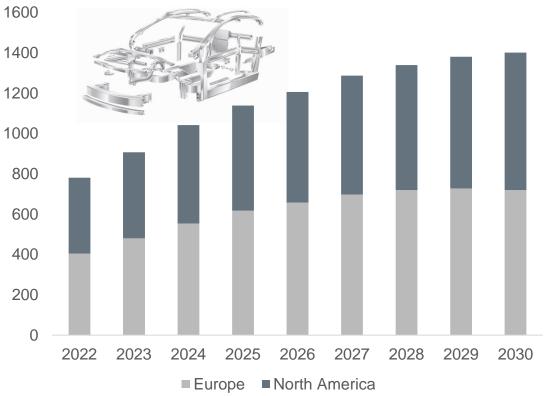
Demand for aluminium from European and American automotive industry to increase by 2.9 million tonnes from 2022-2030

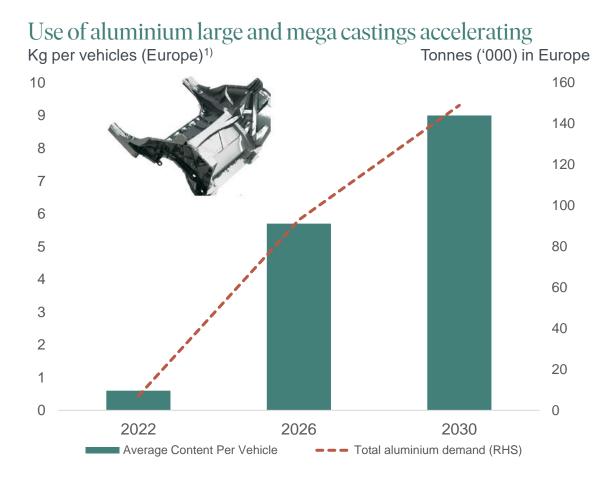
Hvdro

# EVs are not built the same way as internal combustion engines cars

Radical change in design leading to changing dynamics for aluminium usage

### Aluminium demand from extrusions driven by switch to EVs Tonnes ('000)

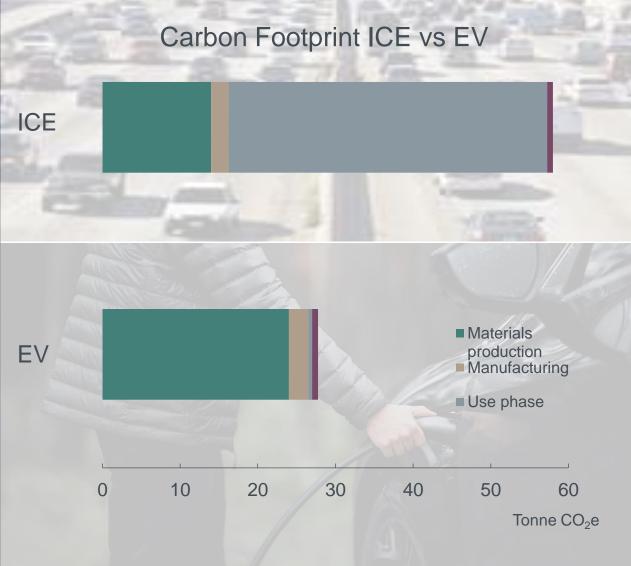




Hydro



# From cutting tailpipe emissions to cutting embedded emissions



83%

Of the embedded emissions from aluminium, steel and polymer

+40%

Emissions from materials, including batteries, increase 40% from ICE to EV<sup>1)</sup>

# Transition to EVs enables substitution opportunities



EVs contain considerably more copper than combustion engines



**Price, Weight, Emissions** 

60-80kg



Copper content in electric vehicles

Copper content compared to typical combustion engine vehicle

### **Application A**

Replacing complex copper cabling with approx. 3kg of aluminium solution

Potential additional global demand in 2030 100kt

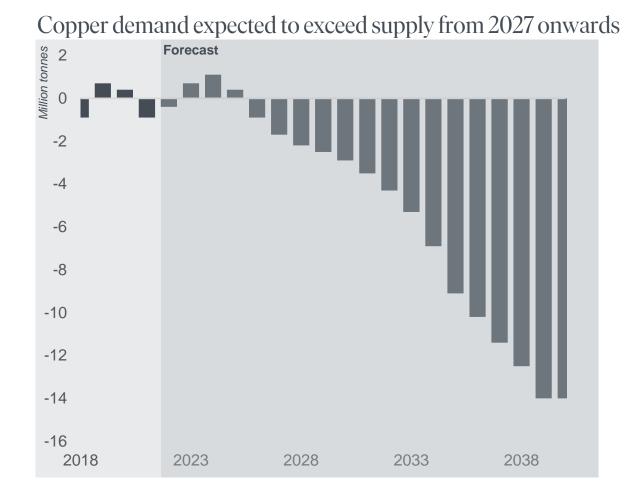
### **Application B**

Replacing flexible copper cabling with approx. 5 kg of aluminium solution

Potential additional global demand in 2030 **180kt** 

## Aluminium is an attractive substitute for copper

Especially in segments with high growth from green transition



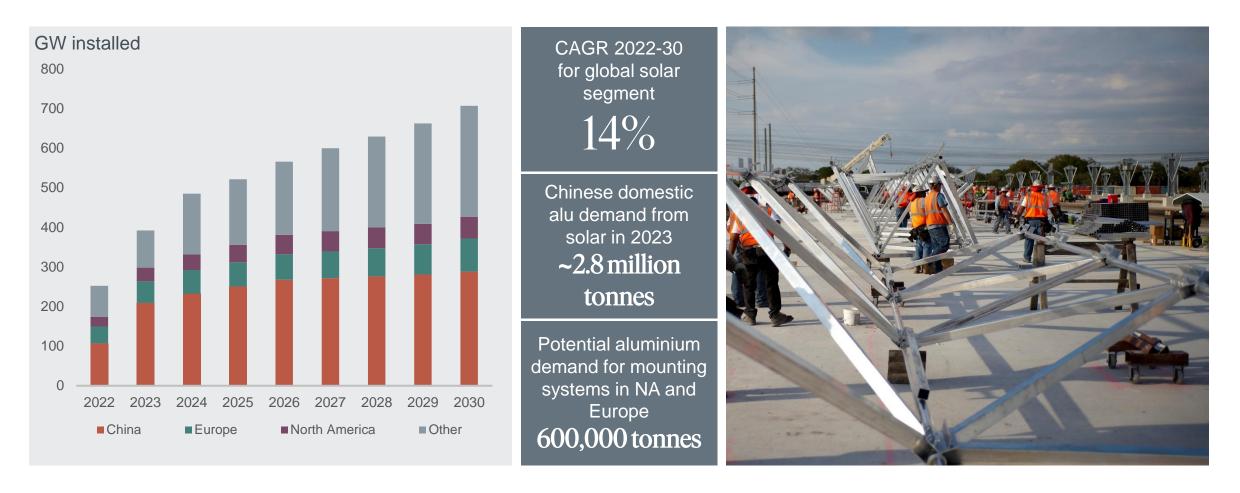
### Key substitution facts



**Hydro** 

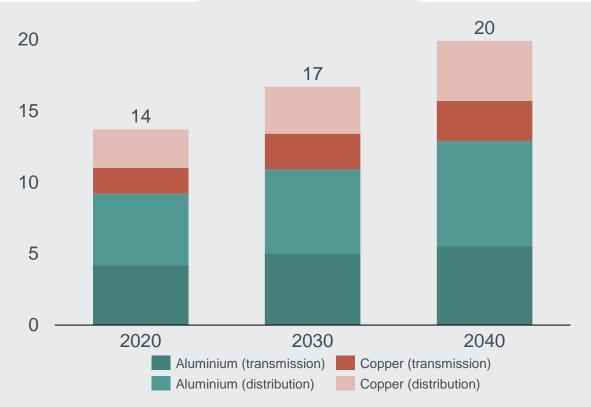
# Solar market provides strong growth potential for aluminium $\mathbb{J}_{Hydro}$

Regional growth potential within aluminium mounting systems



# Green transition drives substantial expansion of electricity grids

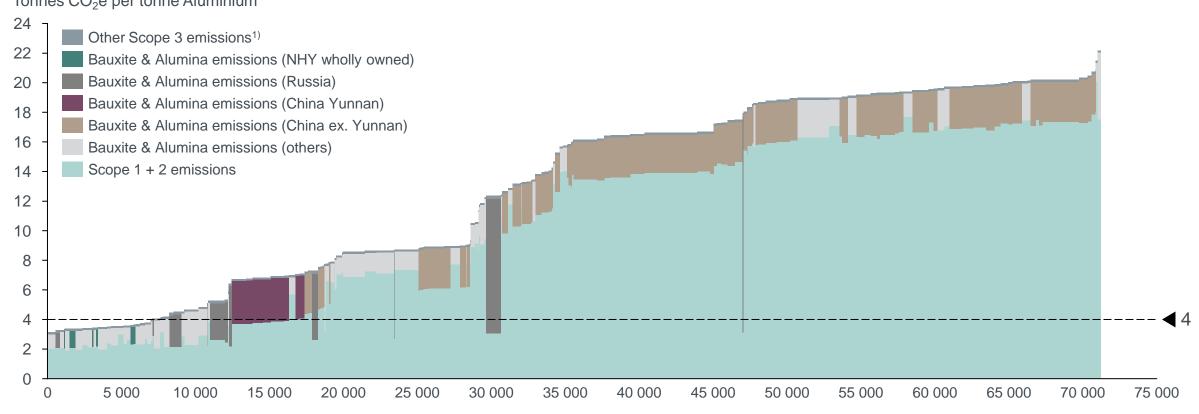
Average annual demand for aluminium by 2040 in stated policies scenario Million tonnes



### Reaching 1.5 degree scenario requires adding or refurbishing 80 million kms of grids by 2040 International Energy Agency 2023, Electricity Grids and Secure Energy Transitions

# Full value chain perspective: 7 million mt of primary production with embedded emissions below $4.0 \text{ kgCO}_2/\text{kg}$ aluminium

### Cradle-to-gate emissions curve 2023 Tonnes CO<sub>2</sub>e per tonne Aluminium



## Scrap loophole undermines CBAM and climate goals

- The Carbon Border Adjustment Mechanism (CBAM) extends ETS carbon pricing to import products from 2026, protecting EU industry from carbon leakage.
- As part of the scheme, <u>CBAM will recognize and price emissions</u> from imported aluminium based on re-melted industrial scrap.
- Correct allocation of carbon emissions in products is necessary for CBAM to mirror the EU-ETS and function properly.
- <u>We believe re-melted industrial scrap should be assigned the same</u> <u>emissions as primary aluminium.</u> EU producers pay for these emissions, so should importers.
- Currently, <u>CBAM does not recognize that re-melted industrial scrap has</u> <u>carbon emissions.</u>
- The loophole is substantial, as there are more than enough re-melted industrial scrap available globally to satisfy EU aluminium demand.
- Furthermore, the loophole undermines low-carbon aluminium production in Europe, and deprives Member States of CBAM revenue.
- European recyclers are facing the biggest risk from the loophole.

CBAM- extending carbon pricing to imported products to level out ETS effects

October 1, 2023 CBAM transitional period starting

> Indirect CO<sub>2</sub> compensation remains

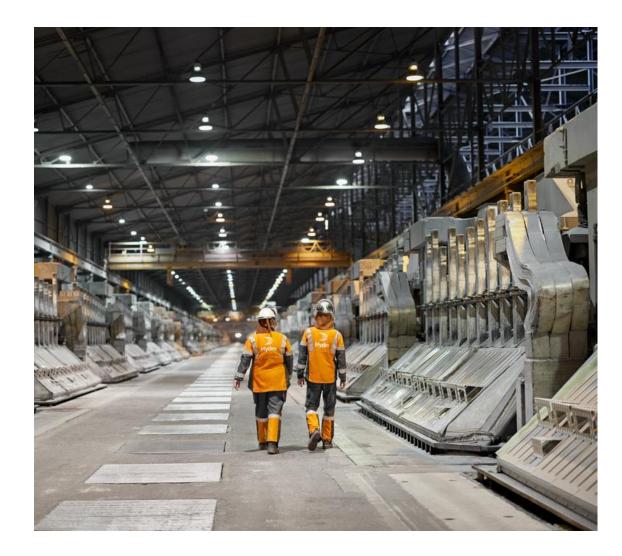
> > **2025** Re-evaluation of indirect CO cost compensation

April 2023

**CBAM** adopted

**2026-2034** CBAM to replace free quotas

# EU agenda supporting Hydro's strategy



### Regulatory framework supporting strategic direction

### **Critical Raw Material Act**

- Aluminium expected to be defined as a Strategic Raw
  Material upon final adoption
  - Important recognition of aluminium's role for EU strategic autonomy and the green transition

### Sustainability legislation

- Stricter regulations on Green Claims and Corporate Sustainability
   Due Diligence favor sustainability frontrunners
- End-of-life vehicles regulation supports Hydro's recycling ambitions



### **Renewable energy**

- · High ambitions for renewable energy production in EU
- Supports Hydro's internal decarbonization and strengthens
- demand for aluminum from renewables market segment

### Regulatory changes needed to support green transition

R

### **CBAM – Carbon Border Adjustment Mechanism** • Labelling remelted industrial scrap as zero-carbon material on

- Labelling remelted industrial scrap as zero-carbon material on import creates a large loophole in CBAM
- Unless changed it will undermine intention of CBAM on climate and competetiveness

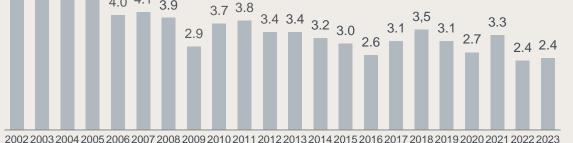


# Sustainable Operations

## Safe and responsible operations is a top priority

Leadership in health and safety, social responsibility, and compliance as a license to operate

## TRI Rate<sup>1)</sup> 10.3 7.0 6.0 4.0 4.1 3.9



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

2) ESG performance as of 31.12.2023

### Continuing efforts within ESG performance<sup>2)</sup>



- Transparent and consistent reporting approach for more than three decades
- Sustainability is fully integrated in Hydro's strategy
- Work in progress to prepare for implementation of the EU Corporate Sustainability Reporting Directive (CSRD)



17.8 (Low risk) #3 in sector (3/224)

Member of Dow Jones Sustainability Indices

Powered by the S&P Global CSA **69%** Europe Index inclusion **DJSI** inclusion since 1999

Moody's **ESG Solutions** 73/100



AA rating "Leading initiatives to achieve carbon-free aluminium"

## ecovadis

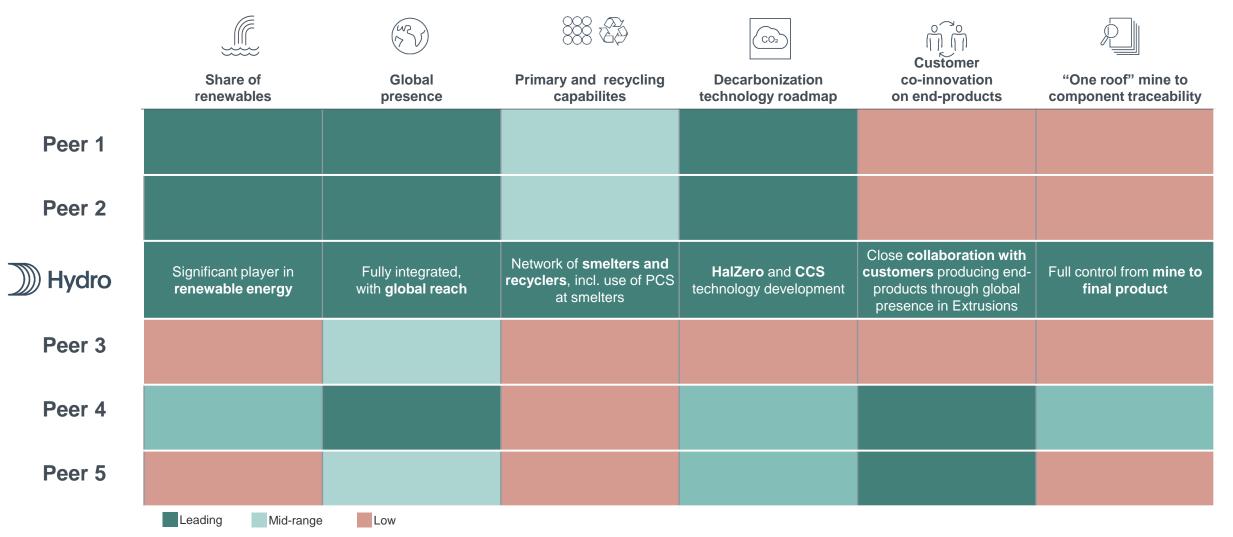
72/100 95<sup>th</sup> percentile



**B** rating Corporate Rating: Prime Status

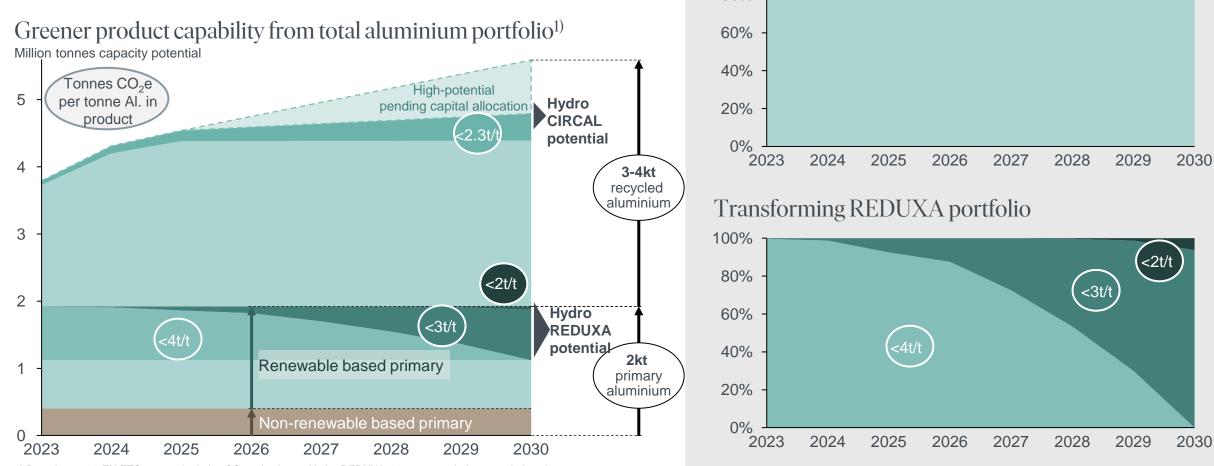
# Many vying to take sustainable aluminium leading positions $\mathcal{J}_{Hydro}$

Only Hydro with integrated advantage



# Positioning Hydro to pioneer the green aluminium transition

Earnings uplift potential 2030 of NOK 2 billion<sup>1)</sup>



Growing recycling capabilities

<2.3t/

100%

80%

1) Based on 2030 EU ETS cost and relative  $CO_2$  reduction vs Hydro REDUXA 4.0 at current industry traded upcharge. Hydro REDUXA and CIRCAL potential based on estimated certification capacity. Primary capacity based on equity share renewable power. Hydro CIRCAL products have post-consumer scrap content > 75%

# Execute on ambitious decarbonization and technology road map, step up to contribute to nature positive and a just transition



Forcefully deliver on net-zero roadmap, decarbonizing our value chain from mine-tocomponents

- Net-zero scope 1 and 2 GHG emissions by 2050 or earlier
- On track to meet 30 percent reduction in scope 1 and 2 CO2e by 2030
- 30% reduction of upstream scope 3 GHG emissions per tonne aluminium by 2030
- 850-1200 kTonnes post-consumer scrap recycling capacity by 2030



Contribute to a nature positive future through initiatives on biodiversity, emissions reduction and supply chain management

- No Net Loss of biodiversity for our bauxite mine, from a 2020 baseline
- No Net Loss of biodiversity for new projects
- 1:1 reforestation on track
- 50% reduction in material non-GHG emissions by 2030
- Eliminate landfill of all recoverable waste by 2040

### Social

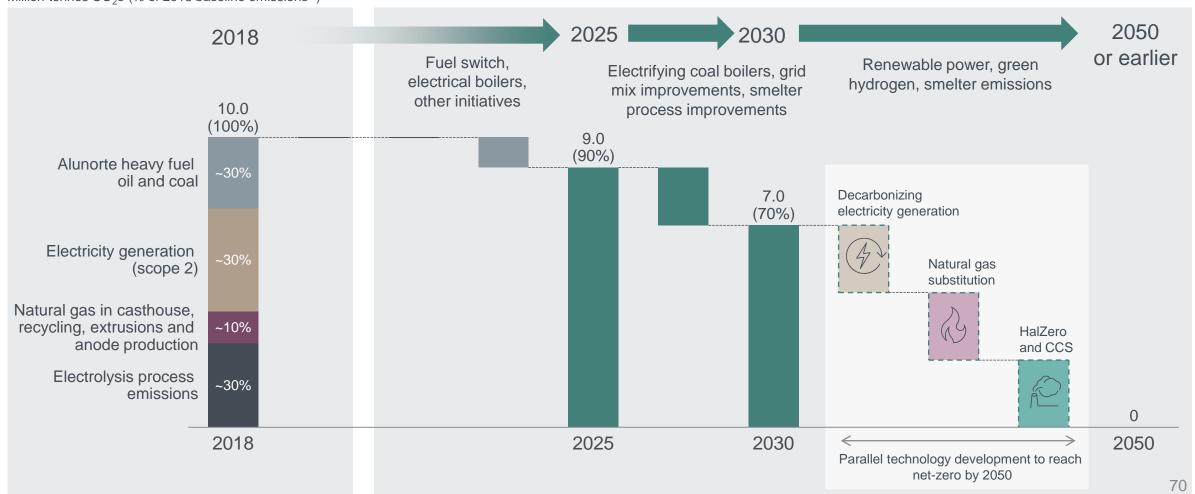


Improve lives and livelihoods wherever we operate by supporting a just transition

- On track to deliver on target of empowering 500,000 people with skills and education by 2030
- Significant social projects completed in Brazil
- Transparency and traceability of key product sustainability data by 2025 or earlier

## Net-zero Hydro: The roadmap

On track to achieve 30% carbon emissions reduction by 2030 and net-zero by 2050 or earlier



Hydro

### GHG emissions – ownership equity<sup>1</sup>) Million tonnes CO<sub>2</sub>e (% of 2018 baseline emissions<sup>2</sup>)

1) Scope 1 and scope 2. 2) 2018 rebased baseline post-Alunorte transaction as of December 1, 2023

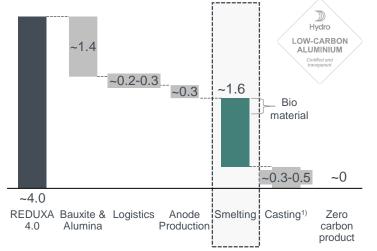
# Decarbonization ambition: Three paths to net-zero

Clear technology roadmap to deliver industrial volumes of zero-carbon aluminium by 2030

HalZero process New process technology for decarbonizing new capacity

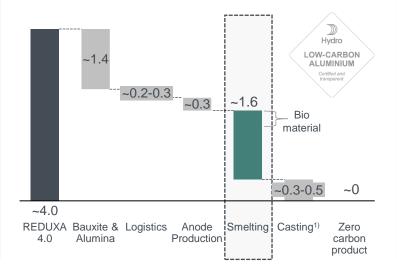


CO<sub>2</sub>e emissions per year



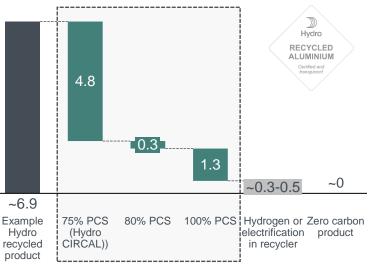
Carbon capture and storage Technologies for decarbonizing existing smelters





Recycling Technologies for more PCS-use



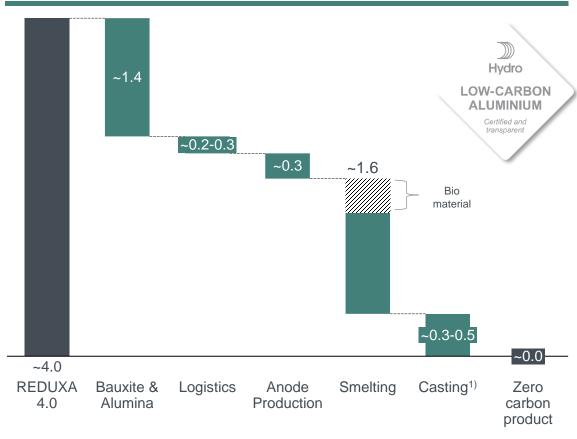




# Widening our scope to reach zero CO<sub>2</sub> emissions

Structured approach to reduce emissions throughout primary value chain

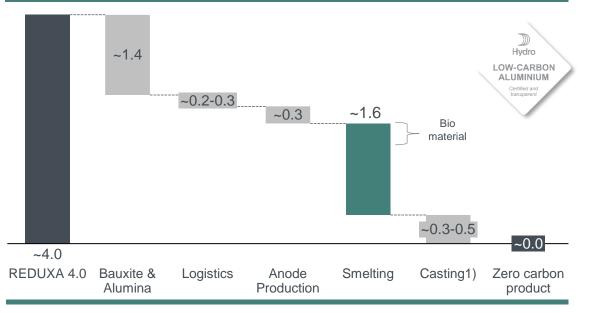
### CO<sub>2</sub>e emissions kgCO<sub>2</sub>/kgAl





# Electrolysis decarbonization on track - HalZero

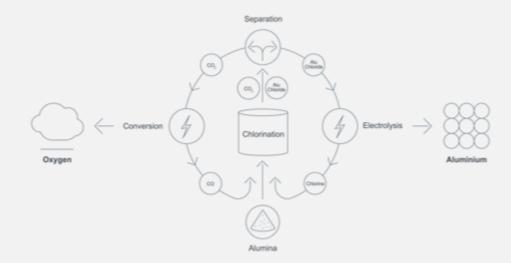
## CO<sub>2</sub>e emissions kgCO<sub>2</sub>/kgAl



#### Timeline

	2022	2025	2030	2035
HalZero	Studies	Testing	Industrial scale pilot	Industrial capacity

### Ground-breaking technology to change the game



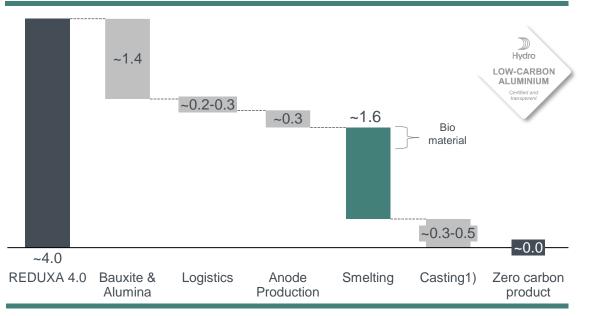
- Approval to start construction of new test facility in Porsgrunn - expected to be operational by 2025
- On track for first metal by end 2025 and industrial pilot volumes by 2030





# Electrolysis decarbonization on track – carbon capture

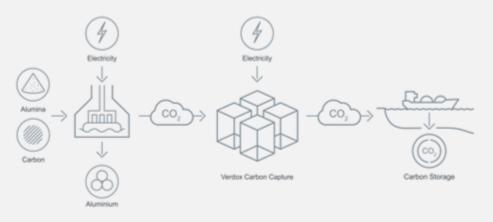
## CO<sub>2</sub>e emissions kgCO<sub>2</sub>/kgAl



### Timeline

	2022	2025	2030	2035
CCS – ready cells	Testing	Industrial Industrial scale pilot capacity		
Carbon capture	Studies	> Testing	Industrial scale pilot	Industrial capacity

### Technology shift for existing aluminium smelters



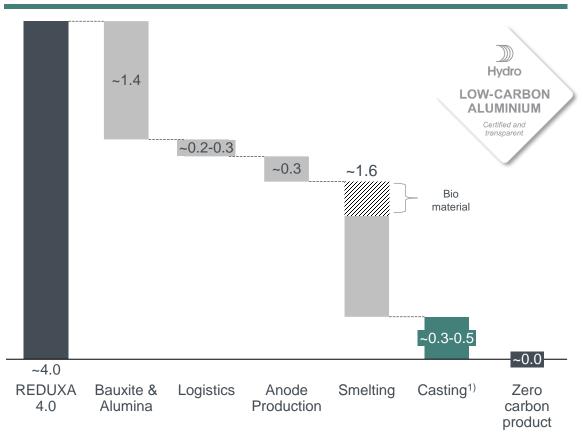
- Testing of Verdox technology ongoing at Sunndal
- Installing capture ready cells as part of ongoing relining process
- On track to deliver first CO<sub>2</sub> capture in 2024 and industrial scale pilot volumes by 2030



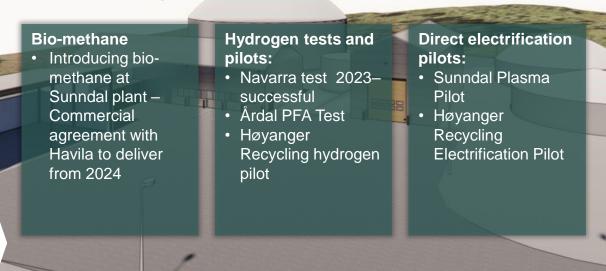
# Pursuing optionality to decarbonize casthouses

Important milestones for all initiatives: Bio-methane, hydrogen and direct electrification

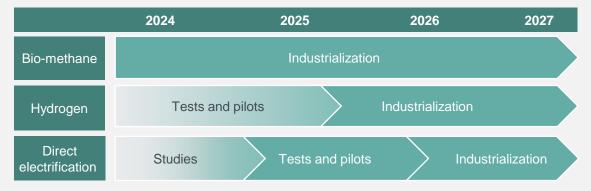
## CO<sub>2</sub>e emissions kgCO<sub>2</sub>/kgAl



## Starting industrialization of bio-methane from 2024, stepping up activities in electrification



#### Timeline



)) Hydro

LOW-CARBON

ALUMINIUM

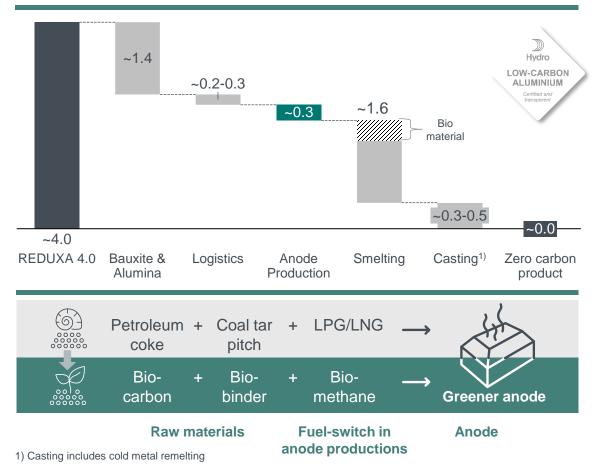
Hydro

ALUMINIUN

# Anode decarbonization

Utilizing bio-materials in anode production triggers potentials for below zero emissions

## CO<sub>2</sub>e emissions kgCO<sub>2</sub>/kgAl



#### Hydro LOW-CARBON ALUMINIUM Conflict and transparent

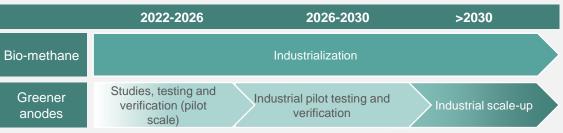
### Bio-methane and bio-materials in the process

- Fuel switch to bio-methane in anode baking furnace Havila contract
- Substitution to bio-based packing materials

### Bio-materials in anodes

- · Substitute fossil materials to bio-carbon and bio-binder in anode
- Potential to reduce the CO<sub>2</sub>, PAH and S emissions
- · Collaboration with external suppliers and research institutions
- Potential below zero CO<sub>2</sub> emissions from electrolysis off-gas capture

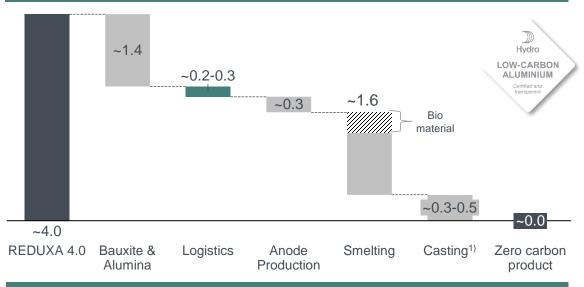
### Timeline



# Logistics decarbonization

Choosing the right solutions leads to reduced emissions. Ambition: 30% reduction by 2030

## CO<sub>2</sub>e emissions kgCO<sub>2</sub>/kgAl





## What we have done

- >95% of AM volumes now have the major transport leg by sea
- 85% emission reduction on container transport from China to Europe
- Moving volumes from truck to barge, rail and sea
- Introducing biofuel on selected trucking routes
- Supply chain improvements



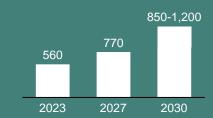
### What we will do

- Developing greener routes
- Exploring opportunities for "green shipping corridors"
- Digitalization and measurement to improve incentive structures and transparency

#### Timeline



Hydro LOW-CARBON ALUMINIUM *Recycling 2030 ambitions:* 



## 850-1,200 kmt PCS capacity



## NOK **5-8** billion **EBITDA** potential



## **Recycling decarbonization**

Full value chain with multiple product outlets

Large recycling asset base in Europe and North America

· Broad range of products - extrusion ingot, sheet ingot, foundry alloys, HyForge, Master alloys





## Ability to utilize and upcycle mixed scrap

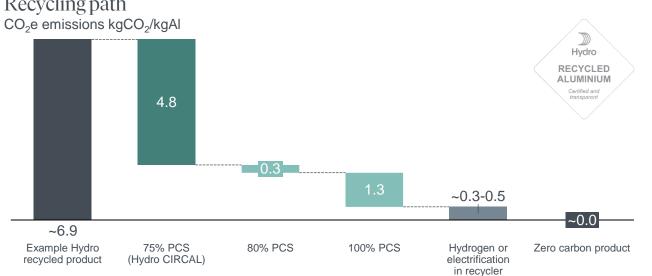


#### Sorting & production technology

- Technical and metallurgical competence
- · Production optimization know-how from scrap to product
- Patented HySort technology, in-house R&D

#### **Close customer & supplier relations**

- Local presence and market insight in core locations
- · Established relationships with scrap suppliers
- · Partnerships and close cooperation with customers
- Commercial intelligence and strong value chain positioning



## Recycling path

# Contribute to a nature positive future through initiatives on biodiversity, waste handling and land-use



### No Net Loss Ambition for Paragominas

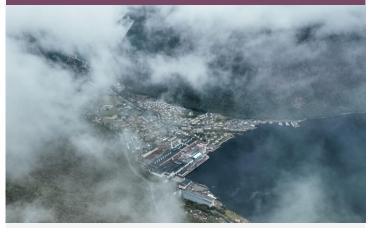


- No Net Loss of biodiversity for our bauxite mine, from a 2020 baseline
- Strengthening onsite mitigation and rehabilitation
- Investing in conservation and restoration offsets

# Partnerships for Nature Positive Outcomes

- Develop opportunities for positive nature impacts beyond delivering NNL outcome for mine
- Partnership with Imazon and IPAM
- Creating value for nature and society where we operate

#### Supply chain emissions



- Establish inventories and baselines for material pollutants linked to Hydro's supply chain by end of 2024
- World Economic Forum's Alliance for Clean Air

# Improving lives and livelihoods wherever we operate by supporting a just transition



## Just transition framework



Respect and promote human rights



Support positive local development

Invest in education



Responsible supply chain

# Investing in the community is our license to operate





#### **Social Infrastructure**

- Construction of 9 Terpaz community centers (3 already built) targets security, income generation and access to basic services to 1,500 people per day
- Construction of a Technical School with the capacity to educate 1,200 students per year



#### **Community Projects**

- Investment in community-based projects benefitted 80 thousand people since 2018
- 60 thousand people with access to education
- 1,400 family farmers with access to technical support



#### **Stakeholder Engagement**

- Transparency, dialogue and volunteer work are performed by a dedicated team
- 178 community leaders are involved in a dialogue forum called Sustainable Barcarena Initiative
- 500 volunteers worked to benefit 14 thousand people and 70 local organizations

# Sustainable financing initiatives increase access to capital and provide cost of capital advantage

## Green and Sustainability Linked Financing Framework

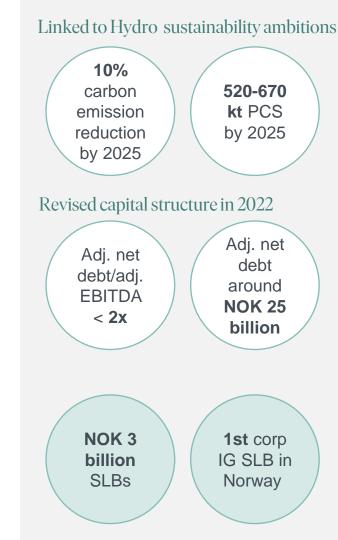
- Framework published to facilitate issuance of green and sustainability linked bonds
- Linked to Hydro's sustainability ambitions
- CICERO Shades of Green provided Second Party Opinion allocating medium green shading and governance assessment at excellent

## Updated capital structure policy and EMTN Program

- Revised capital structure targets over the cycle
- EMTN program established to streamline bond issuance in line with capital structure policy

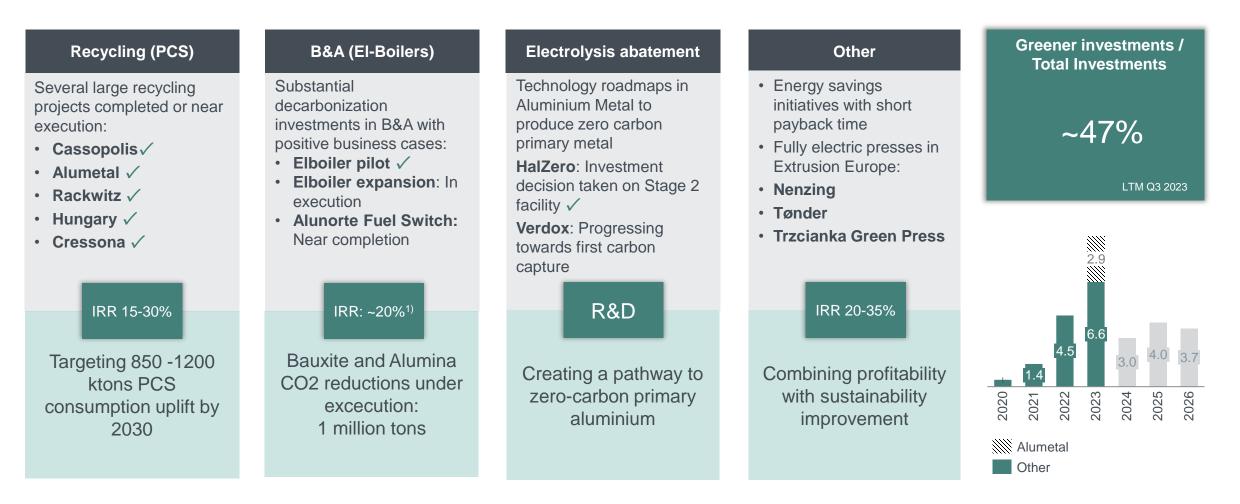
## Sustainability linked bonds (SLBs)

- NOK 3 billion SLBs (2022-2028) issued under framework and EMTN programme
- First SLB issue in the Norwegian corporate investment grade market
- SLB feature increased access to capital in challenging market conditions



# Greener investments drive value creation

Hydro's largest prioritized investment areas combine sustainability and profitability



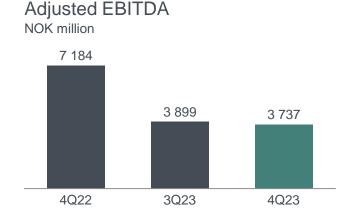
Hvdro



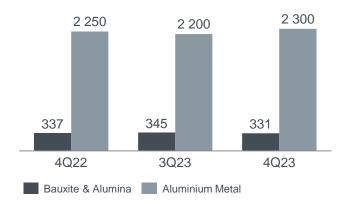
# Financial Framework

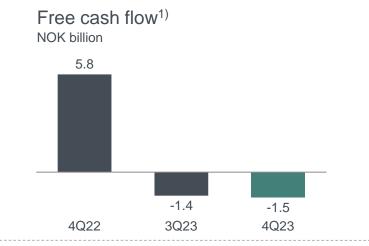
# Key performance metrics | Q4 2023



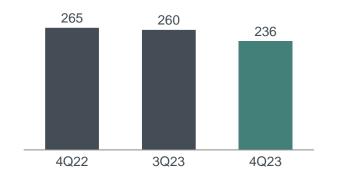


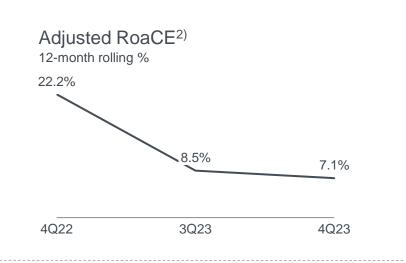
Upstream costs<sup>3,4)</sup> USD per tonne



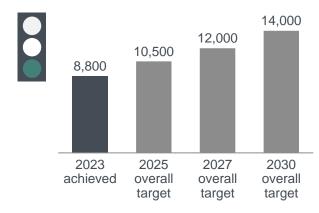








Improvement program status NOK millions



- Free cash flow is defined as net cash provided by (used in) operating activities of continuing operations, adjusted for changes in collateral and net purchases of money market funds, plus net cash provided by (used in) investing activities of continuing operations, adjusted for purchases of / proceeds from sales of short-term investments
- 2. Adj. RoaCE calculated as adjusted EBIT last 4 quarters less underlying tax expense adjusted for 30% tax on financial items / average capital employed last 4 quarters

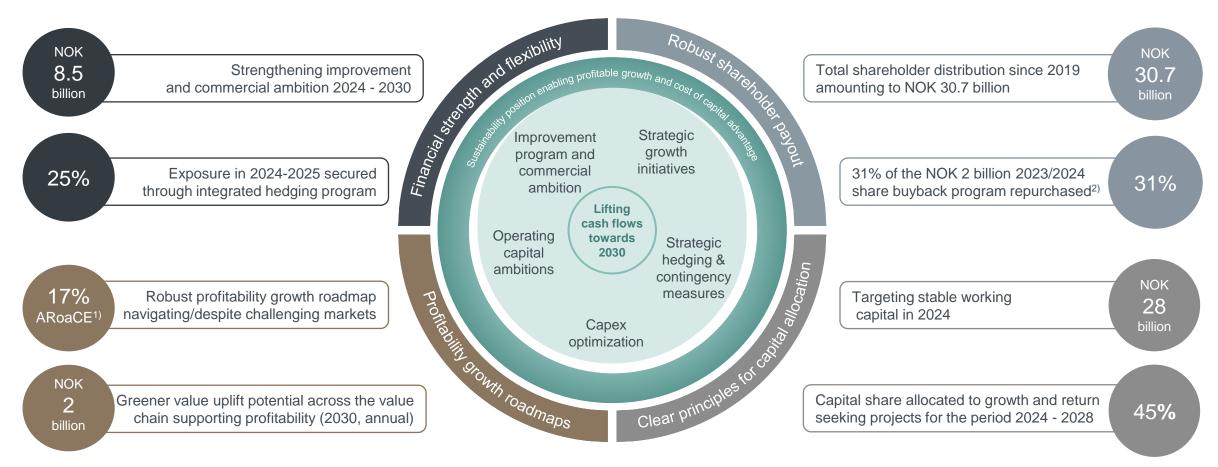
3. Realized alumina price minus adjusted EBITDA for B&A, excluding insurance proceeds relating to decommissioned crane (NOK ~500 million), per mt alumina sales

 Realized all-in aluminium price (incl. strategic hedge program) less adjusted EBITDA margin excluding indirect CO<sub>2</sub> compensation catch-up effect (NOK ~1.4 billion) and power sales Slovalco, Albras and Norwegian smelters, incl Qatalum, per mt aluminium sold. Implied primary cost and margin rounded to nearest USD 25

# Our financial framework guides the short and long-term



Solid framework for lifting returns and cash flow and managing uncertainty



 Hydro group external scenario 2030 ARoaCE based on CRU price and premium assumptions and S&P Global FX assumptions, with adjustments as specified in the footnotes
 31% repurchased as of 24<sup>th</sup> of November

# Capital allocated according to strategic modes

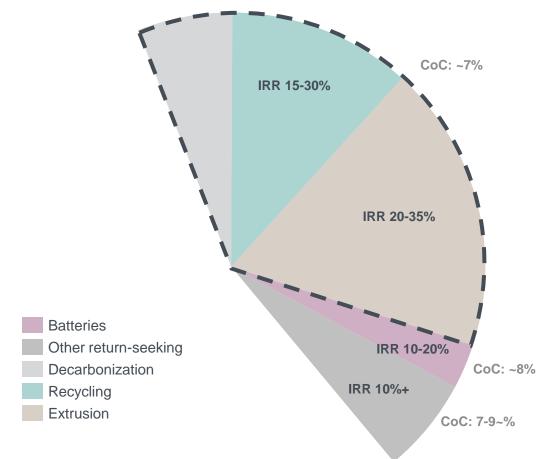
Strategic modes reflect global megatrends and high-return opportunities

Safe, compliant and efficient operations The Hydro Way					
Businesses	Bauxite & Alumina	Aluminium Metal	Recycling	Energy	Extrusions
Strategic mode	Sustain and improve	Sustain and improve	Growth	Selective growth	Growth
Towards 2030	Reduce risk, improve sustainability footprint, improve cost position	Robustness and greener, increase product flexibility, improve cost position	Substantial shift in conversion of post- consumer scrap	Growth in renewables and batteries	Growth with new capacity and capabilities

**Hydro** 

# Strong profitability in strategic growth areas

Indicative profitability in current return-seeking and growth portfolio



#### Recycling

- Increase proportion of post consumer scrap (PCS), lowering metal cost
- Improved economies of scale in brownfield expansions
- Sorting technology and equipment standardization

#### Extrusions

- New presses with improved capabilities and commercial value, capturing market share
- Press replacements with significant cost reductions and increased productivity
- Focus on high growth segments including automotive, systems business and commercial transportation

#### Decarbonization

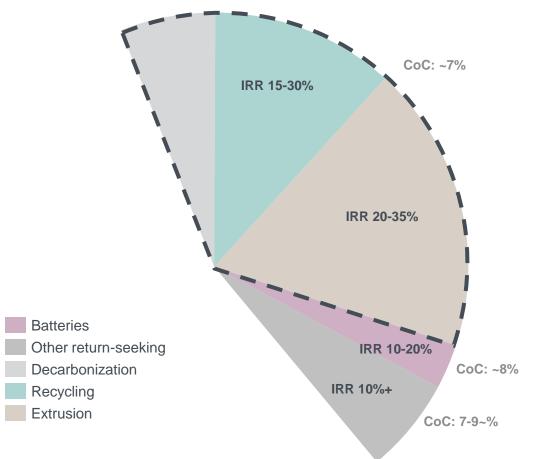
- Alunorte Fuel switch project (IRR 20+%) and electrical boilers
- Carbon capture technology pilots in mid-term, industrial scale pilot volumes by 2030
- HalZero as technology pilots in mid-term, industrial scale pilot volumes by 2030

#### Batteries

- Focused strategy within sustainable battery materials, leveraging Hydro capabilities
- Establish positions in attractive growth segments in core markets
- Core investments: Hydrovolt (recycling) and Vianode (anode material)

# Press replacements giving new capabilities and cost savings

Indicative profitability in current return-seeking and growth portfolio



**Press consolidation** Two old presses One new press 4-5 FTEs per shift Manning 2 x 8 FTEs per shift EUR 1,500K Maintenance cost p.a. EUR 350-450K Downtime 15-20% 5-10% Scrap rate 33-35% 25-28% Annual production 2x9K tonnes 16K tonnes Based on cost savings alone IRR: 30%+ **Benefits** 

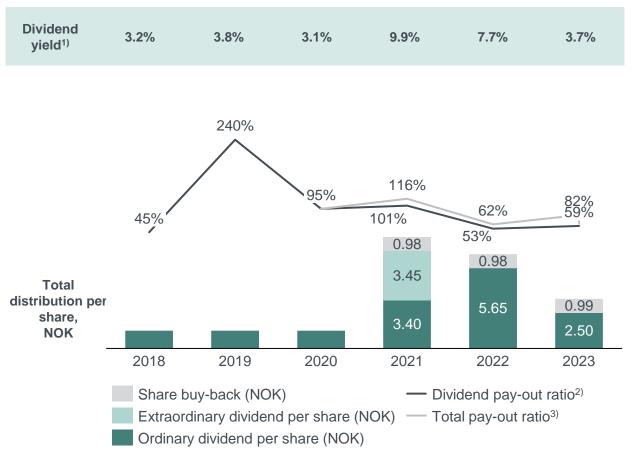
- Higher levels of automation and better ergonomics, state-of-the-art technology .
- New and improved technical capabilities to serve new segments at higher prices
- High energy efficiency, lower cost per kilo & higher EBITDA per ton

# Shareholder and financial policy

)))) Hydro

- Aiming for competitive shareholder returns and dividend yield compared to alternative investments in peers
- Dividend policy
  - Average ordinary payout ratio: 50% of adjusted net income over the cycle
  - 1.25 NOK/share to be considered as a floor
  - Share buybacks and extraordinary dividends as supplement in periods with strong financials and outlook
  - Five-year average ordinary pay-out ratio 2018-2022 of ~74%
- Maintain investment-grade credit rating
  - Currently: BBB stable (S&P) & Baa3 with positive outlook (Moody's)
  - Competitive access to capital is important for Hydro's business model (counterparty risk and partnerships)
- Financial ratio target over the business cycle
  - Adjusted net debt to adjusted EBITDA < 2x

## Historical shareholder distribution



# Hedging policy

#### Overall risk policy

- · Remain exposed to the inherent cash flow volatility related to Hydro's business
- Fluctuating with the market volatility mitigated by strong balance sheet

### Diversified business

- · Vertical integrated value chain reducing risk and volatility
- · Strengthening relative position to ensure competitiveness

### Upstream margin risk

- Currency exposure, mainly USD and BRL
- Exposed to LME and Platts alumina index prices
- Strategic and operational hedging with perspective of mitigating downside risk and securing margins (not opportunistic)
- Operational LME hedging one-month forward sale

### Downstream margin risk

- Spread between customer prices and the underlying production cost
- As such exposed to commodity prices, exchange rates, other costs, market conditions and negotiating power
- Risk is managed through operational hedging programs



# 2025 hedge position increased by 20 kt during the quarter

#### Aluminium hedges of 320-460 kt/yr 2024-25 in place

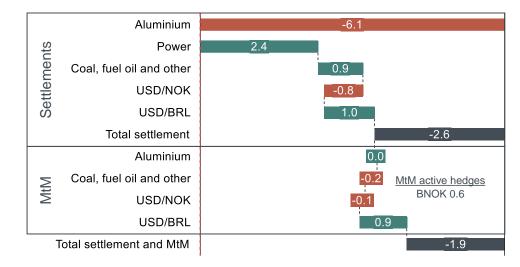
- 2024: 440 kt hedged at a price of ~2500 USD/t
- 2025: 320 kt hedged at a price of ~2500 USD/t
- Pricing mainly in NOK, with USD hedges converted to NOK via USD/NOK derivatives
- Corresponding raw material exposure partially secured using financial derivatives or physical contracts

#### **B&A and AM BRL/USD Hedge**

- USD 772 million sold forward for 2024-2026
  - USD 335 million 2024 at rate 6.19
  - USD 267 million 2025 at rate 5.33
  - USD 170 million 2026 at rate 5.48
- Aim to reduce volatility and uncertainty in Alunorte and Albras cash flows, as well as support robust cost curve positions

## Strategic hedging status

NOK Billions



## Utilizing Hydro's hedging policy to deliver on strategic ambitions

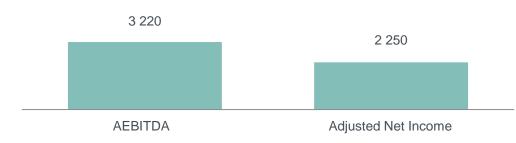
- Flexibility to hedge in certain cases
  - Support strong cost position
  - Strong margins in historical perspective, e.g., supporting ARoaCE target
  - Larger investments



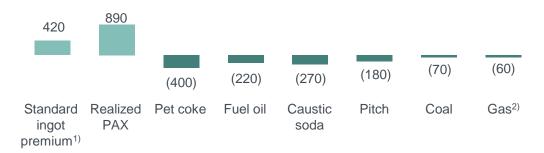
# Significant exposure to commodity and currency fluctuations



## Aluminium price sensitivity +10%



## Other commodity prices, sensitivity +10%



#### Currency sensitivities +10%

Sustainable effect:

NOK million	USD	BRL	EUR
AEBITDA	4,250	(1,020)	(100)

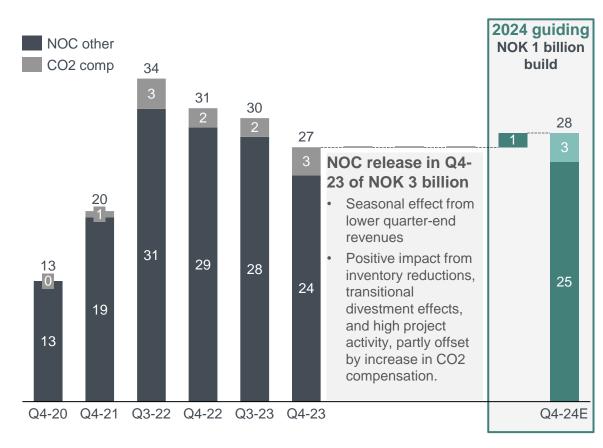
One-off reevaluation effect:

Financial items (590) 1,390 (4,370	0)
------------------------------------	----

- Annual adjusted sensitivities based on normal annual business volumes. LME 2,120 USD/mt, standard ingot premium (Europe duty paid) 190 USD/mt, PAX 355 USD/mt, fuel oil 820 USD/mt, petroleum coke 440 USD/mt, pitch 965 EUR/mt, caustic soda 360 USD/mt, coal 105 USD/mt, gas (Henry Hub) 2.74 USD/MMBtu, USDNOK 10.91, BRLNOK 2.19, EURNOK 11.66
- Aluminium price sensitivity is net of aluminium price indexed costs and excluding unrealized effects related to operational hedging
- BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated
- Excludes effects of priced contracts in currencies different from underlying currency exposure (transaction exposure)
- Currency sensitivity on financial items includes effects from intercompany positions
- 2023 Platts alumina index (PAX) exposure used
- Adjusted Net Income sensitivity calculated as AEBITDA sensitivity after 30% tax
- Sensitivities include strategic hedges for 2024 (remaining volumes for 2024, annualized)

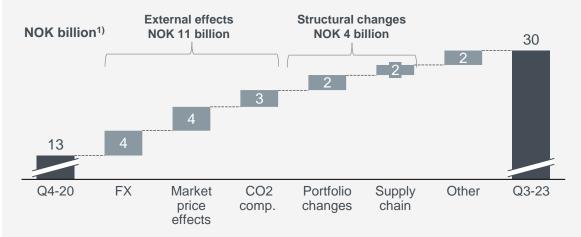
## Targeting stable Net Operating Capital in 2024

## $\frac{Net\ Operating\ Capital^{1)}}{_{NOK\ billion}}$

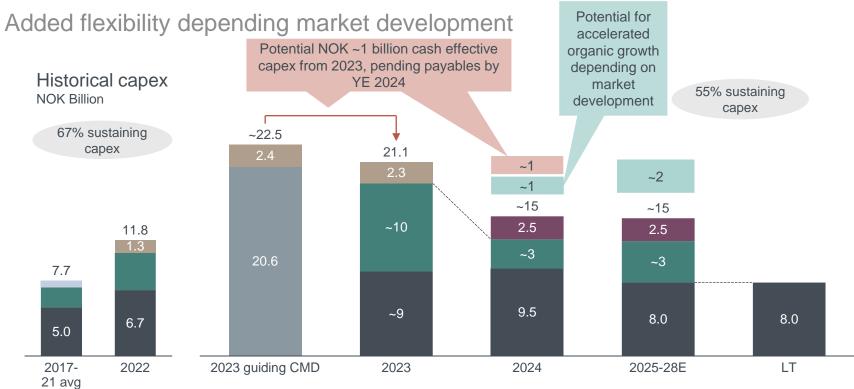


### Structural changes and market effects driving Net Operating Capital increase historically NOK 17 billion NOC increase since Q4-20 (until Q3-23)

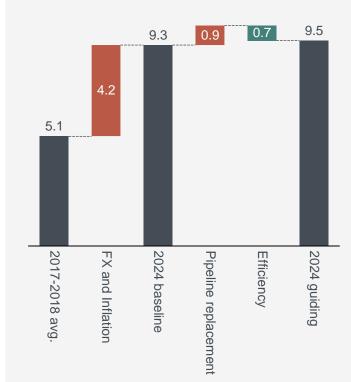
- Weakening reporting currency (NOK) (all BAs)
- Higher sales- and raw material prices (all BAs)
- Introduction of CO2 compensation scheme (AM)
- Portfolio changes (AM, HE)
- Strategic supply chain changes (AM)
- M&A and growth
- Transitional inefficiencies due to restructuring and market volatility (AM, HE)



# Underlying 2024 capex in line with last year's guidance



Sustaining capex development NOK Billion



Growth and return-seeking capex

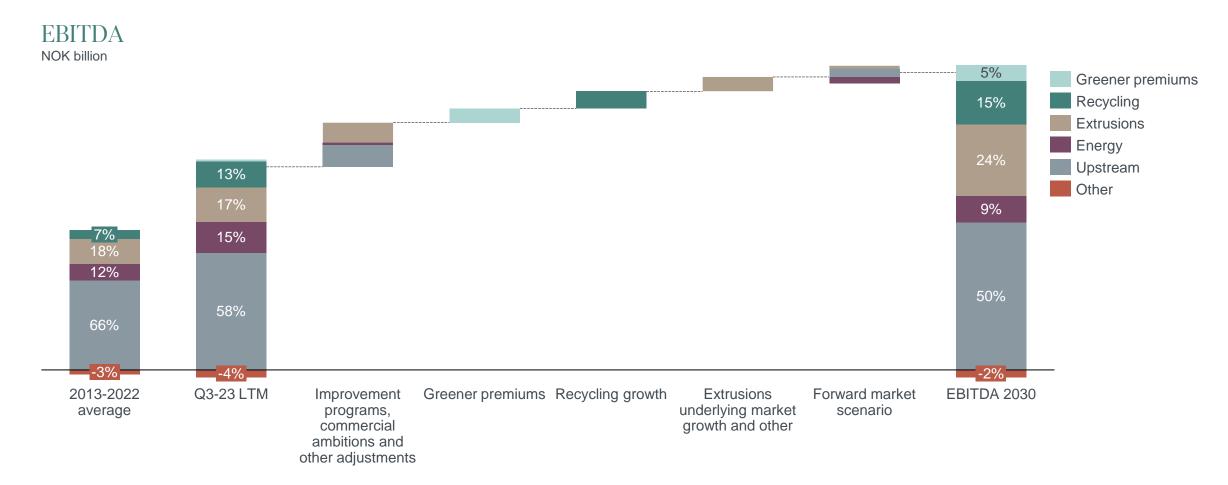
REIN (Macquarie share)

M&A Recycling Sustaining Rolling

# Capital allocation increases earnings resilience

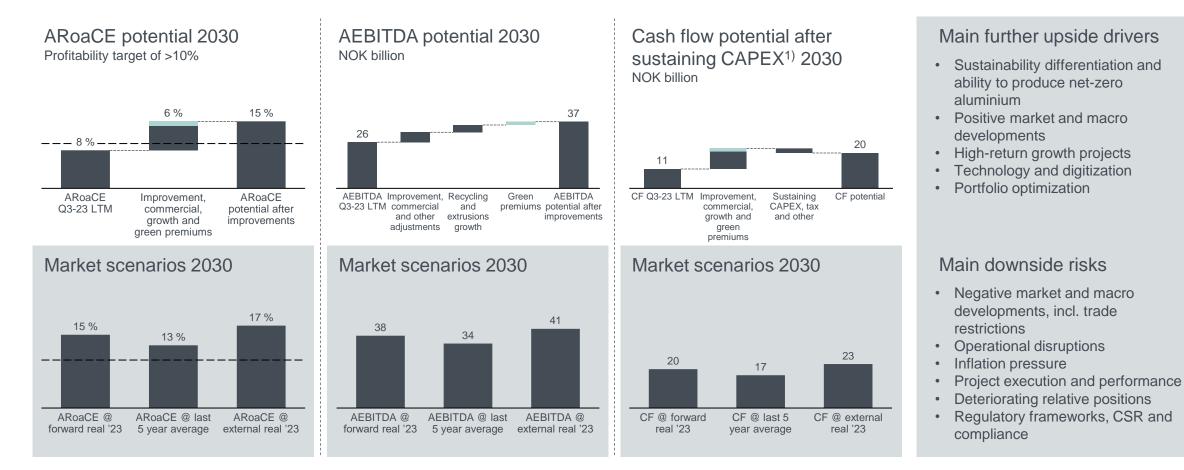


Extrusion and recycling margins, greener premiums growing as share of total earnings



# Hydro profitability growth roadmap

Main drivers – improvement efforts, growth and market development

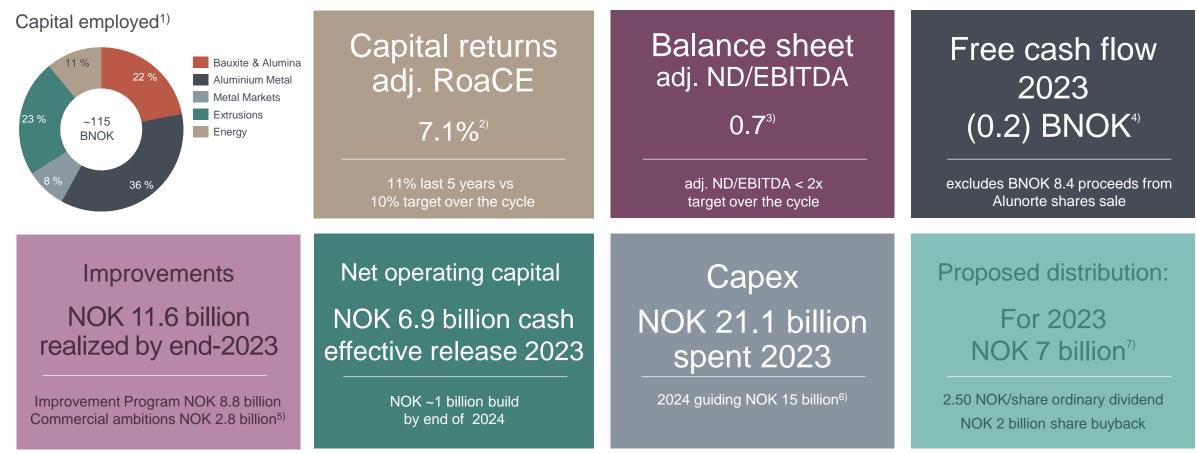


Cash flow calculated as EBITDA + tax + long-term sustaining CAPEX + other (lease payments, interest expenses)
 Assumptions and sources behind the scenarios can be found in Additional information
 Sources: External scenario is based on CRU price and premium assumptions and S&P Global FX assumptions, with adjustments as specified in the footnotes

Hvdro

# Capital return dashboard 2023





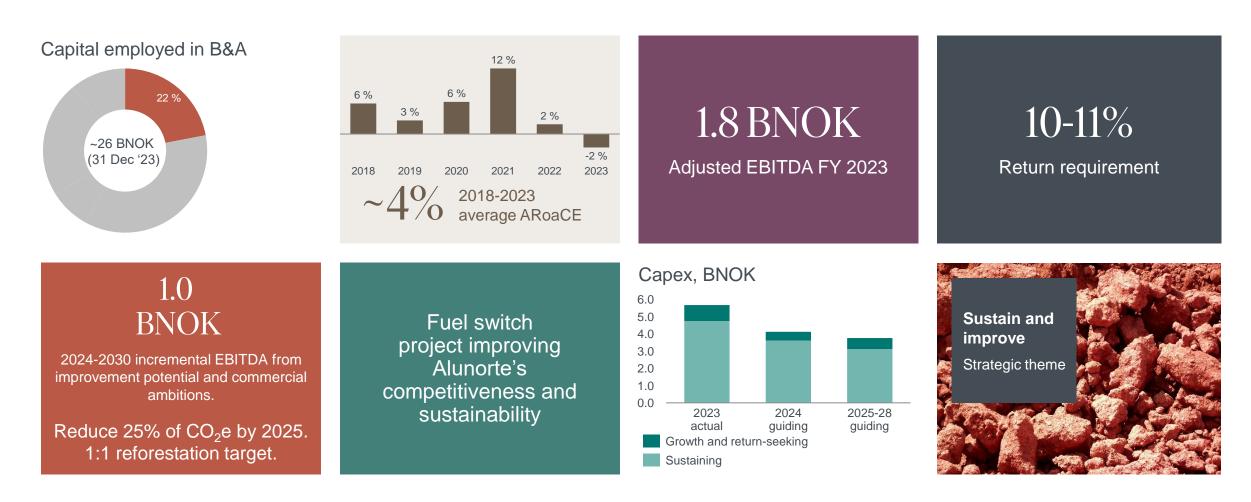
- I) Graph excludes (2.7) BNOK in capital employed in Other & Eliminations
- 2) Adj. RoaCE calculated as adjusted EBIT last 4 quarters less underlying tax expense adjusted for 30% tax on financial items / average capital employed last 4 quarters
- 3) Average adjusted net debt last 4 quarters / total adjusted EBITDA last 4 quarters
- 4) Free cash flow operating cash flow excl. collateral and net purchases of money market funds, less investing cash flow excl. sales/purchases of short-term investments
- 5) Including Energy commercial in scope, NOK 0.4 billion 2023

6) Excluding Hydro Rein. Potential for additional NOK ~1 billion accelerated organic growth depending on market development. Potential NOK ~1 billion cash effective capex payables from 2023 on top, pending payables by YE 2024

7) Pending approval from the AGM on May 7th, 2024

# Capital return dashboard for Bauxite & Alumina

Returns below the cost of capital reflecting challenging markets, embargo and operational issues during the early years

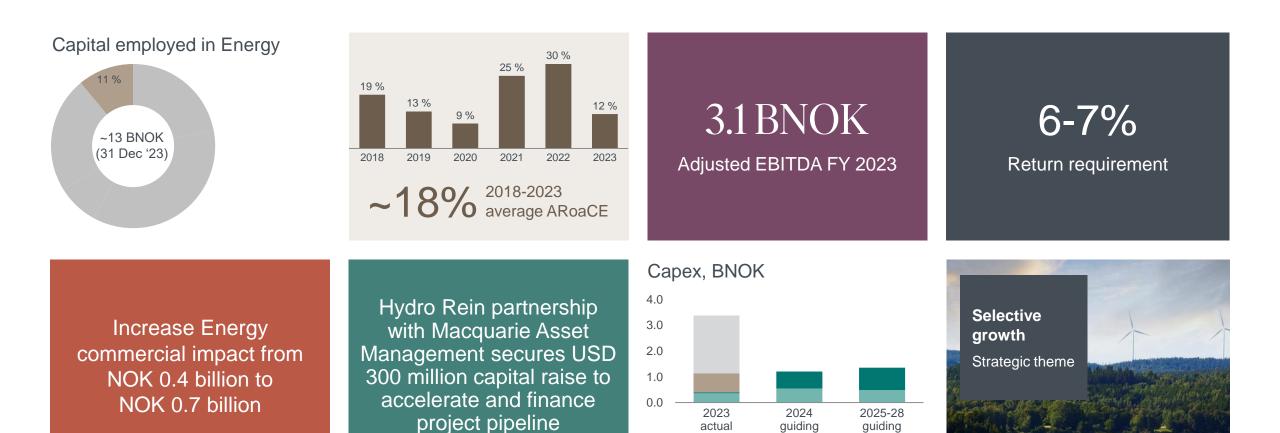




# Capital return dashboard for Energy

)))) Hydro

Returns above the cost of capital reflecting the depreciated asset base



REIN

Batteries

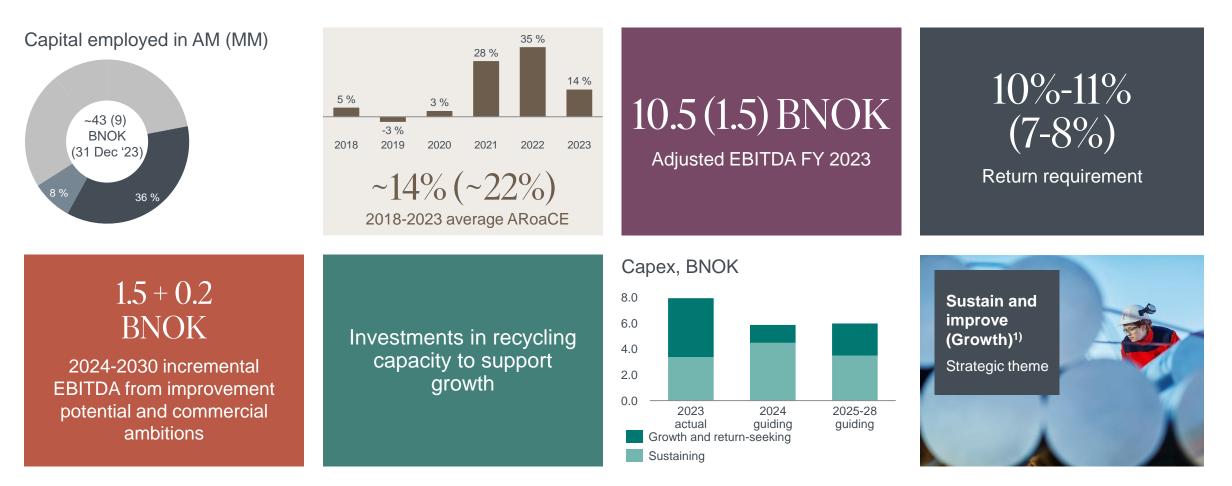
Growth and return-seeking

Sustaining

# Capital return dashboard for Aluminium Metal & Metal Markets



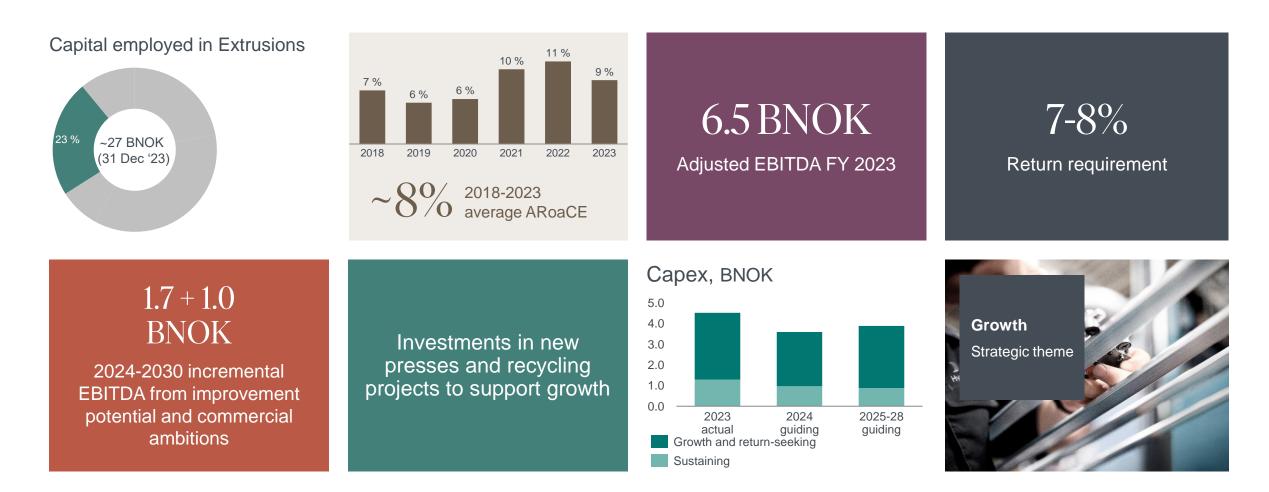
Investments in recycling capacity to support growth



# Capital return dashboard for Extrusions



Returns in line with the cost of capital reflecting leading market positions in high value segments and portfolio optimization

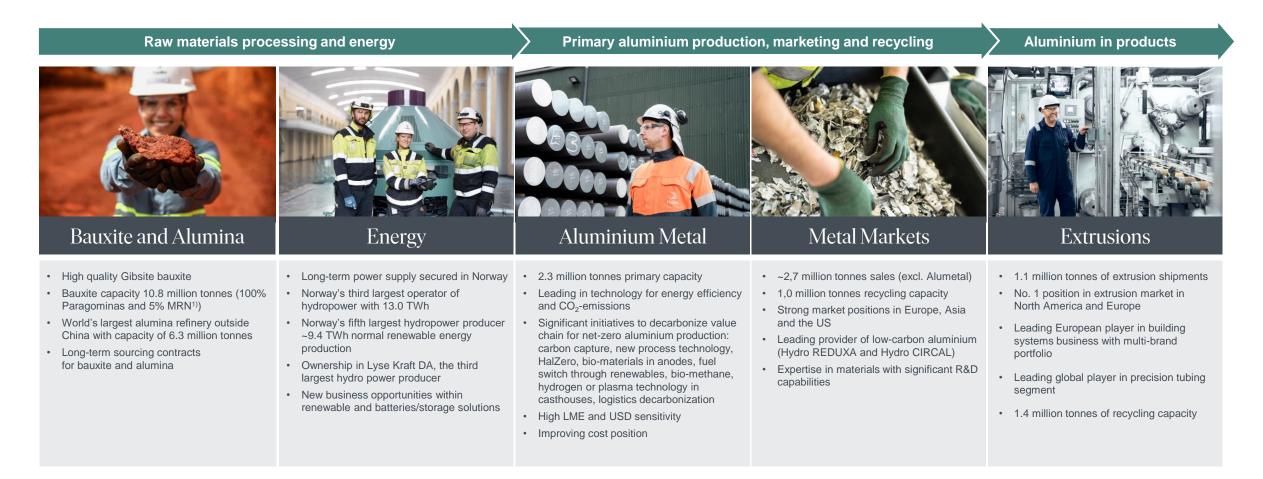




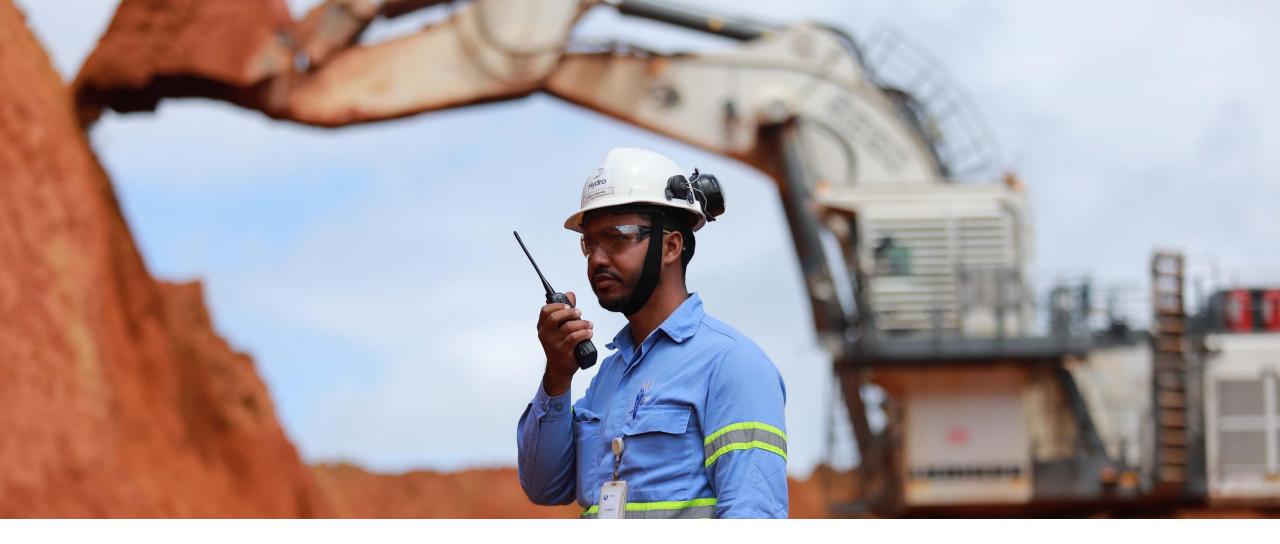
# <u>Appendix:</u> Business Areas

## The aluminium value chain

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



Hydro

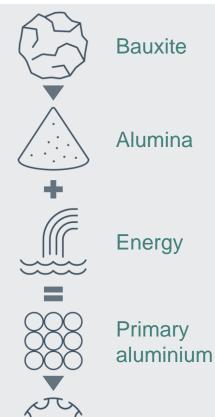


# Bauxite & Alumina

# B&A is an important enabler for low-carbon aluminium



Controlling the top of the value chain



Extrusion

We can produce among the lowest carbon aluminum in the world



Guaranteeing an integrated supply chain that follows world class ESG practices Enabling greener premiums for our primary aluminium and extrusion products

# Hydro

WE ARE FOCUSED ON IET CARBON-NEUTRALITY BY 2039 throughout our entire value chain



Hydro has the highest quality, lowest carbon and most sustainable Alumina in the world allowing us to demand a greener premium from our top customers

#### By 2025 B&A will deliver:

- + 1<sup>st</sup> Decile Energy usage
- + 1<sup>st</sup> Decile Emissions
- + Best Practice Tailings Management
- + Best Practice Residue Management
- + Best Practice Reforestation
- + Best Practice Social Investment
- Best Practice Community Engagement
- = Global EPD + greener premium



# Industry frontrunner with robust operations

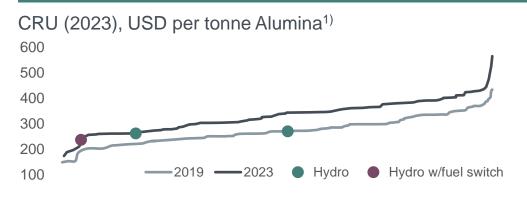


B&A have developed a more robust operation, but current market environment is challenging

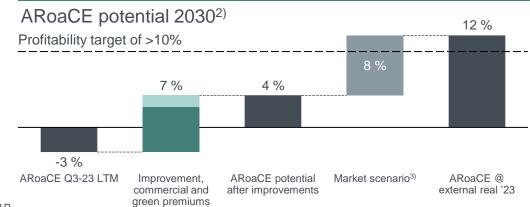
### Improved operations

- Nameplate production at Alunorte/Paragominas for the last 3 years
- Greatly improved asset integrity leading to the first award of ISO55001 to a refinery and to a bauxite mine
- Complete rebuild of the water management systems to reflect the changing climate/rainfall levels
- Successful deployment of the press filters
- · Development and deployment of tailings dry backfill
- Strengthened key relationships both in the government and local communities
- Rebalancing alumina portfolio (Glencore deal) to reflect internal Alumina needs, returning cash to Hydro
- All while delivering some of the highest quality alumina in the world

## Competitive cost position



### Roadmap to profitability in market scenario

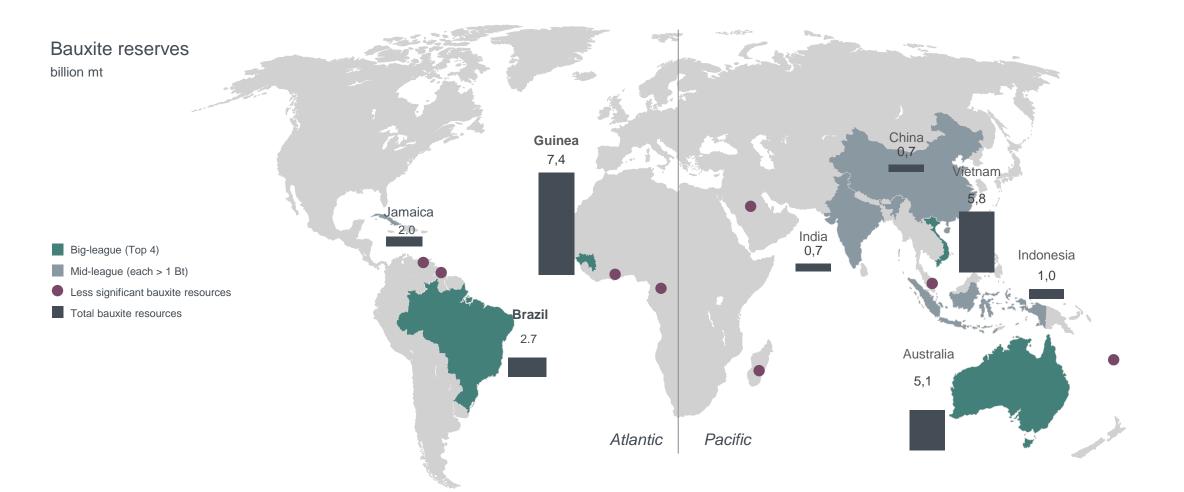


<sup>1)</sup> CRU 2023 cost curve. 2) Cash flow calculated as EBITDA + tax + long-term sustaining CAPEX. Assumptions and sources behind the scenarios can be found in Additional information. 3) Sources: External scenario is based on CRU price and premium assumptions and S&P Global FX assumptions, with adjustments as specified in the footnotes

## Large and concentrated bauxite reserves



Guinea stands out as a long-term source



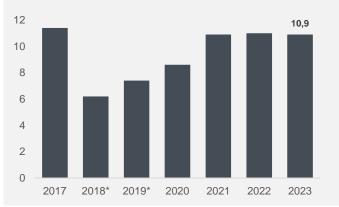
### Bauxite and alumina cluster in Para, Brazil



Paragominas bauxite mine



Bauxite production, mt (100% ownership, nameplate capacity 9.9mt)

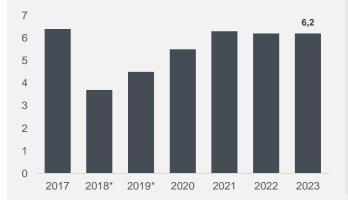


- Long-life resource
- Bauxite transported by pipeline
- Pioneering "tailing dry backfill" method for waste management

#### Alunorte alumina refinery



Alumina production, mt (62% ownership, nameplate capacity 6.3mt)



- World's largest alumina refinery outside China
- Bauxite supplied from Paragominas and MRN
- World-class conversion cost position
- State-of-the-art press filter tech to process bauxite residue
- Enhancing plant robustness to prepare for extreme weather events

#### Bauxite licenses

#### Refining and mining competencies

### External supply contracts

### Sales contract portfolio

# Hydro and Glencore partnering up to further develop Alunorte

The sale is

an important

step to

deliver on

Hydro's

2025

strategy

### Hydro balances its alumina portfolio after agreement with Glencore<sup>1)</sup>

- Hydro has sold 30% of Alunorte and 5% ownership in MRN to Glencore
- Glencore acquired an additional 40% of MRN, currently owned by Vale. This stake will be acquired by Hydro from Vale and immediately sold to Glencore on a back-to-back basis.
- The transaction has an *enterprise value of USD 1.15 billion* (including ARO).
- Net debt at Alunorte as of 31 March 2023 was USD 375 million

• Proceeds used for strategic growth investments in line with Hydro's 2025 strategy and shareholder distribution

- Alunorte is a core strategic asset, however <u>equity alumina production</u> will be more balanced
- Continue to reduce emissions from Alunorte through fuel switch project and electrification of coal boilers, <u>targeting first decile position on global</u> <u>carbon curve by 2025</u>
- <u>Strong commitment to continue</u> <u>development of social projects</u> to improve the lives and livelihoods in nearby communities



- Location: Barcarena, state of Pará, Brazil
- Annual capacity: 6.3 mt/year
- Employees: 7 900<sup>1)</sup>
- Pre transaction ownership: **92%**
- Post transaction ownership: 62%



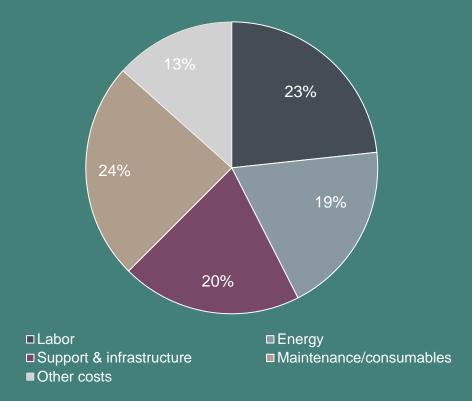
- Location: Oriximiná-PA, Brazil
- Annual capacity: **12.5mt /year**
- Employees: 5 200<sup>1)</sup>
- Pre transaction ownership: 5%
- Post transaction ownership: **0%**

1) Includes contractors

## Bauxite operational mining costs in Paragominas

- Labor cost
  - Influenced by Brazilian wage level
- Energy cost
  - Refers to Power and fuel cost
- Maintenance and consumables
  - Mainly influenced by Brazilian inflation
- Large fixed cost base (labor and maintenance) participation.

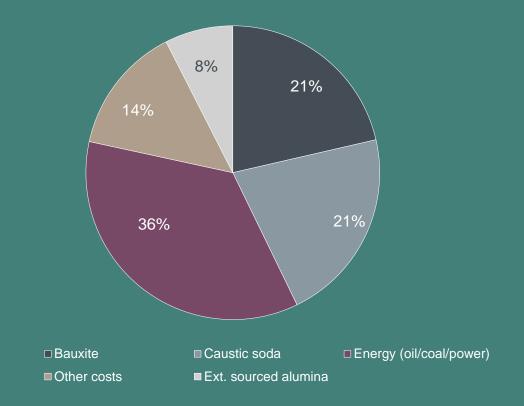
### Indicative Paragominas bauxite mining costs



## Favorable integrated alumina cost position

- Implied alumina cost 2023 USD 340 per mt<sup>1)</sup>
  - Alunorte, Paragominas and external alumina sourcing for resale
- Bauxite
  - Internal bauxite from Paragominas at cost, sourced bauxite from MRN
  - External bauxite sales <sup>2)</sup>
- Energy
  - 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

### Indicative implied alumina cost composition



2) Until December 1<sup>st</sup>, 2023 (Glencore transaction)

<sup>1)</sup> Realized alumina price minus Adjusted EBITDA for B&A, per mt alumina sales

## Strong commercial organization maximizing the value of B&A assets



- 4.0-4.5<sup>2)</sup> million mt of external alumina sourced annually
- 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

#### Long positions in alumina

- Pricing should reflect alumina market fundamentals
- Selling 3-4 million mt per year of alumina externally
  - Index pricing<sup>1)</sup> (the new norm) and short to medium-term contracts
  - New contracts: 100% sold on index, except hydrate and short-term contracts, normal terms 1-3 years
  - Legacy LME-linked contracts: priced at ~14% of LME 3M

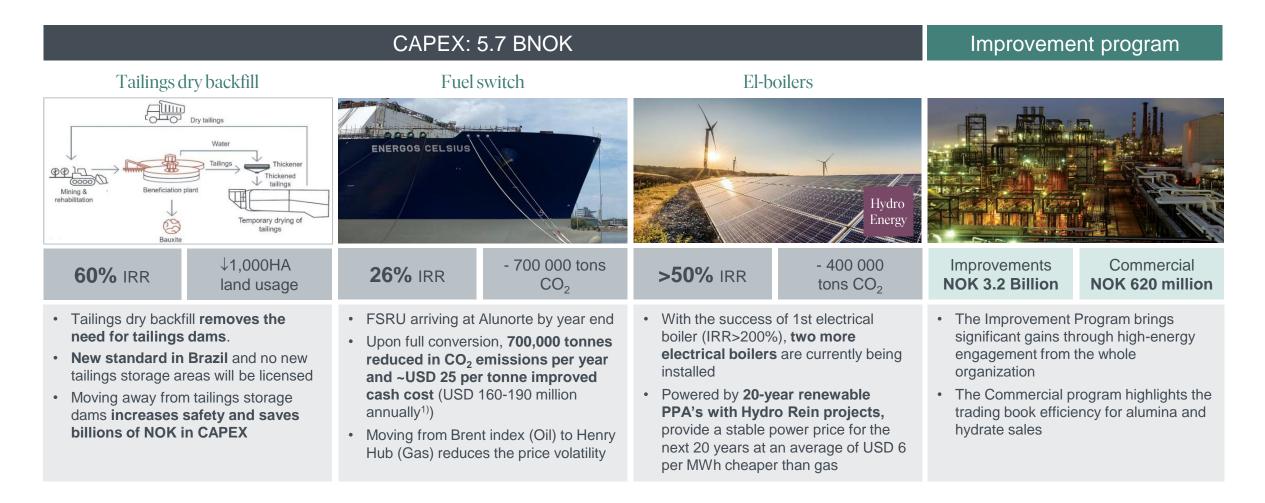


- 1) Rounded figures. Indicating volumes available for index pricing. Includes minority sales priced at % of LME with floor. Based on annual sourced volumes of around 2.5 mill t, assuming normal production at Alunorte.
- 2) Including volumes repurchased from Glencore under the term of the sale of 30% equity in Alunorte

Hvdro

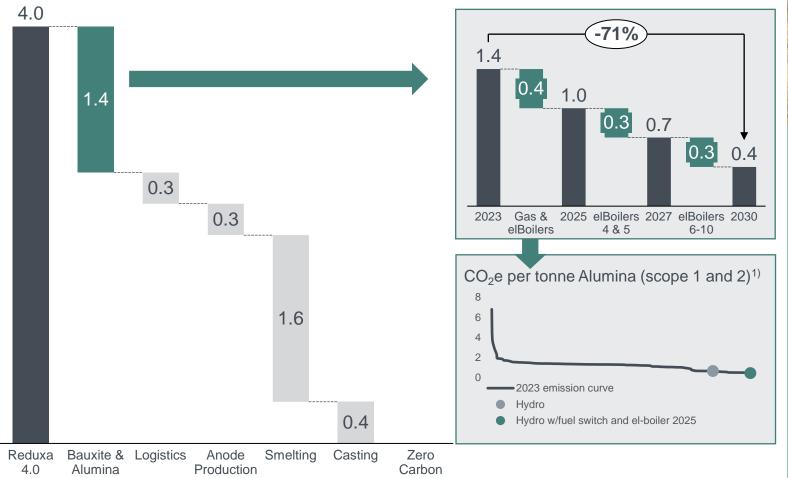
### Focus on driving profitability in a sustainable way





## Alunorte to reduce carbon 70% by 2030

### $CO_2 e$ emissions kg $CO_2$ /kgAl





- Already 1<sup>st</sup> Quartile emissions in 2023
- Fuel Switch and three el-boilers will move Alunorte to one of the lowest smelter grade Alumina available (project being executed)
- Further two el-boilers will remove the need to use coal by 2027
- An additional five el-boilers will give us the ability to produce steam without emissions





### Contributing to nature positive





### Reforestation

- **Best practice reforestation program** in Paragominas, exceeding 1-to-1 replanting on a strict a three-year cycle:
  - Year 1 = Deforestation
  - Year 2 = Mining
  - Year 3 = Reforestation
- Working together with multiple universities and researches
- Expanding the program and start rehabilitation outside of our mine, contributing towards Nature Positive



### Residue management

- Hydro is current best practice in Residue management averaging 0.7T of Residue per T of alumina
- Entered into an agreement with Wave Aluminium – creating the potential to extract up to 1 million tons of carbon free pig iron from residue each year
- The first phase of the treatment plant will go live in 2024 and will be capable of processing 50,000T of Residue

### Investing in the community is our license to operate





#### **Social Infrastructure**

- Construction of 9 Terpaz community centers (3 already built) targets security, income generation and access to basic services to 1,500 people per day
- Construction of a Technical School with the capacity to educate 1,200 students per year



#### **Community Projects**

- Investment in community-based projects benefitted 80 thousand people since 2018
- 60 thousand people with access to education
- 1,400 family farmers with access to technical support



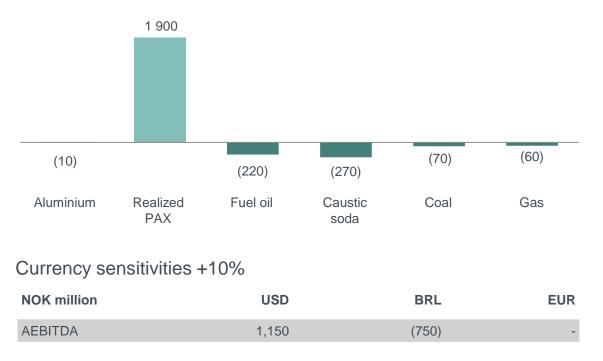
#### **Stakeholder Engagement**

- Transparency, dialogue and volunteer work are performed by a dedicated team
- 178 community leaders are involved in a dialogue forum called Sustainable Barcarena Initiative
- **500 volunteers** worked to benefit 14 thousand people and 70 local organizations

### Bauxite & Alumina sensitivities



### Annual sensitivities on adjusted EBITDA if +10% in price NOK million



#### Revenue impact

• 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

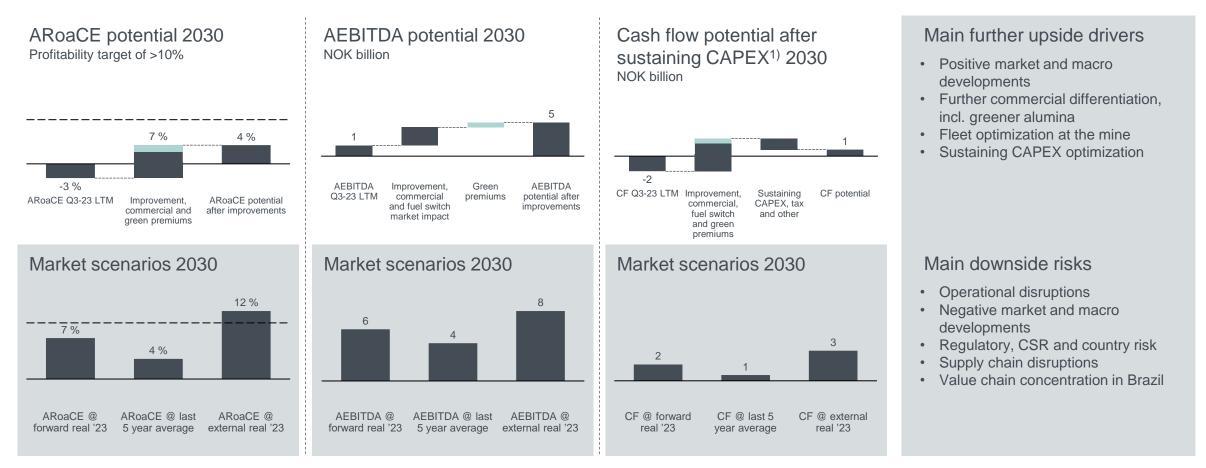
#### Energy

- ~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)

Annual adjusted sensitivities based on normal annual business volumes. LME 2,120 USD/mt, standard ingot premium (Europe duty paid) 190 USD/mt, PAX 355 USD/mt, fuel oil 820 USD/mt, petroleum coke 440 USD/mt, pitch 965 EUR/mt, caustic soda 360 USD/mt, coal 105 USD/mt, gas (Henry Hub) 2.74 USD/MMBtu, USDNOK 10.91, BRLNOK 2.19, EURNOK 11.66 BRL sensitivity calculated on a long-term basis with fuel oil assumed in USD. In the short-term, fuel oil is BRL-denominated. 2023 Platts alumina index (PAX) exposure used

### Bauxite & Alumina profitability growth roadmap

Main drivers – fuel switch, commercial differentiation and market development



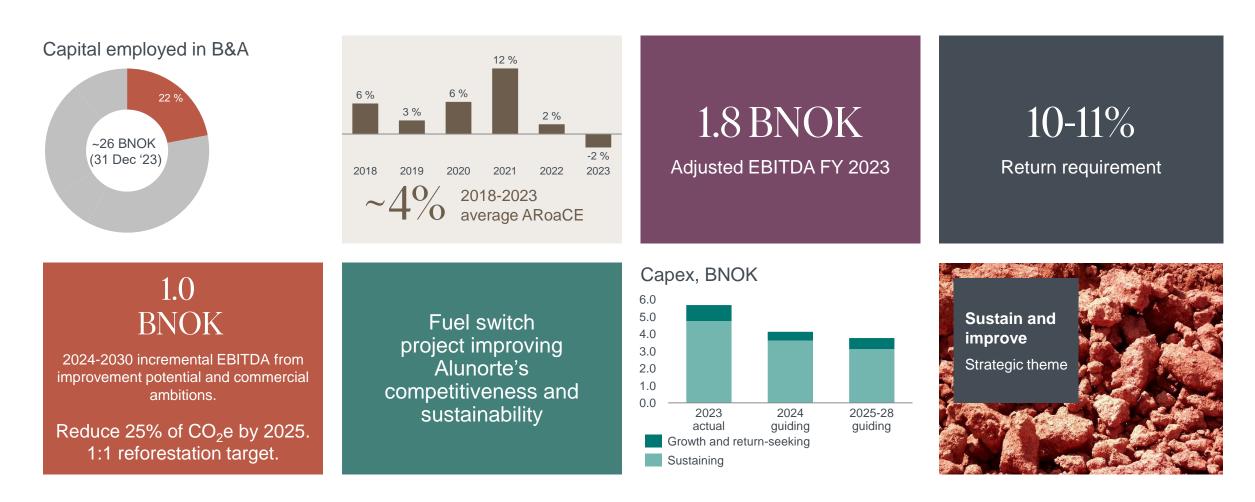
Assumptions and sources behind the scenarios can be found in Additional information

Sources: External scenario is based on CRU price and premium assumptions and S&P Global FX assumptions, with adjustments as specified in the footnotes

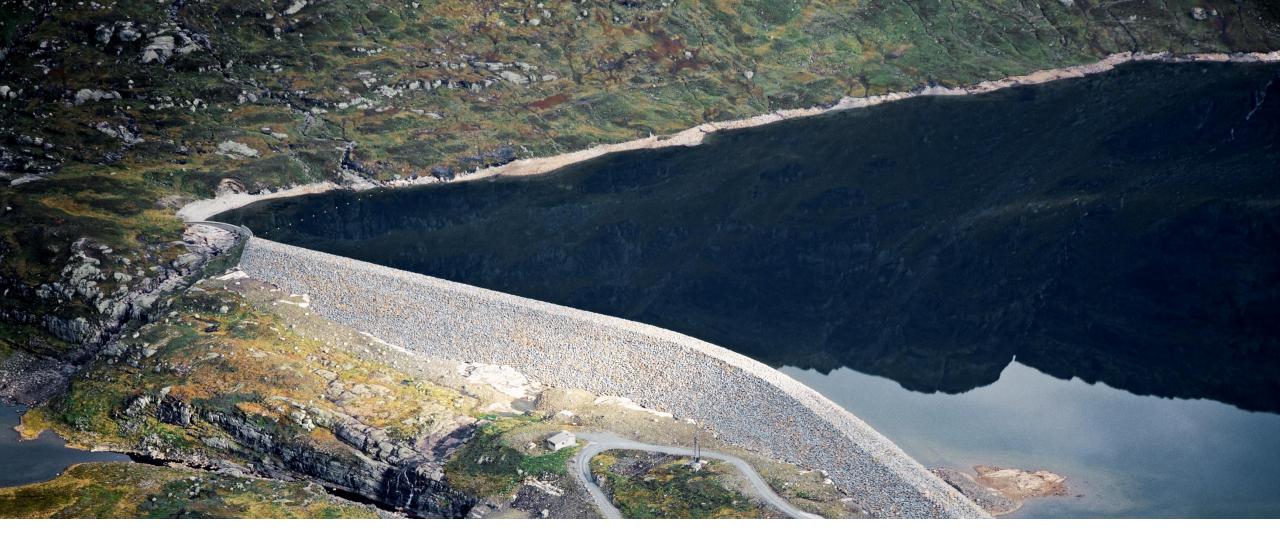
Hvdro

### Capital return dashboard for Bauxite & Alumina

Returns below the cost of capital reflecting challenging markets, embargo and operational issues during the early years

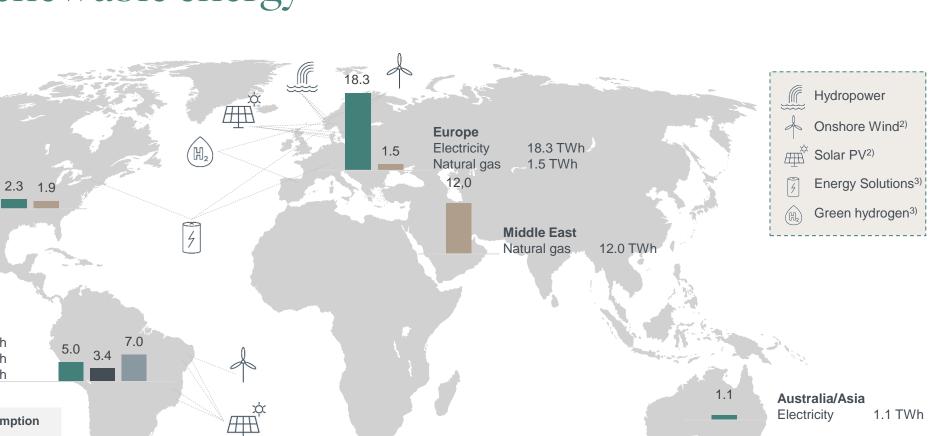






## Energy

## Pioneering the green aluminium transition, powered by renewable energy



Based on equity-adjusted 2022 values for Norsk Hydro's bauxite mines, alumina refineries, smelters, remelters and extrusion plants.
 Only projects in operation and under construction or announced.
 Only pilot projects

15.4

Hydro's energy consumption<sup>1)</sup>

**North America** 

2.3 TWh

1.9 TWh

5.0 TWh

3.4 TWh

7.0 TWh

Total energy consumption

7.0

South America Electricity

Coal

Electricity

Natural gas

Fuel Oil

Coal

Fuel oil

26.7

Electricity

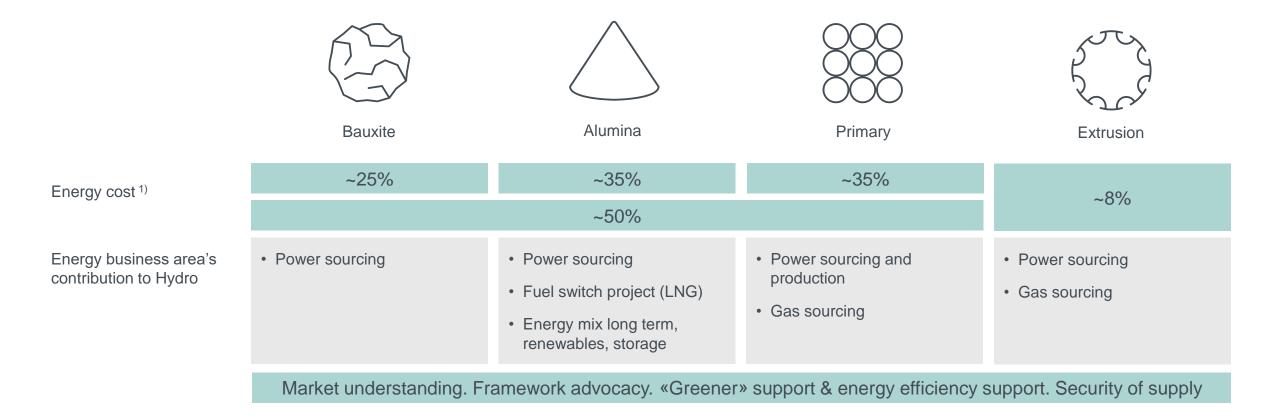
Natural gas

**Hydro** 

### Energy is a key differentiator in the aluminium industry



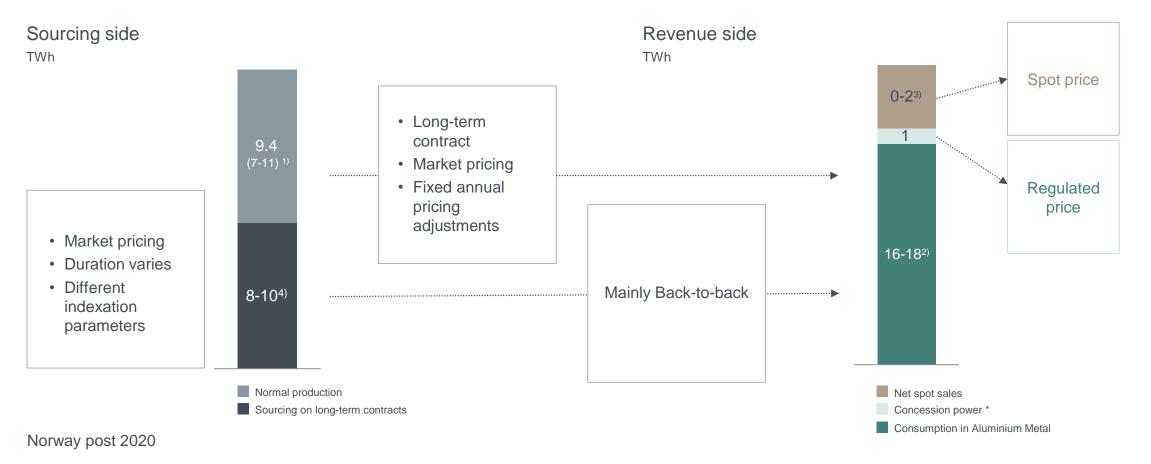
Center of energy excellence in Hydro



## Market pricing principle applied to internal contracts



Based on external price references



1) Depending on the precipitation level, hydropower production may vary from 7 TWh in a dry year to 11 TWh in a wet year

2) Consumption in AM at current production levels and at full installed capacity

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

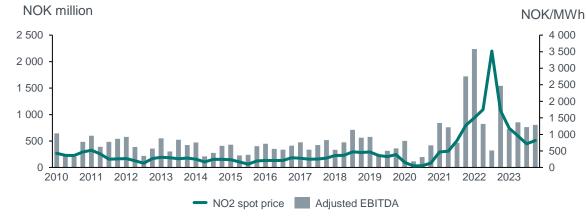
4) Depending on status of sourcing

### Energy EBITDA development









- Production and market prices strongly linked to hydrological conditions
- Seasonal market variations in demand and supply. Gains or losses may occur from delink between area prices arising due to transmission capacity limitations in the Nordic area
- Power portfolio optimized versus market
- Lift in annual EBITDA contribution from 2021
  - Positive impact from expiry of legacy supply contract from 2021
  - 8 TWh internal contract for power sales to Aluminium Metal in Norway effective from 2021-30
- Stable and competitive production cost base:
  - Mainly fixed costs
  - Volume-related transmission costs
- Maturing portfolio growth options; emphasis on flexible production & selected geographies

### Norwegian power market surplus in question

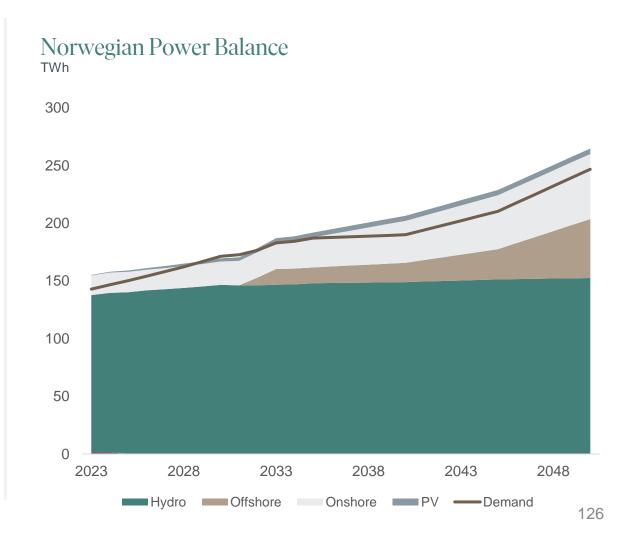
Public opposition to onshore wind parks limiting the effect of attractive renewable resources

Market uncertainty prevails

Power market balance weakening (short-medium term)

Demand from electrification and new industries outpaces supply in the short end

Lack of certainty regarding timing of new offshore wind areas



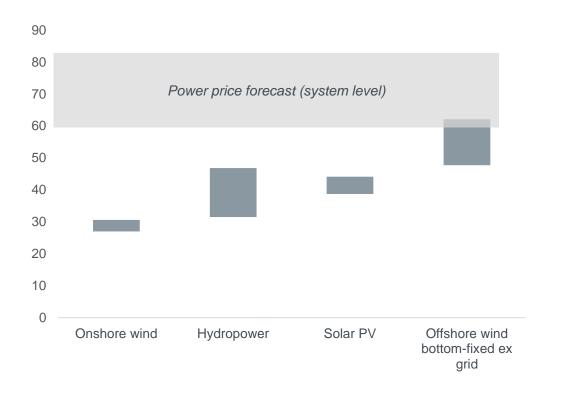


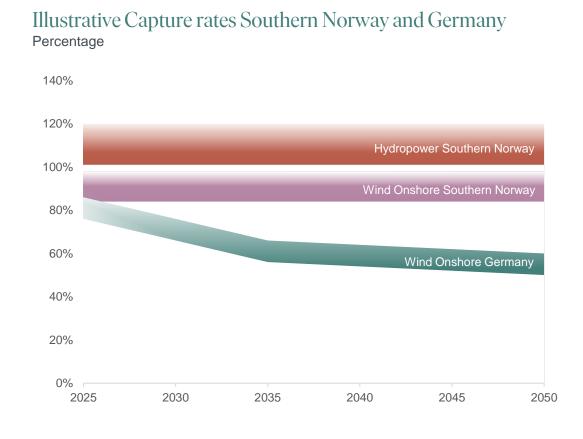
### Norwegian power projects remain attractive



Attractive resource base and cost level, and onshore wind is enabler for renewables at low shaping cost

### Range of LCOE and Nordic System price to $2030^{1\!\text{)}}$ 2023 EUR per MWh





#### \*For year 2022 and 2023

## Wind and hydropower interplay is key for future system

12000

10000

8000

6000

4000

2000

Ω

Hydro power production MWh/h

NO2 Week 6 2023 ■ Hydro power ■ Wind power 12000 10000 8000 MWh/h 6000 4000 2000 0 6, feb. 7, feb. 8, feb. 9, feb. 10, feb. 11, feb. 12, feb. Hours

Hourly Total

Share of wind production in NO2 is currently 10-12 %\*

Flexible hydropower production adjusts according to intermittent wind production

6. feb. 7. feb. 8. feb. 9. feb. 10. feb. 11. feb. 12. feb.

Hours

Hourly per source

NO2 Week 6 2023

-Hydro (LHS) -Wind (RHS)

1600

1400

1200

1000

800

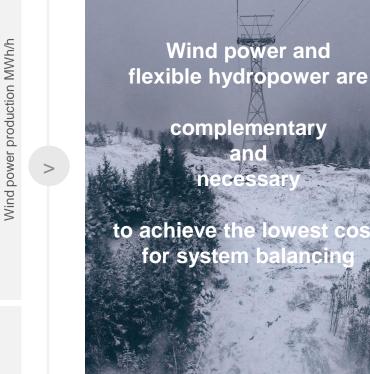
600

400

200

0

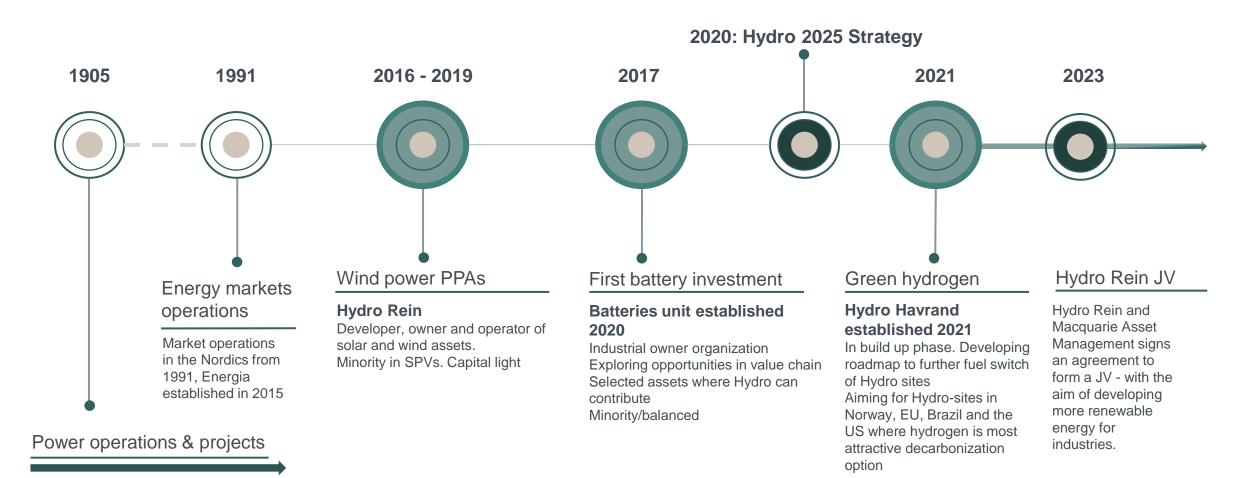
Wind power and





### Pursuing growth opportunities at different stages

Realizing value potential

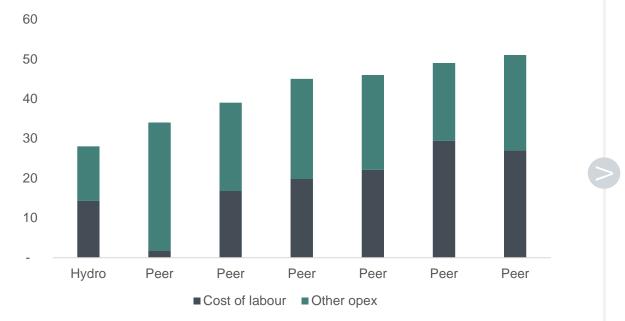


**Hydro** 

# Energy: Strong production platform, market performance and growth opportunities



### Resource spend Norwegian hydropower players 2022 NOK per MWh



#### Industry leader on cost and operational performance

### Strong platform for value creation

- EBITDA "platform" from operations
  - 8 TWh on long term contracts (predictable prices)
     + 2 TWh (average) net long spot volume in merchant market
  - App. NOK 3.5 billion LTM adjusted with normal production and no area price gain<sup>1)</sup>
- Commercial contribution of app. NOK 400
   million (average last years) comes in addition
- Maturing portfolio growth options; emphasis on flexible production and selected geographies

## Energy assets and unique competence drive value creation across Hydro



Strong platform for production, sourcing and advisory

L

**Operations and projects:** HSE excellence, operating 40 power plants across Norway (hydropower and wind). Large scale project execution across new units and Hydro



**Commercialize positions:** PPA originator, from "as produced" to PPA profile, highly competitive sourcing and optimal energy solutions

<u>₹</u>

**Market, grid & regulatory insight:** Strong market presence and insight, monitoring regulatory initiatives across Norway, the EU and Brazil. Grid and infrastructure development

### Decarbonizing Hydro and external industries

Decarbonizing Hydro

- Power sourcing, managing and matching profiles and consumptions
- Hydro Rein offering renewable power and energy solutions
- Hydro Havrand replacing fossil fuels with green hydrogen
- Hydrovolt delivering post consumer aluminium scrap from used EV batteries

Decarbonizing industries

- Investing in renewables in the Nordics, Europe and Brazil and PPAs to external customers
- Battery materials investments focused on reduced CO<sub>2</sub>footprint from LCA<sup>1</sup> perspective
- Green hydrogen to fuel switch industries and transport

### Position and capabilities across entire value chain

Major renewable energy producer, market player and offtaker

### **In Operation**

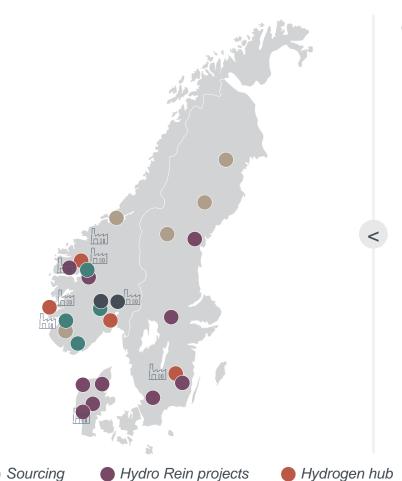
Hydropower in Norway (equity): 9.4 TWh Hydropower in Norway (operator): 13 TWh Wind power in Norway (operator): 0.7 TWh

### Sourcing

Hydropower in the Nordics: 6 TWh Wind power in the Nordics: 4.2 TWh\*

#### Hydro Rein projects under development

Wind power in the Nordics: 4.4 TWh Solar power in the Nordics: 1.1 TWh



#### Offtake Aluminium Metal

Norwegian smelters: 17 TWh

#### **Offtake Extrusions**

Industrial offtake

Selected Extrusion plants: 0.1 TWh

### **Potential offtake Batteries**

Potential sites portfolio companies: 1 TWh

#### Potential offtake green Hydrogen

Hydrogen hubs at selected strategic sites

\* Sourcing volumes in 2023/2024 affected by disrupted delivery of volume from a long-term power purchase agreement in the northern part of the Nord Pool area.

Equity power

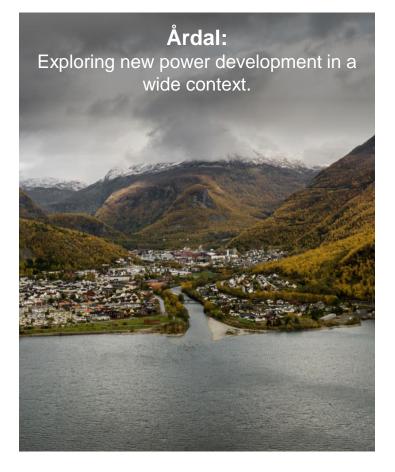
Market operations

### Status for Hydro's wind projects in Western Norway



Pursuing opportunities to develop and source power to industry





Other locations: Actively exploring opportunities for new power development close to Hydro's aluminium smelters.



# Value creation across the energy space going forward

High performance and profitability ambitions: Energy Classic ROACE > 15% Hydro Rein JV platform annual eIRR 10 – 20 % Batteries 3x invested capital, 20% TSR average annually

2

Grow value of our Norwegian portfolio through upgrading of existing hydropower plants. Increase commercial ambitions in market operations

3

Develop Hydro Rein to become the preferred supplier of renewable energy solutions to industrial customers in core markets - and a key enabler for decarbonization of Hydro



Support Hydro across business areas and geographies with fuel switch solutions including green hydrogen



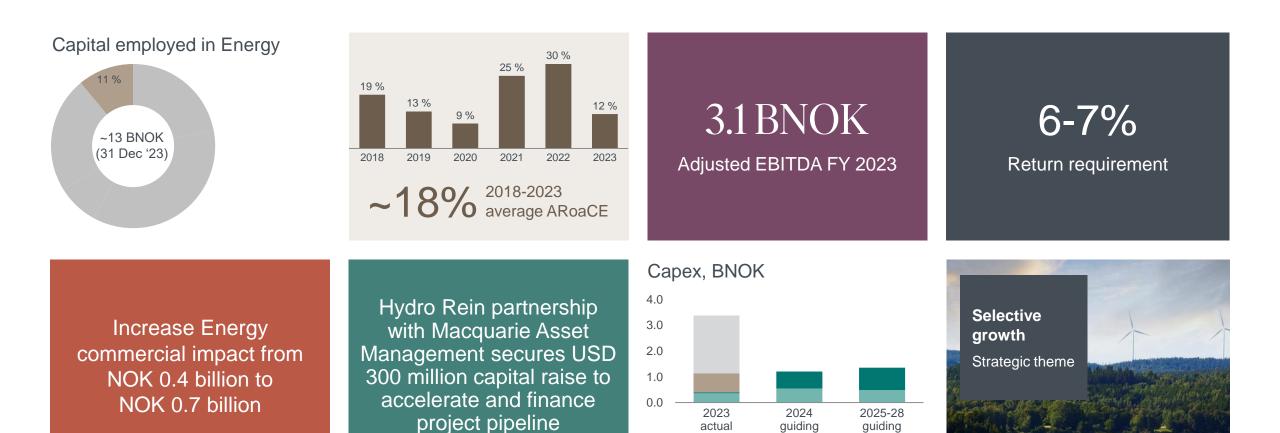
Develop our portfolio of assets delivering more sustainable battery materials, empowering the future of green mobility



### Capital return dashboard for Energy

)))) Hydro

Returns above the cost of capital reflecting the depreciated asset base



REIN

Batteries

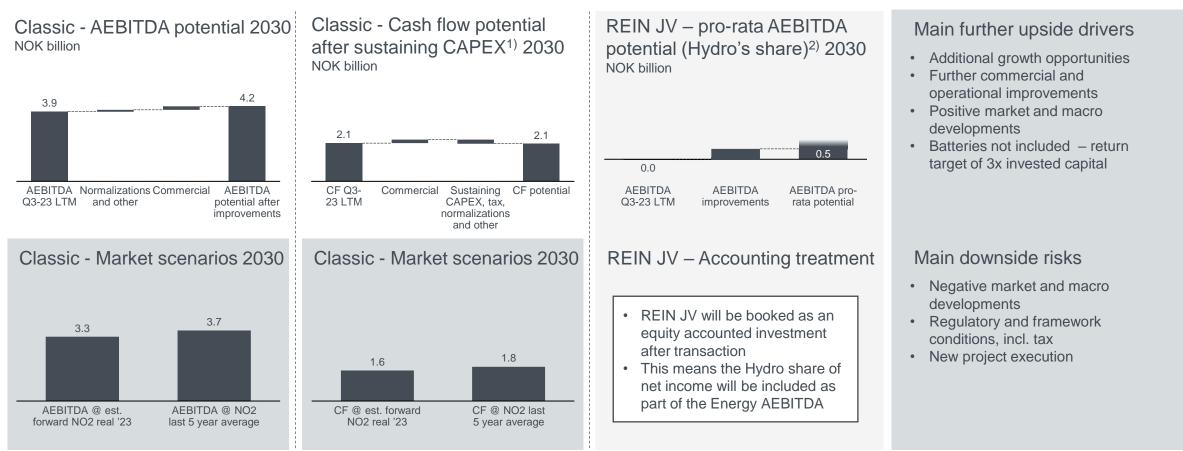
Growth and return-seeking

Sustaining

### Energy profitability growth roadmap



Main drivers – Net spot sales volume and market development



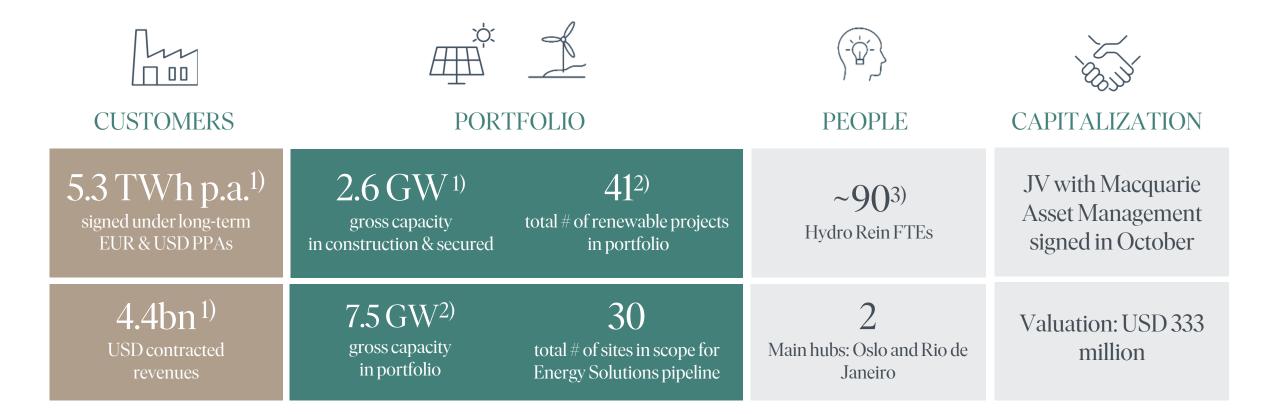
Note: Classic excluding growth from new energy areas

1) Cash flow calculated as EBITDA + tax + long-term sustaining CAPEX

2) EBITDA from assets. S&GA at JV-level not included

Assumptions and sources behind the scenarios can be found in Additional information

## Hydro Rein's journey: Fast-tracking portfolio development



Status as of January 2024

1) Including Vista Alegre.

2) Total portfolio incl. wind projects in Western Norway

3) Including new contracted employees not yet started

**Hydro** 

# Portfolio overview: Renewable energy projects in the Nordics and Brazil



	Project	Country	Price area	Technology	# Projects	Ownership (%)	Partner(s)	Gross capacity (MW)	Production (GWh)	FID	COD
UNDER CONSTRUCTION	Stor-Skälsjön	-	SE2	×	1	25%	MEAG	260	807	2021	2024
	Ventos de São Zacarias		Northeast	Ź	1	49.9%	Green Investment Group	456	1,957	2022	2024
	Mendubim	$\bigcirc$	Northeast		1	33.3%	Scatec kequinor	531	1,227	2022	2024
	Boa Sorte	$\bigcirc$	Southeast	Ш <sup>ф</sup>	1	30%		438	964	2022	2024
SECURED	Vista Alegre <sup>2</sup>		Southeast		1	30%		902	2,102	2024	2025
Pipeline <sup>1</sup>	Geisli Energi		NO1/NO2	Ź	Up to 16	49.9%	Opplysningsvesenets fond	Up to 655	730	2027+	2028+
	Snøheia		NO3	×	1	35%3		300	1,000	TBD	TBD
	Årdal		NO5	TBD	1	TBD	Årdal Energi	TBD	TBD	TBD	TBD
	SE3/SE4 portfolio		SE3/SE4	Ź	9	50%	Solus	672	2,000	2028-29	2030-31
	<b>S140</b> & <b>S148</b> (Kalmar & Skåne län)		SE4		2	100%	N/A	118	143	2027	2028
	<b>M36</b> & <b>M108</b> (Jylland)		DK1	Ш <sup>ф</sup>	2	50%	COMMERZ REAL 스	362	412	2025-27	2027-28
	M93A (Tønder)		DK1		1	100%	N/A	114	145	2025	2027
	<b>M98</b> (Randers)		DK1	ά. Έ	1	100%	N/A	296	374	2026	2027
	Fótons de Santa Conceição		Northeast	Ě	1	49.9%	Green Investment Group	133	290	2024	2026

Notes: (1) Excludes Irupé project, an early stage floating solar PV project in Brazil with up to 2 GW potential (2) Rein has secured an option to enter the project (3) Owned 100% through Hydro Energi, development services by Hydro Rein

Conshore wind

Solar PV

138

#### 139

## Current portfolio adds 2.4 TWh to REIN's captive power<sup>1)</sup>



1.7 GW gross, approximately USD 1.8 billion gross

### Renewable energy

Gross GW



Projects under construction



Status as of January 2024

- 1) Projects in construction and secured.
- Total portfolio within JV scope, including Irupé.

3) Hydro Rein's ownership before farmdown to offtakers

# Hydro Rein on track to becoming preferred supplier of renewable energy solutions to industrials



2026 Targets communicated at Hydro's Capital Markets Day 2022

**3 GW** Gross portfolio in operation and construction >500 MW added gross capacity to pipeline on average annually 400-450 MNOK<sup>1)</sup> Estimated EBITDA contribution from projects in construction

### Key numbers<sup>1</sup>): portfolio under construction – as of Q3 2023

1.7 GW<br/>Gross portfolio in<br/>operation and<br/>construction~3 BNOK<br/>Estimated pro-rata<br/>Equity Capex (net of<br/>agreed farm-downs)~410 MNOK<br/>Estimated pro-rata<br/>EBITDA2) from projects<br/>in construction1.5 GW<br/>Gross capacity added to<br/>the pipeline in 2023YTDGross capacity added to<br/>the pipeline in 2023YTD

2030 vision of continued profitable growth

Sustainable & attractive risk-adjusted returns 10-20% platform eIRR

#### **Balanced portfolio**

Between geographies and technologies

#### Services and capabilities

Covering the full value chain, capturing developer margin

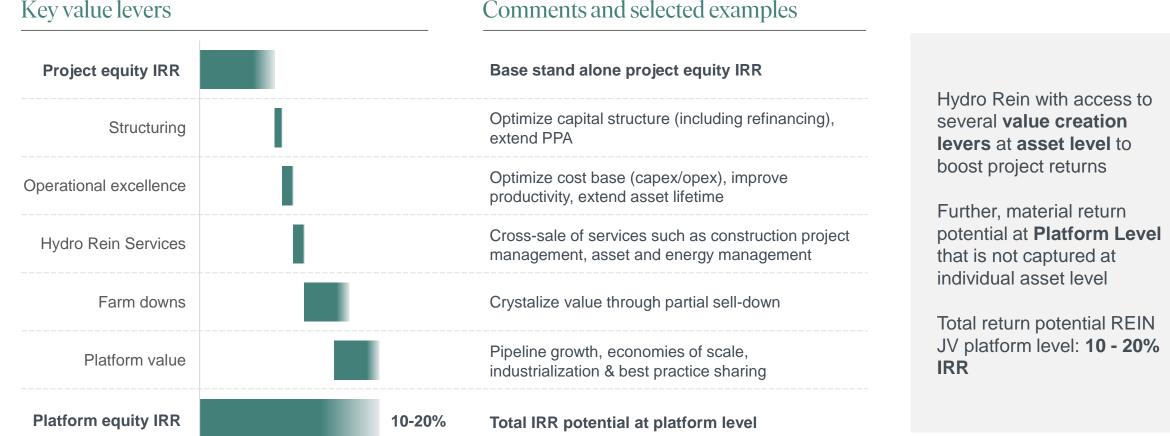
#### **Regional leadership**

REIN being one of the leading players in core geographies

### Multiple value levers to create attractive returns

Hvdro

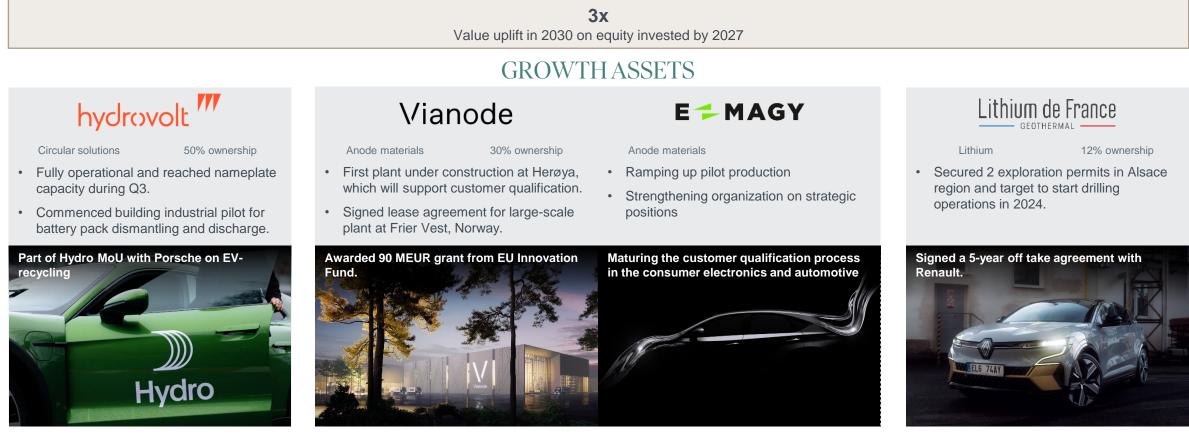
Value levers at project and platform level



### Empowering the future of green mobility

Progress in the sustainable battery materials portfolio throughout 2023

### STRATEGIC TARGETS



PORTFOLIO HOLDINGS

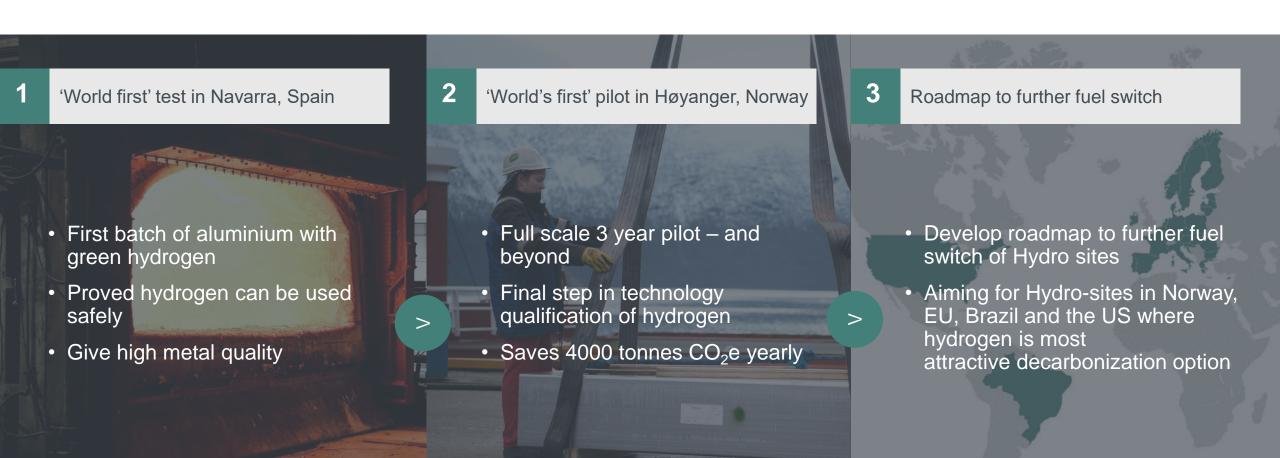


**northvolt** 0.6% owner share Hvdro

### Hydrogen breakthrough

# Hydro Havrand: World's first aluminium made with green hydrogen





### Planned 2024/2025

2023 →

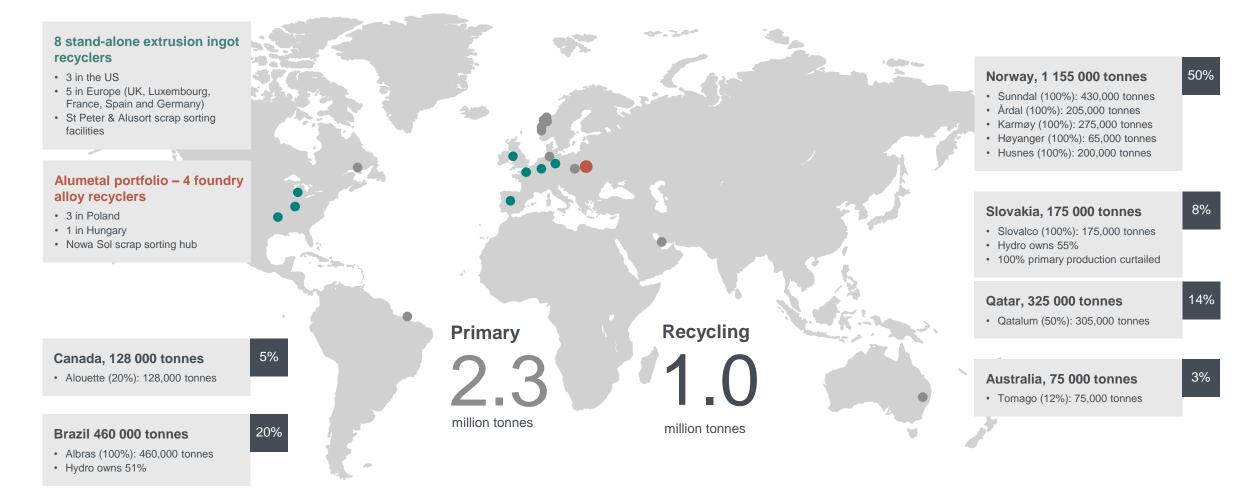


## Aluminium Metal

## Global production network





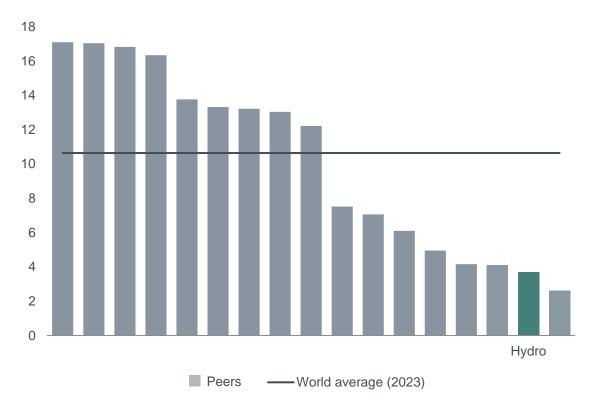


2.3 million mt is consolidated electrolysis capacity, Slovalco and Albras are fully consolidated, Tomago and Alouette are proportionally consolidated and Qatalum is equity accounted. Slovalco based on primary capacity, not production (currently 100% primary production curtailed and lower remelt). 1.0 million mt includes 0.7 mill mt in stand-alone extrusion ingot recyclers and 0.3 mill mt in Alumetal, excluding additional remelt capacity in Primary casthouses.

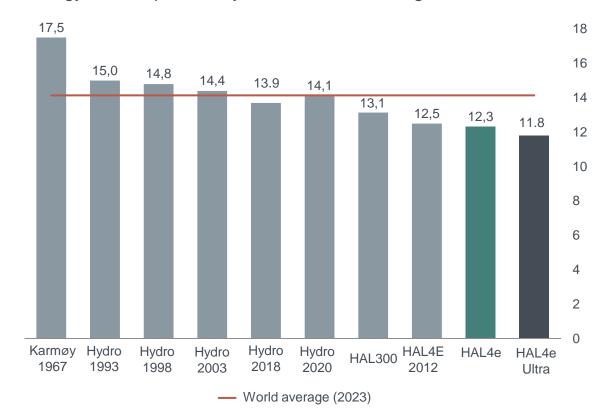
## Low-carbon footprint due to renewable energy base and industry lowest energy consumption



#### Total emissions, in tonne $CO_2/t$ al



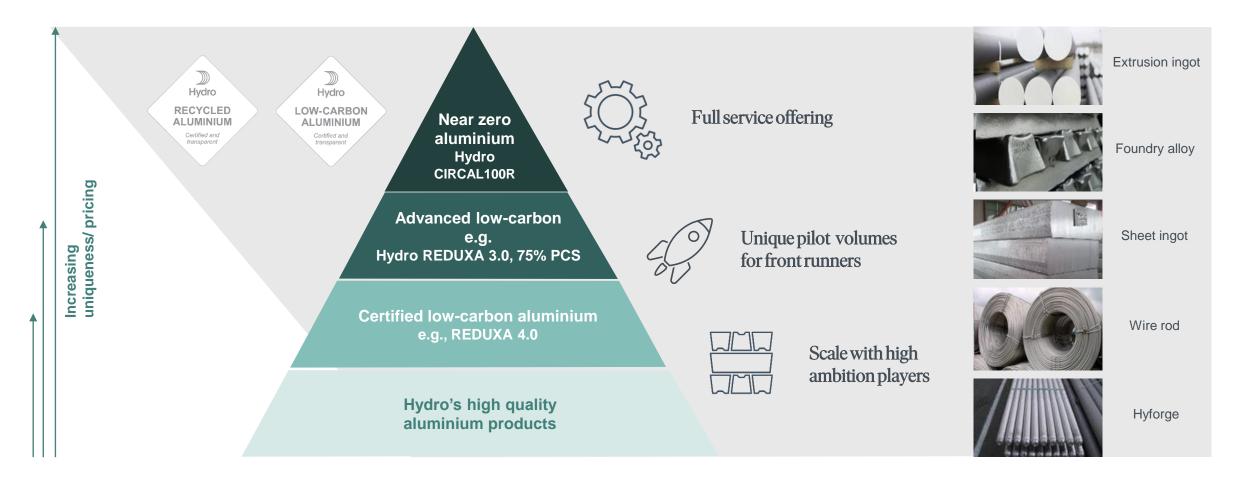
#### Energy consumption in Hydro smelters<sup>1)</sup>, kwh/kg al



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

## Hydro has a unique value proposition in aluminium

Going to market with a combined offering of primary and recycled aluminium with a full product spectrum and with tailor-made alloys is unique to AM



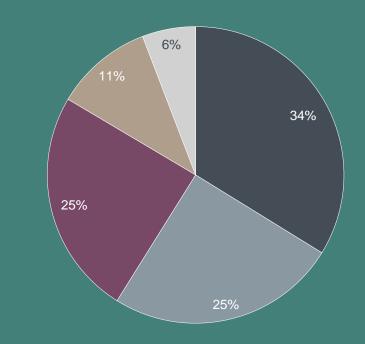
Hydro

## Competitive primary aluminium cash cost

- Primary aluminium cash cost 2023
  - All-in implied primary aluminium cash cost<sup>1,2)</sup> USD 2 225 per mt
  - LME implied primary aluminium cash cost<sup>1,3)</sup> USD 1 750 per mt
- Alumina
  - Purchases based on alumina index ~93%
  - Purchased based on LME link ~7% (only for Qatalum)
- Power
  - Long-term contracts
  - 3/4 of power need from renewable power
  - · Contracts with a mix of indexations; inflation, LME, coal, fixed
- Carbon
  - Majority of contracts are based on 1-2 years, quarterly pricing
- Fixed costs
  - · Maintenance, labor, services and other
- Other
  - Other direct costs and relining
- 1) Adjusted EBITDA margin excluding power sales Slovalco, Albras and Norwegian smelter
- 2) Realized LME aluminium price (incl.strategic hedges) plus premiums minus adjusted EBITDA margin, including Qatalum, per mt primary aluminium sold

. 4) Pie chart based on cost of producing liquid aluminium, not directly comparable to the LME or All-in implied primary aluminium cash cost

#### Liquid aluminium cash cost 2023<sup>3)</sup>



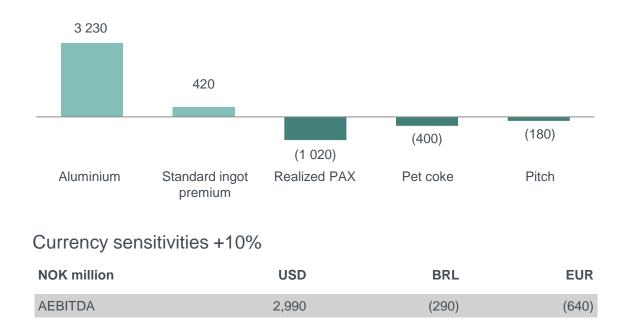
■ Alumina ■ Power ■ Carbon ■ Fixed cost ■ Other

<sup>3)</sup> Realized LME aluminium price (incl.strategic hedges) minus adjusted EBITDA margin, including Qatalum, per mt primary aluminium produced

### Aluminium Metal sensitivities



### Annual sensitivities on adjusted EBITDA if +10% in price NOK million



#### 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
- ~ 2-3 months lag
- Mainly priced on Platts index

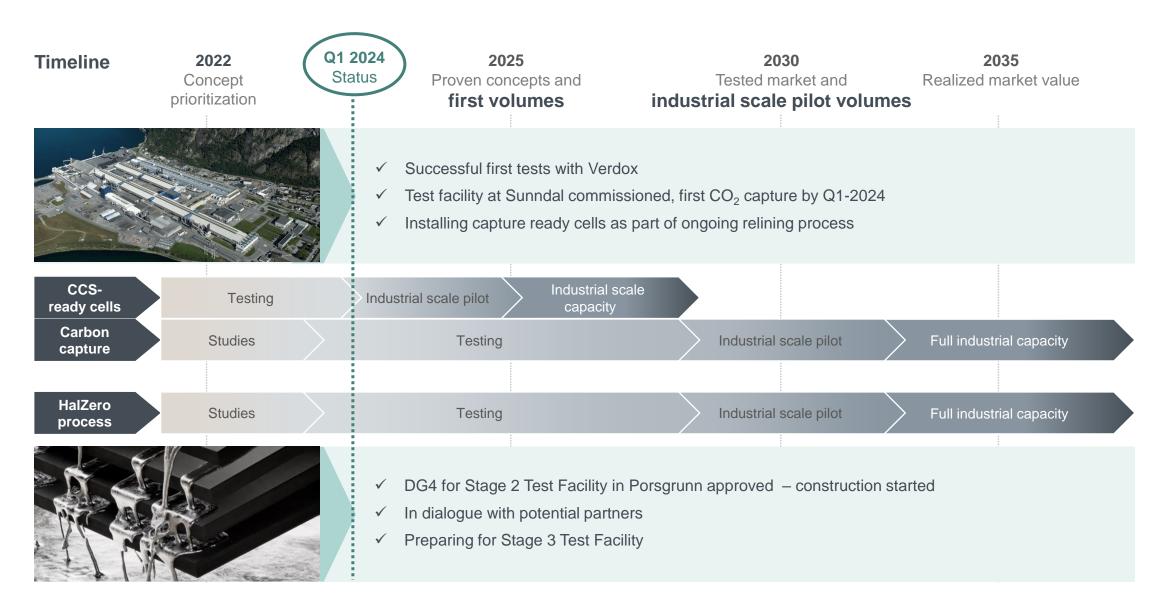
#### Carbon

- ~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

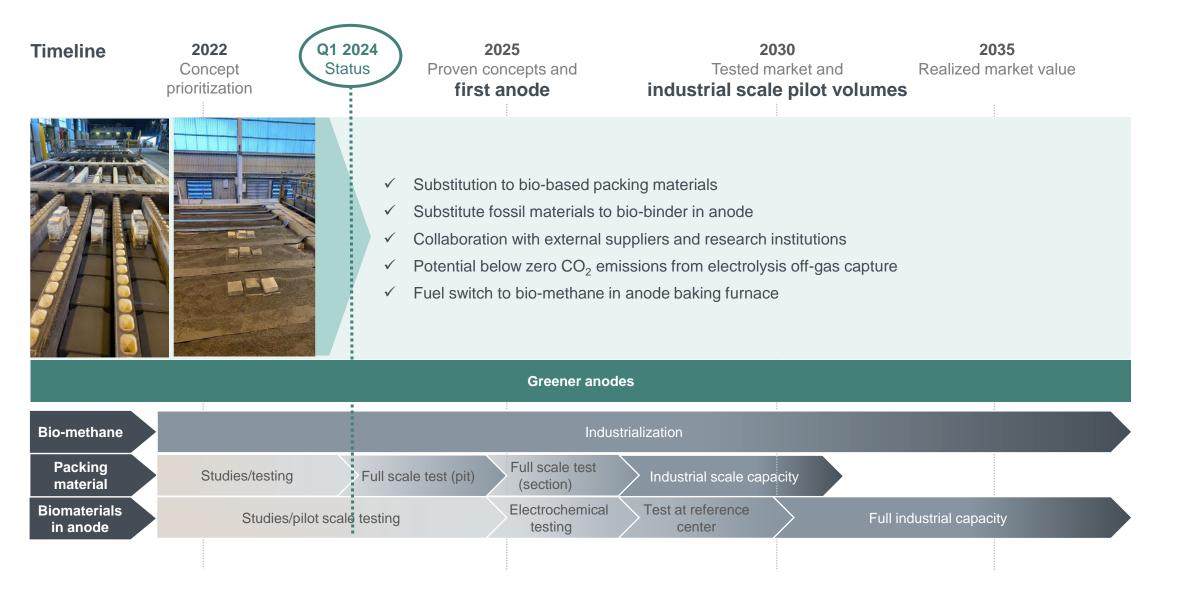
- 14.0 MWh per tonne aluminium
- Long-term power contracts with indexations

## Preparing for first CO<sub>2</sub> capture and HalZero testing at scale



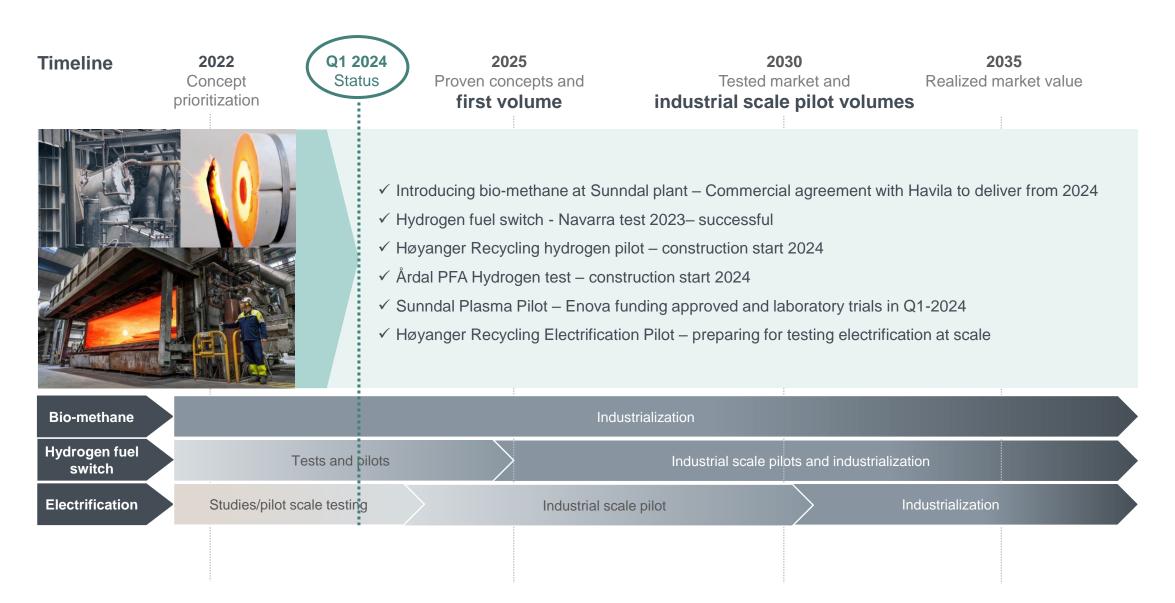
Hvdro

### Biomaterials to reach zero and below





## Bio-methane, hydrogen and direct electrification

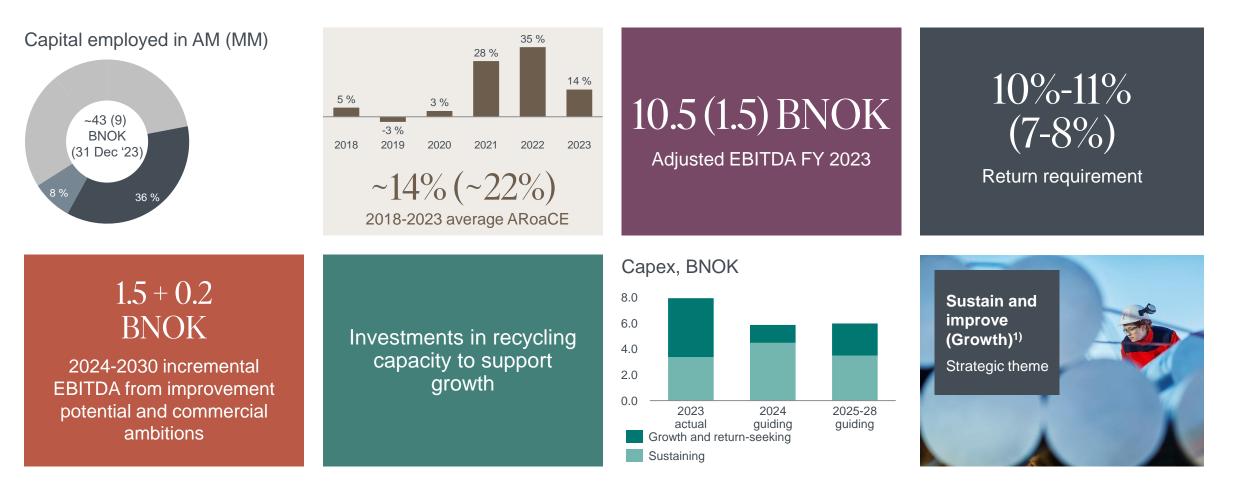


Hvdro

## Capital return dashboard for Aluminium Metal & Metal Markets



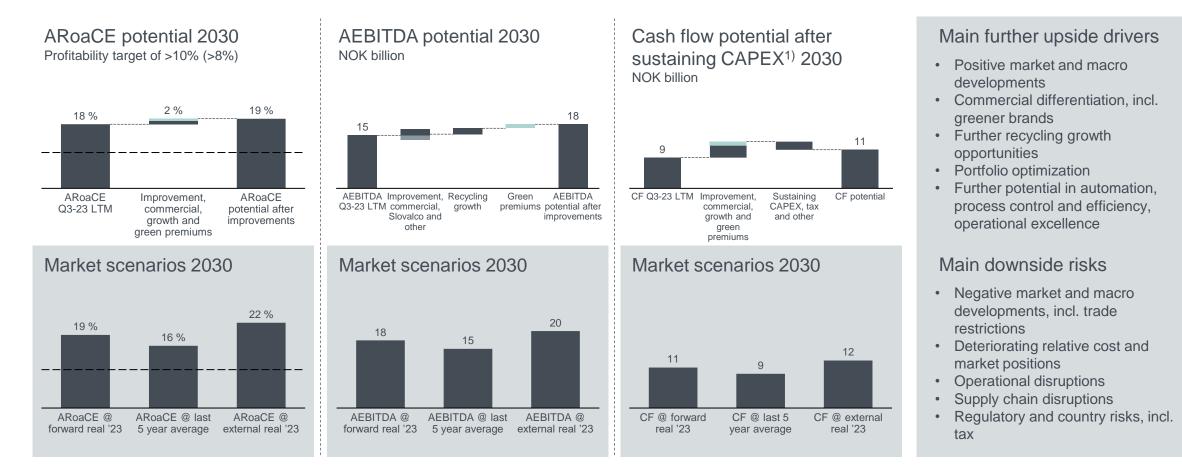
Investments in recycling capacity to support growth



## Aluminium Metal and Metal Markets profitability growth roadmap



Main drivers - improvement efforts, commercial differentiation and market development



1) Cash flow calculated as EBITDA + tax + long-term sustaining CAPEX

Assumptions and sources behind the scenarios can be found in Additional information

Sources: External scenario is based on CRU price and premium assumptions and S&P Global FX assumptions, with adjustments as specified in the footnotes



## 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





### Pricing of value-added products



	Smelter	Intermediate product	Casthouse
	Aluminium	Standard ingot	Value added products
			Extrusion ingot     Foundry alloy     Sheet ingot     Wire rod
SN	Traded on LME	• US Midwest - 1020 (in cent per pound)	<ul> <li>Extrusion Ingot – Priced above standard ingot</li> <li>Foundry Alloy – Priced above standard ingot</li> <li>Sheet ingot – Priced above standard ingot</li> <li>Wire rod - Priced above standard ingot</li> </ul>
Europe	Traded on LME	<ul><li>Duty paid IW Rotterdam</li><li>Duty unpaid IW Rotterdam</li></ul>	<ul> <li>Extrusion ingot – Priced above LME</li> <li>Foundry Alloy – Priced partly above standard ingot and partly above LME</li> <li>Sheet ingot – Priced above standard ingot</li> <li>Wire rod - Priced partly above standard ingot and partly above LME</li> </ul>
Asia	Traded on LME & SHFE	<ul> <li>CIF Japan Premium (MJP)</li> <li>Singapore In Warehouse</li> <li>CIF South Korea</li> </ul>	<ul> <li>Extrusion ingot – Priced partly above standard ingot and partly above LME</li> <li>Foundry Alloy – Priced partly above standard ingot and partly above LME</li> <li>Sheet ingot – Priced partly above standard ingot and partly above LME</li> </ul>

## Metal Markets earnings drivers



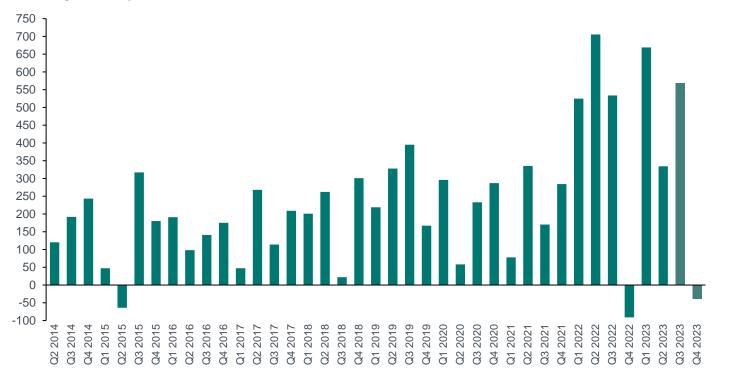
#### Recyclers

- Revenue impact volume, LME and product premiums
- 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 ingot and LME trading
- Third-party casthouse products
- Results influenced by currency fluctuations and inventory valuation effects
- Adjusted EBITDA for Commercial excl. currency and inventory valuation effects for 2024 expected in the range of 250MNOK to 400MNOK

Adjusted EBITDA excluding currency effects and inventory valuation effect, NOK million<sup>1)</sup>



1) Amounts are as disclosed for the individual years reflecting the accounting policies applied for those years and Hydro's definition of APMs applied for the relevant years.

### 2025 recycling targets achieved with 2023 year-end installed capacity

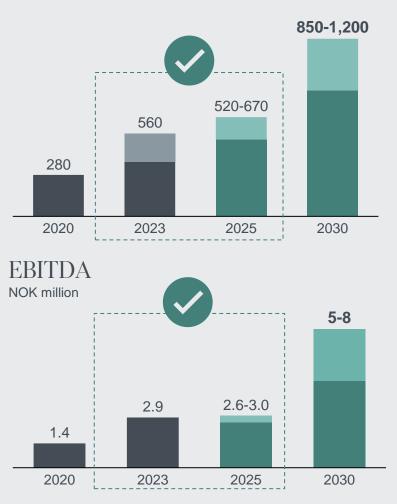
Recent recycling projects with production and post-consumer scrap capacity Tonnes ('000)



#### Recycling targets 2030<sup>1)</sup>

#### Post Consumer Scrap

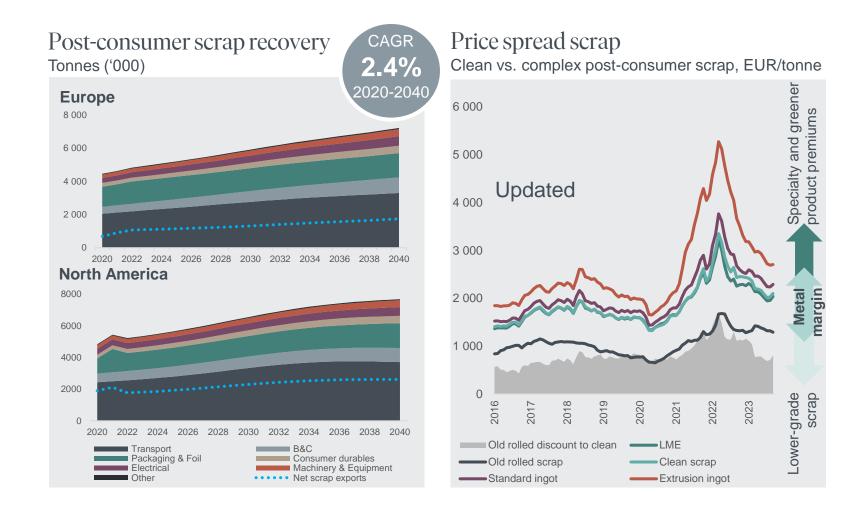
Consumption and targeted capacity usage, tonnes ('000)



### Post-consumer scrap generation is increasing

)))) Hydro

But multiple hurdles exist for its utilization



#### Key trends in aluminium recycling

- Growth in recycling and billet capacity pressuring margins on "clean" scrap feedstock
- Large export volumes from Europe and North America to Asia
- Regulatory changes and protectionism
   measures affecting future scrap market
- Increasing generation and more interest in lower-grade scrap, but multiple challenges:
  - o Supply chain complexity
  - Contamination
  - $\circ$  Collection
  - Sorting limitations
  - o Logistics

## Mixed scrap types require sorting capabilities and ability to convert to various products



Securing access to the right scrap – key success factor



## Megatrends support recycling agenda

Increasing focus on circular economy from both consumers and regulators

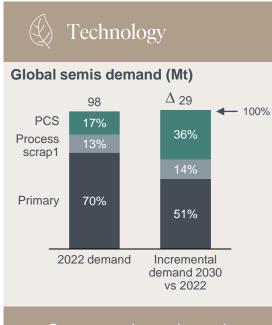


- Process design closed loops
- Product design lower material use
- Reuse and refurbish (second life)

### Waste to value



- Reduce waste generation
- Reuse and upcycle waste streams to products



- Capture and recycle products at end-of-life
- Improve scrap sorting
- Increase recycling efficiency
- Technology advancement

# 

- End-of-life Directive
- EU waste shipment regulation
- Critical raw materials act
- CO<sub>2</sub>-regulations

**Hydro** 

## Diversifying and high-grading recycling product portfolio across markets and geographies



Successfully completed organic and inorganic projects in 2023 include:



#### Introducing Hydro CIRCAL, increasing EI market share in the US

- 40kt of PCS per year enabling delivery of similar volumes of Hydro CIRCAL<sup>®</sup> to the North American market
- Lowest carbon extrusion ingot offering in North America



State-of-the art HyForge line in Rackwitz, Germany

#### Diversifying portfolio and growing high-margin HyForge capacity

- Ramping-up the HyForge line in Rackwitz Germany
- Forging stock geared towards the automotive industry



### Entering the recycled FA market with Alumetal acquisition

- Advanced sorting capabilities and capacity
- Opportunity to utilize more scrap grades Identified synergies of **10-15 MEUR by 2027**



#### Securing access to scrap, industrializing HySort technology in the US

- Invested 4MUSD in a 50:50 JV with scrap-yard operator Padnos in MI, US
- Installing HySort equipment; total capacity ~36 kt p.a.
- Supplying Cassopolis with suitable fractions; marketing the rest externally

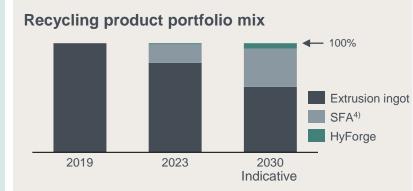
## Hydro has a proven track record developing recycling capabilities



Increasing use of PCS and sorting capacity<sup>1)</sup>

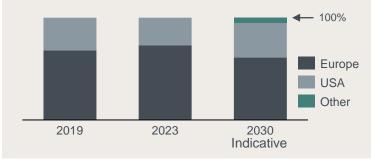
+40% PCS use 2019 to 2023





#### Recycling production by region

+100 kt Sorting capacity 2019 to 2023



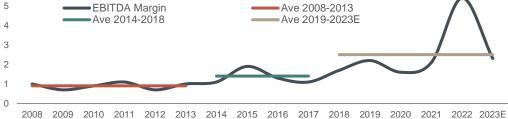
#### Expanding specialty and greener product offerings<sup>3)</sup>





#### Lifting profitability through the cycle

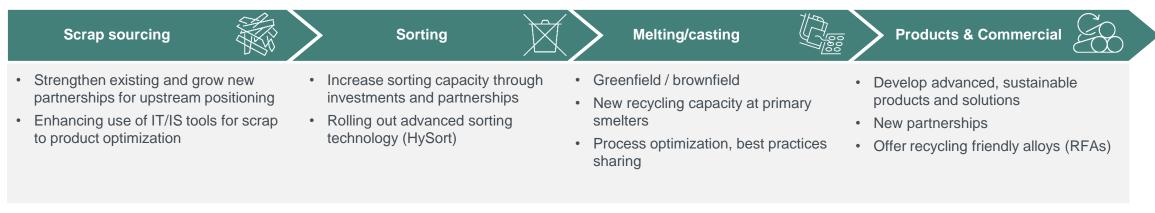




## Stepping up activities across the recycling value chain

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Continuing to transform scrap into sustainable solutions for our customers



#### Selected projects in the pipeline adressing key market trends



SFA products for **automotive** e.g. gigacastings, electrical engine housing



**Specialty casthouse** equiped to produce advanced products also for automotive; large CIRCAL capacity



Introducing HyForge for **automotive applications** in the US

*Recycling 2030 ambitions:* 



**850-1,200** kmt PCS capacity



NOK **5-8** billion EBITDA potential



## Hydro with competitive advantages in recycling



#### Full value chain with multiple product outlets

- Large recycling asset base in Europe and North America
- Broad range of products extrusion ingot, sheet ingot, foundry alloys, HyForge, Master alloys
- Ability to utilize and upcycle mixed scrap



#### Sorting & production technology

- Technical and metallurgical competence
- Production optimization know-how from scrap to product
- Patented HySort technology, in-house R&D

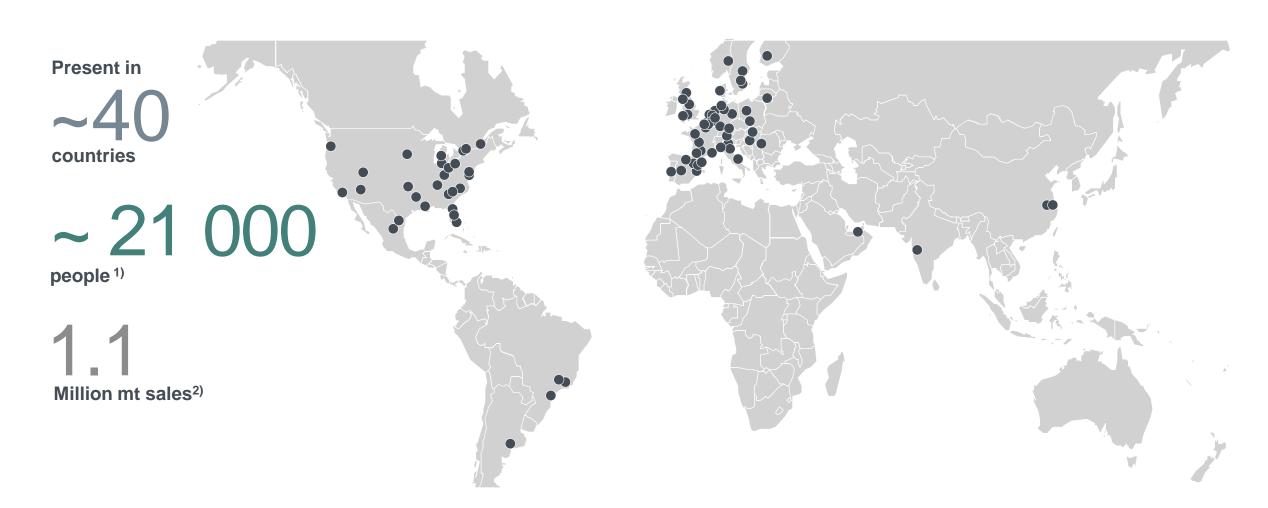
#### **Close customer & supplier relations**

- · Local presence and market insight in core locations
- · Established relationships with scrap suppliers
- · Partnerships and close cooperation with customers
- Commercial intelligence and strong value chain positioning

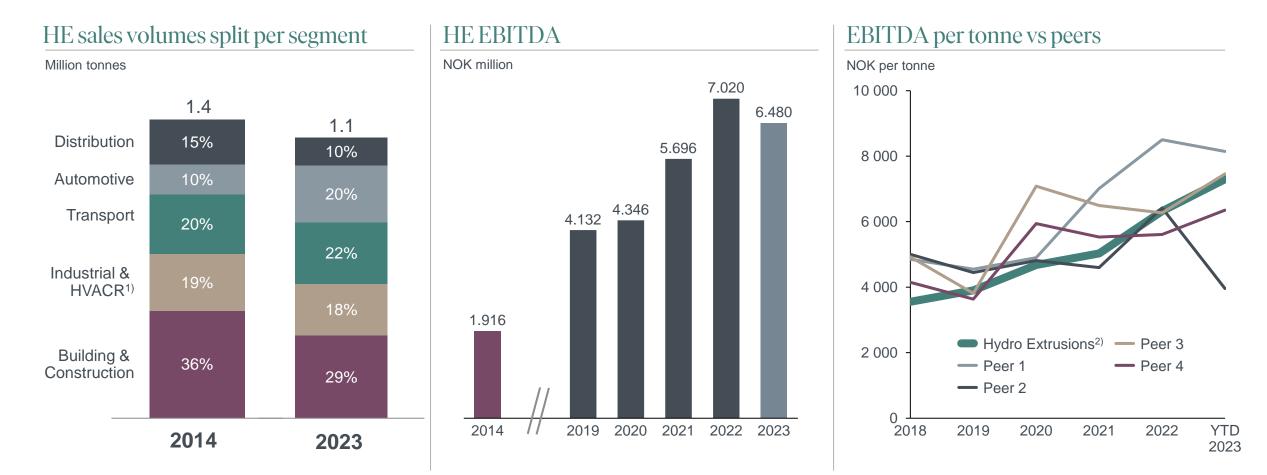


## Extrusions

## Extrusions – #1 in the global aluminium extrusion industry $\mathbb{J}_{Hydro}$



## Hydro Extrusions delivering strong EBITDA uplift through $\lim_{Hydro}$ targeting high-growth, advanced segments



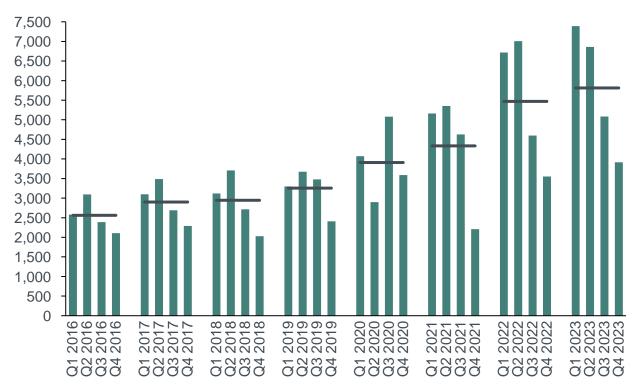
1) Heat, ventilation, air conditioners & refrigerators

2) HE EBITDA adjusted for capitalization of dies to make comparable to peers

### Extrusions earnings drivers



#### Adjusted EBITDA per tonne<sup>1)</sup>, NOK



- 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

## Industry trends towards 2030 are favorable for Hydro Extrusions, driven by customer needs and segment growth



Opportunity to leverage Hydro Extrusions' strengths increases as target segments develop

#### Customer needs



- As industries and applications mature, customers demand more developed solutions
- Value added offerings
- New, R&D driven solutions
- Customers will partner with suppliers providing new and advanced solutions, e.g., low-carbon, high R/C content, sustainably produced solutions

#### Segment growth



- More growth expected in value added product and solutions area rather than "commodities"
- Attractive segments with 5-10% annual growth
- Key growth segments include Automotive / Emobility and solar / Renewables / Big & Wide Rail

#### HE capabilities



- Strong innovative capacity to provide highquality advanced solutions
- Developed R&D position that can be further enhanced
- · Head start vs competition in sustainability area
- Size, geographical coverage and advanced capabilities to be relevant in differentiated segments

## Hydro Extrusions will leverage opportunities from greener transition to strengthen market positions

2022-30:

2022-30:

0.6



#### Secular growth drivers in key segments



#### HE positioning and growth ambitions

- Strong global positions, long term relationships with major automotive OEMs
- Proven capabilities, innovation and sustainability as key competitive levers
- Increase share of direct OEM supply and long-term contracts
- Investment projects under execution globally
- HE with strong value offering, including surface treatment and low-carbon aluminium solutions
- Solar mounting systems fit well on existing 7-9 inch presses
- Projects in pipeline to increase capacity

- HVAC&R customers with production in North America and China
- Customer projects with proven solutions for replacing copper with aluminium
- Grow capacity and increase customer solutions

## Critical growth projects under execution, maturing projects to enable profitable growth



**Project capacity growth since 2021** 

Further strengthening flagship plants in the portfolio, leveraging key trends

#### Key trends

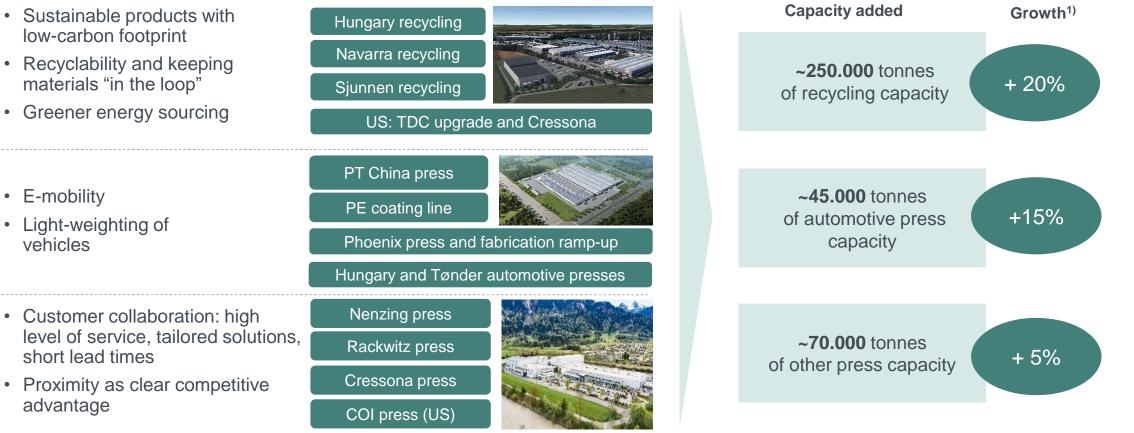
- Sustainable products with low-carbon footprint
- Recyclability and keeping materials "in the loop"
  - Greener energy sourcing

E-mobility

vehicles

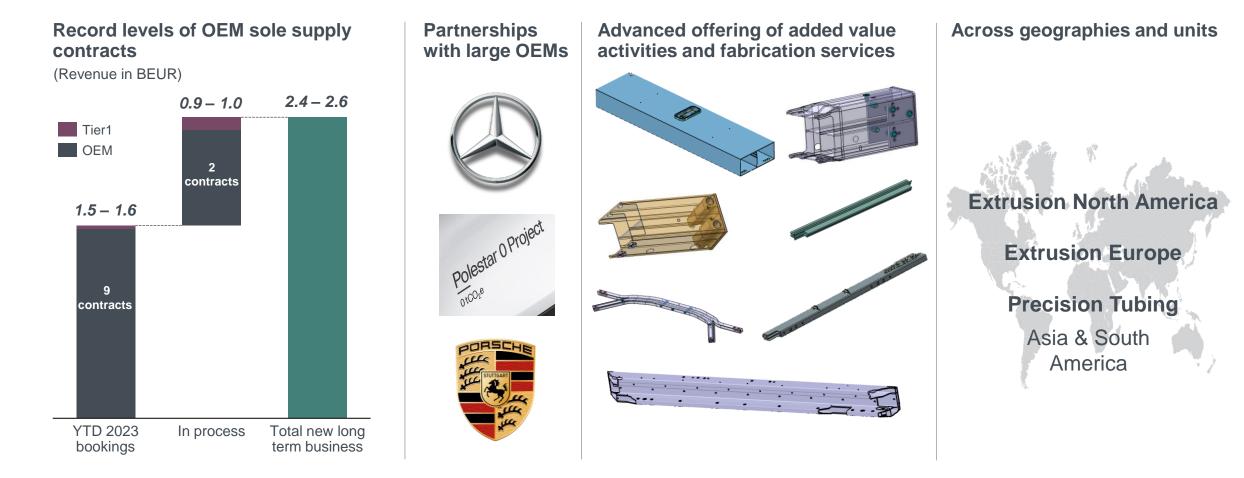
advantage

#### **Project under execution**



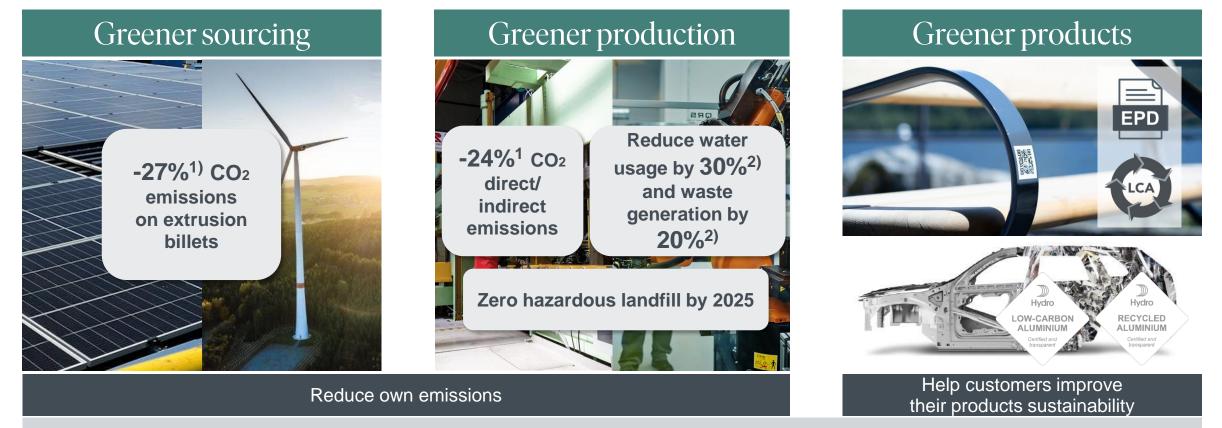
## Significant automotive growth business last quarters





## Reducing own emissions and helping customers improve their products' sustainability towards 2030





Confirm and improve with labels and certifications

## Reducing own emissions and helping customers improve their products' sustainability towards 2030



#### Greener sourcing

**Greener Sweden** Pilot project towards net-zero



**Renewables in the U.S.** Spanish Fork plant fully solar powered



#### Greener production

**PV-powered press** Solar-powered press in Poland



Hydrogen-fueled recycling World's first batch produced in Spain



#### Greener products

Shaping the market First project with Hydro CIRCAL 100R



**Greener partnerships** Partnering with customers and others



### Customers from all industries partnering with Hydro Extrusions to make greener products





#### **VELUX**®

Partnering to cut carbon emissions from its value chain in half by 2030

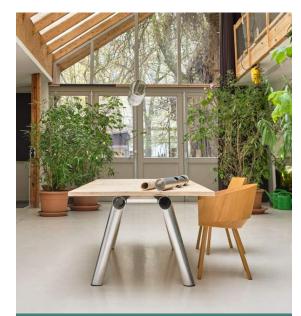


Cleanest Dirt Bike Ever project to remove emissions from production by 2025



#### Schweizer

Solar panel systems made from low-carbon aluminium extrusions



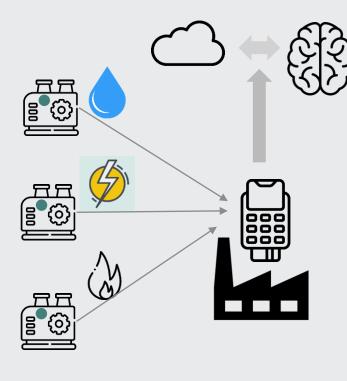
#### HAY

Light and flat-packed BOA conference tables made with Hydro CIRCAL

## Digitalization, AI and automation

Key levers to improve performance and profitability

#### AMR = Automatic Meter Reading



• = Sensors

AMR = Sensors with real-time tracking of energy, water, gas consumption and vibration at machines in plants

#### Value contribution

- Using AI / machine learning / dash-boards to identify "irregularities"
  - Benchmark between machines and products to drive improvements & reduce waste / consumption
- Peak-shaving / improved production planning
- Preventive maintenance through vibration / consumption patterns
- Traceability through connected systems

#### Automation

- PT Taicang Fabrication reducing 95 FTEs through Automation & EBS<sup>1</sup> (>20% of work-force)
  - Ergonometric, quality, safety and finance
- Automatic quality controls enable delivering millions of parts without quality issues

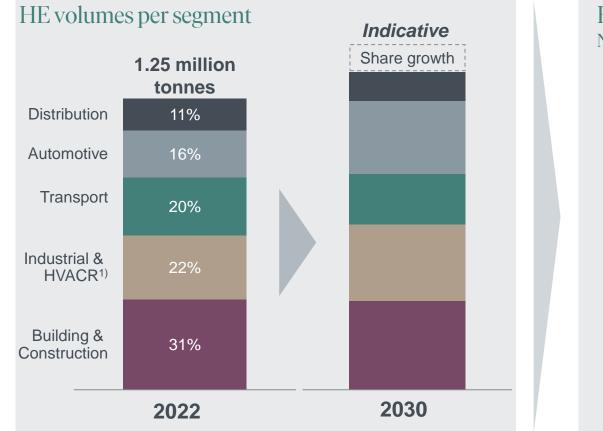




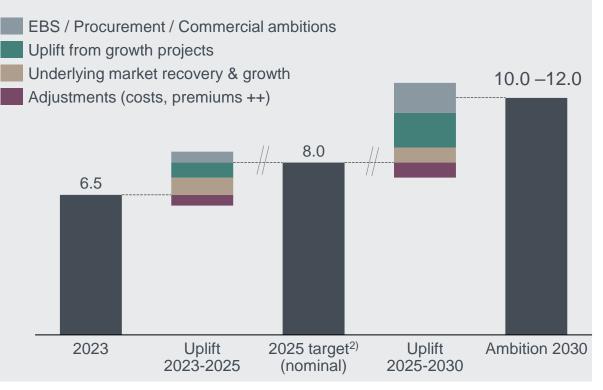
## HE increasing profitability towards 2030 through uplift from growth projects and underlying improvements



Growing market share in dedicated segments, further operational and commercial improvements



#### HE EBITDA ambitions NOK billion (real 2023)



1) Heat, ventilation, air conditioners & refrigerators

2) Target of 8 BNOK in 2025 in nominal terms as communicated in 2021. Range target 2030 in real terms



### Hydro Extrusions 2030 strategic direction



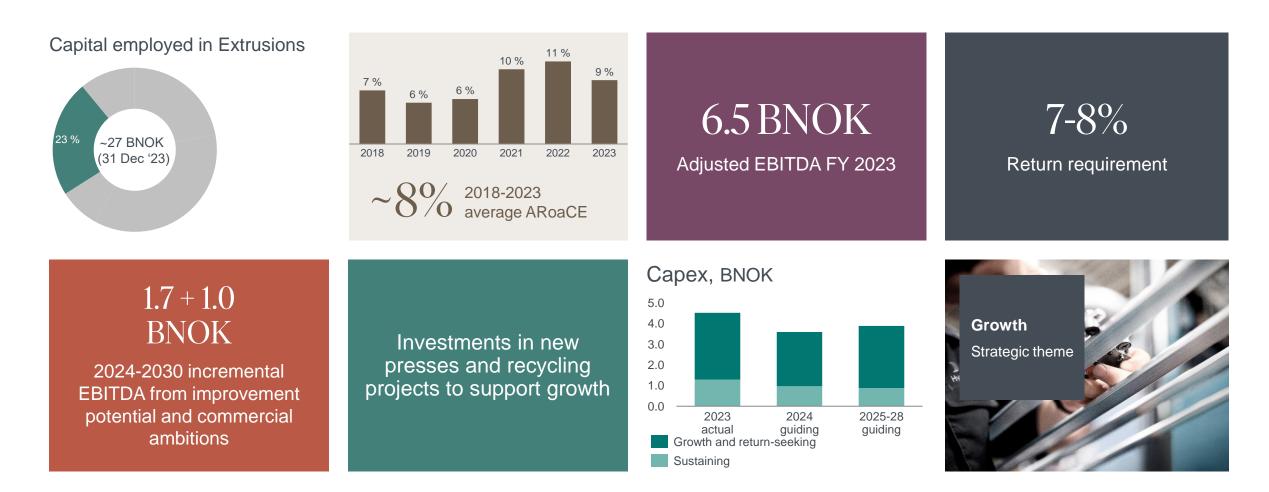


- Increased **digitalization** throughout value-chain
- Standardization will generate value through the value-chain from understanding profit to driving procurement and reducing energy consumption

# Capital return dashboard for Extrusions



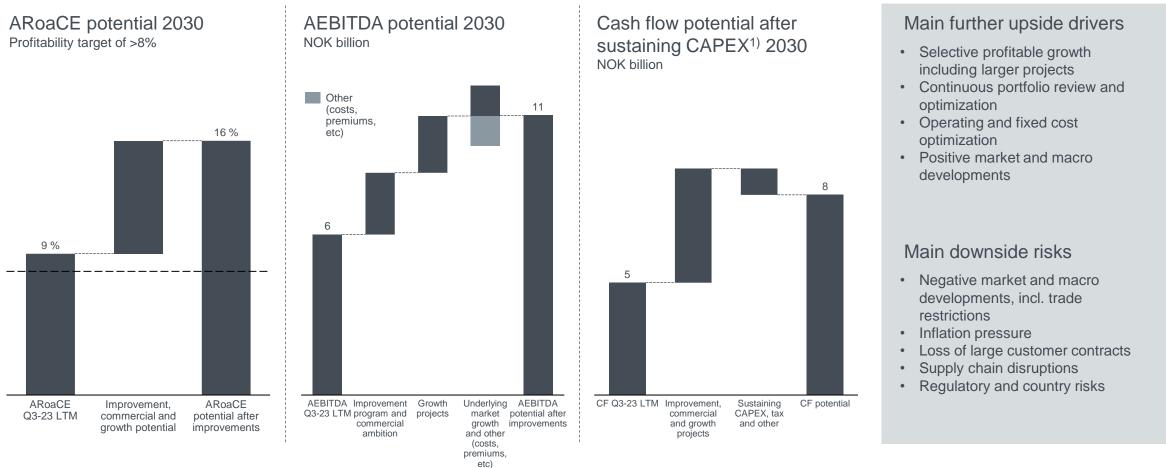
Returns in line with the cost of capital reflecting leading market positions in high value segments and portfolio optimization



# Extrusions profitability growth roadmap

)))) Hydro

Main drivers – improvement program and commercial ambition



1) Cash flow calculated as EBITDA + tax + long-term sustaining CAPEX Assumptions and sources behind the scenarios can be found in Additional information

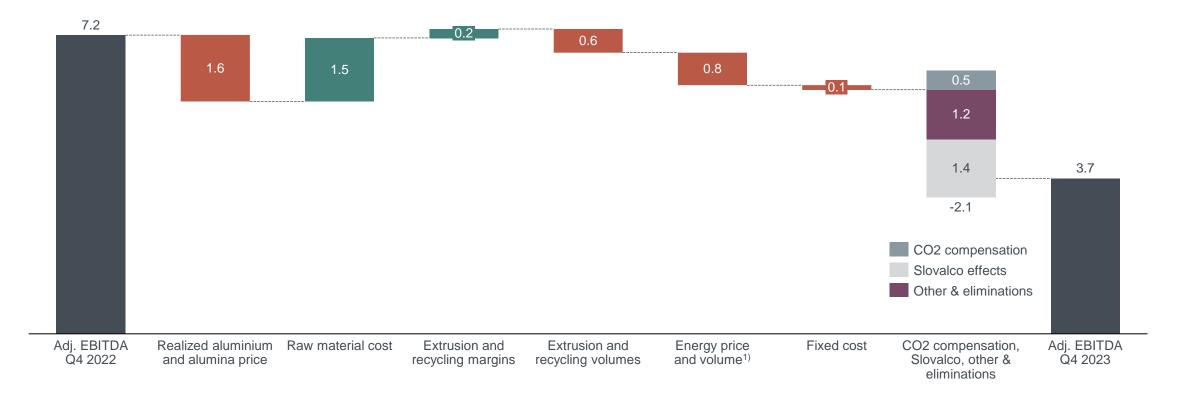


# Additional information

### Adj. EBITDA down on lower prices, Extrusion results and Slovalco effects, partly offset by lower raw material cost



Q4 2023 vs Q4 2022



### Income statements

NOK million						Fo	ourth quarte 2023		urth quarter 2022		ird quarter 2023		Year 2022		Year 2023
Revenue							46 754	4	44 075		44 702		207 929		193 619
Share of the profit (loss) in equity accounted investments							46		131		171		1 337		492
Other income, net							1 272		1 051		348		4 406		4 152
Total revenue and income							48 072	2	45 256		45 220		213 672		198 263
Raw material and energy expense							29 633		28 857		30 501		129 373		123 538
Employee benefit expense							6 673		5 931		6 238		22 886		25 931
Depreciation and amortization expense							2 539		2 270		2 327		8 593		9 394
Impairment of non-current assets Other expenses							4 424 7 061		286 6 507		0 6 478		336 21 769		4 421 25 387
Earnings before financial items and tax (EBIT)							(2 256		1 405		(323)		<b>30 715</b>		<b>9 592</b>
Interest and other finance income							257		268		377		619		1 302
Foreign currency exchange gain (loss)							152		356		538		2 192		(2 084)
Interest and other finance expense							(668)		(353)		(537)		(1 161)		(2 264)
Income (loss) before tax							(2 516	)	1 676		55		32 365		6 546
Income taxes							(256	)	(1 519)		(680)		(7 984)		(3 742)
Income (loss) from continuing operations							(2 771	)	158		(625)		24 381		2 804
Income (loss) from discontinued operations								-	36		-		36		-
Net income (loss)							(2 771	)	194		(625)		24 417		2 804
Net income (loss) attributable to non-controlling interests Net income (loss) attributable to Hydro shareholders							(235 (2 537	·	(93) 287		(267) (358)		263 24 154		(778) 3 583
Earnings per share from continuing operations							(1.26	)	0.12		(0.18)		11.76		1.77
Earnings per share from discontinued operations							(	-	0.02		-		0.02		-
Earnings per share attributable to Hydro shareholders							(1.26	)	0.14		(0.18)		11.78		1.77
NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2024	Year 2021	Year 2022	Year 2023
Income (loss) from continuing operations	1 880	2 397	1 127	8 525	6 411	11 136	6 676	158	1 144	5 056	(625)	(2 771)	13 930	24 381	2 804
Net income (loss)	1 500	2 805	1 108	8 529	6 411	11 136	6 676	194	1 144	5 056	(625)	(2 771)	13 942	24 417	2 804
Adjusted net income (loss) from continuing operations	2 448	3 150	3 498	5 810	6 785	7 731	6 258	2 371	3 326	3 410	345	754	14 905	23 145	7 835
Earnings per share from continuing operations	0.89	1.06	0.50	3.47	2.80	5.49	3.34	0.12	0.62	2.56	(0.18)	(1.26)	5.92	11.76	1.77
Earnings per share attributable to Hydro shareholders	0.70	1.26	0.49	3.47	2.80	5.49	3.34	0.14	0.62	2.56	(0.18)	(1.26)	5.93	11.78	1.77 5
Adjusted earnings per share from continuing operations	1.15	1.45	1.60	2.57	3.17	3.63	2.91	0.99	1.70	1.77	0.27	0.50	6.77	10.70	4.26

### )))) Hydro

### Balance sheet



NOK million	December 31 2023	September 30 2023	June 30 2023	March 31 2023	December 31 2022	September 30 2022	June 30 2022	March 31 2022
Cash and cash equivalents	24 618	19 105	22 453	30 873	29 805	25 852	24 507	21 161
Short-term investments	2 641	2 101	1 158	2 696	4 173	2 511	1 882	8 588
Trade and other receivables	25 404	26 387	27 561	28 350	23 988	28 442	29 164	25 955
Inventories	25 449	27 648	28 808	30 216	30 035	31 394	29 415	25 237
Other current financial assets	1 900	1 726	2 722	1 302	1 127	4 887	6 543	4 719
Assets held for sale	3 685	-	-	-	-	-	-	-
Property, plant and equipment	74 981	74 367	72 985	67 827	62 656	62 369	58 920	56 599
Intangible assets	8 447	10 823	10 215	9 839	9 280	9 810	9 374	8 986
Investments accounted for using the equity method	21 228	24 633	24 277	22 566	21 222	22 613	20 055	18 257
Prepaid pension	8 664	9 335	9 981	9 040	8 573	9 352	9 814	9 837
Other non-current assets	9 444	9 135	8 346	8 684	7 759	9 598	8 400	12 398
Total assets	206 462	205 260	208 506	211 395	198 618	206 829	198 074	191 737
Bank loans and other interest-bearing short-term debt	7 111	5 764	5 271	5 899	6 746	11 085	7 796	7 072
Trade and other payables	26 232	24 860	25 529	25 702	24 374	26 703	29 156	25 130
Other current liabilities	10 549	11 093	9 593	10 741	11 688	11 653	10 724	12 536
Liabilities in disposal group	141	-	-	-	-	-	-	-
Long-term debt	28 978	29 944	29 756	29 615	26 029	20 790	21 054	21 073
Provisions	5 867	5 897	6 243	5 692	5 289	5 779	5 539	5 164
Pension liabilities	9 222	8 475	8 388	8 669	8 252	8 064	7 882	8 409
Deferred tax liabilities	4 717	6 153	6 197	5 289	4 796	5 178	5 304	5 281
Other non-current liabilities	6 462	5 325	5 687	5 429	3 648	4 481	5 585	7 564
Equity attributable to Hydro shareholders	100 579	103 062	106 873	108 582	102 455	107 129	99 347	93 906
Non-controlling interests	6 604	4 686	4 968	5 777	5 343	5 967	5 688	5 603
Total liabilities and equity	206 462	205 260	208 506	211 395	196 618	206 829	198 074	191 737

### Adjusting items to EBITDA, EBIT and net income

NOK million (+=loss/()=gain)		Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2022	Year 2023
Unrealized derivative effects on raw material contracts	Hydro Bauxite & Alumina	(376)	(173)	157	353	177	94	(41)	182	(40)	412
Community contributions Brazil	Hydro Bauxite & Alumina	-	-	-	32	-	25	-	-	32	25
Other effects	Hydro Bauxite & Alumina	-	-	-	162	-	-	-	-	162	-
Total impact	Hydro Bauxite & Alumina	(376)	(173)	157	547	177	118	(41)	182	155	437
Unrealized derivative effects on power contracts	Hydro Energy	(236)	46	(254)	615	214	184	41	(37)	170	401
(Gains)/losses on divestments	Hydro Energy	-	(65)	-	-	-	-	-	-	(65)	-
Net foreign exchange (gain)/loss	Hydro Energy	4	2	3	1	(3)	(7)	(5)	(6)	11	(20)
Other effects	Hydro Energy	-	-	-	-	-	-	-	164	-	164
Total impact	Hydro Energy	(232)	(16)	(251)	616	211	177	36	120	116	544
Unrealized derivative effects on LME related contracts	Hydro Aluminium Metal	4 715	(6 374)	(1 538)	207	709	(2 836)	1 414	(954)	(2 990)	(1 667)
Unrealized derivative effects on power contracts	Hydro Aluminium Metal	(766)	1 056	1 291	1 638	62	(106)	113	33	3 218	103
Significant rationalization charges and closure costs	Hydro Aluminium Metal	-	(18)	-	64	-	-	-	-	46	-
Net foreign exchange (gain)/loss	Hydro Aluminium Metal	(19)	(23)	(26)	(40)	(37)	(114)	(79)	(89)	(108)	(320)
Other effects	Hydro Aluminium Metal	-	(69)	-	-	-	-	-	-	(69)	-
Total impact	Hydro Aluminium Metal	3 929	(5 428)	(273)	1 868	733	(3 055)	1 448	(1 010)	97	(1 884)
Unrealized derivative effects on LME related contracts	Hydro Metal Markets	190	(850)	195	358	34	(146)	448	(121)	(107)	215
Transaction related effects	Hydro Metal Markets	-	-	-	-	50	4	35	31	-	120
Total impact	Hydro Metal Markets	190	(850)	195	358	84	(142)	483	(90)	(107)	335
Unrealized derivative effects on LME related contracts	Hydro Extrusions	(442)	543	84	(126)	(19)	6	113	(134)	59	(34)
Unrealized derivative effects on power contracts	Hydro Extrusions	(39)	58	50	(67)	5	(24)	(2)	(6)	3	(28)
Significant rationalization charges and closure costs	Hydro Extrusions	2	13	-	91	51	27	17	171	106	265
(Gains)/losses on divestments and other transaction related effects	Hydro Extrusions	(49)	1	(2)	(4)	20	-	1	4	(54)	25
Other effects	Hydro Extrusions	-	(74)	(2)	-	-	(107)	-	-	(76)	(107)
Total impact	Hydro Extrusions	(527)	541	130	(106)	57	(98)	128	35	38	121
Unrealized derivative effects on LME related contracts	Other and eliminations	(15)	(15)	19	47	(15)	(35)	25	(18)	36	(43)
(Gains)/losses on divestments	Other and eliminations	-	-	-	-	-	-	(25)	-	-	(25)
Net foreign exchange (gain)/loss	Other and eliminations	(21)	(26)	(83)	(91)	(115)	(143)	(130)	(155)	(221)	(543)
Other effects	Other and eliminations	-	-	-	15	-	26	-	-	15	26
Total impact	Other and eliminations	(36)	(41)	(65)	(29)	(131)	(151)	(130)	(174)	(170)	(585)
Adjusting items to EBITDA	Hydro	2 948	(5 966)	(108)	3 254	1 132	(3 152)	1 923	(936)	128	(1 033)
Impairment charges	Hydro Bauxite & Alumina	-	-	-	-	-	-	-	3 773	-	3 773
Impairment charges	Hydro Aluminium Metal	-	-	49	28	-	-	-	628	77	628
Impairment charges	Hydro Extrusions	-	-	-	258	-	-	-	23	258	23
Adjusting items to EBIT	Hydro	2 948	(5 966)	(59)	3 541	1 132	(3 152)	1 923	3 487	464	3 391
Net foreign exchange (gain)/loss	Hydro	(2 392)	1 129	(572)	(356)	1 985	789	(538)	(152)	(2 192)	2 084
Adjusting items to income (loss) before tax	Hydro	556	(4 838)	(631)	3 185	3 177	(2 362)	1 385	3 336	(1 728)	5 475
Calculated income tax effect	Hydro	(181)	1 432	213	(972)	(935)	716	(416)	190	492	(445)
Adjusting items to net income (loss)	Hydro	374	(3 406)	(418)	2 213	2 182	(1 646)	970	3 525	(1 236)	5 031





#### Adjusted EBIT

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	556	383	466	1 913	718	484	10	(586)	(221)	88	(610)	(269)	3 318	626	(1 013)
Hydro Energy	792	713	417	1 674	2 192	777	275	1 493	677	805	712	755	3 596	4 737	2 950
Hydro Aluminium Metal	1 185	2 246	3 684	4 111	4 183	6 349	5 837	4 097	3 328	2 550	727	1 264	11 225	20 467	7 869
Hydro Metal Markets	43	301	133	245	487	666	494	(134)	628	290	482	(229)	721	1 514	1 170
Hydro Extrusions	1 244	1 266	828	(122)	1 587	1 600	640	168	1 485	1 228	548	90	3 217	3 995	3 351
Other and Eliminations	(261)	(17)	(219)	(793)	3	(425)	356	(93)	(532)	(173)	(259)	(380)	(1 291)	(159)	(1 343)
Total	3 559	4 891	5 309	7 026	9 170	9 452	7 611	4 946	5 364	4 788	1 600	1 231	20 786	31 179	12 983

#### Adjusted EBITDA

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	999	855	1 055	2 426	1 270	1 117	633	101	437	817	93	481	5 336	3 122	1 828
Hydro Energy	841	761	465	1 723	2 239	824	321	1 542	726	854	762	805	3 790	4 926	3 146
Hydro Aluminium Metal	1 754	2 807	4 263	4 676	4 765	6 977	6 463	4 756	3 972	3 215	1 379	1 937	13 500	22 963	10 502
Hydro Metal Markets	78	335	170	284	525	705	534	(91)	669	334	568	(38)	867	1 673	1 533
Hydro Extrusions	1 744	1 830	1 457	665	2 331	2 365	1 385	939	2 223	2 013	1 322	923	5 695	7 020	6 480
Other and Eliminations	(234)	10	(192)	(762)	35	(395)	384	(63)	(501)	(134)	(225)	(370)	(1 178)	(39)	(1 231)
Total	5 182	6 598	7 219	9 011	11 165	11 594	9 721	7 184	7 525	7 098	3 899	3 737	28 010	39 664	22 258



EBIT

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	583	467	407	1 830	1 094	657	(147)	(1 133)	(399)	(30)	(570)	(4 223)	3 288	471	(5 222)
Hydro Energy	851	716	435	1 724	2 424	793	526	878	466	628	677	634	3 727	4 621	2 406
Hydro Aluminium Metal	(171)	325	909	7 311	254	11 777	6 061	2 200	2 595	5 605	(721)	1 646	8 376	20 292	9 125
Hydro Metal Markets	19	299	(93)	500	297	1 516	300	(492)	544	432	(1)	(139)	725	1 621	835
Hydro Extrusions	1 220	1 269	852	(412)	2 114	1 059	510	16	1 427	1 326	420	33	2 929	3 699	3 206
Other and Eliminations	(271)	(43)	23	(868)	39	(385)	420	(63)	(402)	(21)	(128)	(206)	(1 158)	11	(758)
Total	2 233	3 034	2 533	10 086	6 222	15 418	7 670	1 405	4 233	7 939	(323)	(2 256)	17 887	30 715	9 592

#### EBITDA

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	1 026	940	996	2 344	1 647	1 290	477	(446)	260	698	134	300	5 306	2 967	1 392
Hydro Energy	900	764	483	1 774	2 471	840	572	926	515	677	726	684	3 921	4 810	2 602
Hydro Aluminium Metal	500	1 037	1 642	8 260	836	12 405	6 736	2 888	3 239	6 270	(69)	2 946	11 440	22 866	12 386
Hydro Metal Markets	55	333	(56)	540	335	1 556	339	(449)	586	476	85	51	872	1 780	1 198
Hydro Extrusions	1 842	1 840	1 495	381	2 858	1 824	1 255	1 045	2 165	2 111	1 194	888	5 558	6 982	6 359
Other and Eliminations	(244)	(15)	50	(837)	71	(354)	449	(34)	(371)	17	(95)	(197)	(1 046)	132	(645)
Total	4 079	4 899	4 610	12 462	8 217	17 561	9 828	3 930	6 393	10 249	1 975	4 673	26 050	39 536	23 291



#### Total revenue

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	6 026	5 976	6 984	8 713	7 901	9 413	8 652	7 986	8 320	8 830	8 423	9 948	27 699	33 951	35 521
Hydro Energy	2 343	2 213	2 116	3 477	4 268	2 456	2 854	3 037	3 452	2 162	3 299	2 644	10 149	12 614	11 557
Hydro Aluminium Metal	8 953	9 467	9 964	14 164	11 094	24 583	16 678	13 129	15 236	18 211	11 366	13 562	42 548	65 483	58 375
Hydro Metal Markets	13 624	15 275	16 447	19 715	22 674	27 698	22 374	18 222	20 873	22 483	19 329	18 629	65 061	90 968	81 314
Hydro Extrusions	16 334	17 470	17 984	18 509	23 468	25 269	22 620	19 819	22 717	22 608	19 142	18 178	70 296	91 176	82 645
Other and Eliminations	(15 327)	(15 843)	(16 784)	(18 146)	(22 788)	(24 626)	(20 733)	(18 118)	(22 065)	(20 664)	(16 856)	(16 208)	(66 099)	(86 264)	(75 794)
Total	31 951	34 559	36 710	46 433	46 616	64 793	52 445	44 075	48 534	53 630	44 702	46 754	149 654	207 929	193 619

#### External revenue

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	3 546	3 538	4 533	5 471	5 052	5 864	5 641	5 091	5 289	5 570	5 404	6 807	17 088	21 649	23 069
Hydro Energy	787	486	204	1 780	2 415	646	1 082	1 324	1 634	257	1 616	1 058	3 257	5 467	4 564
Hydro Aluminium Metal	762	621	310	3 681	(2 518)	8 640	4 327	2 638	1 528	5 444	1 741	3 936	5 373	13 087	12 649
Hydro Metal Markets	10 789	12 552	13 831	16 993	18 472	24 420	18 796	15 132	17 308	19 837	16 716	16 829	54 165	76 821	70 690
Hydro Extrusions	16 203	17 346	17 829	18 505	23 199	25 228	22 585	19 881	22 765	22 527	19 221	18 122	69 883	90 892	82 635
Other and Eliminations	(136)	16	4	2	(5)	(6)	15	9	10	(4)	3	3	(113)	13	13
Total	31 951	34 559	36 710	46 433	46 616	64 793	52 445	44 075	48 534	53 630	44 702	46 754	149 654	207 929	193 619



#### Internal revenue

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	2 479	2 438	2 452	3 242	2 848	3 549	3 011	2 895	3 031	3 260	3 019	3 141	10 610	12 303	12 542
Hydro Energy	1 556	1 727	1 912	1 697	1 853	1 810	1 772	1 713	1 818	1 905	1 683	1 586	6 891	7 148	6 993
Hydro Aluminium Metal	8 191	8 846	9 654	10 484	13 611	15 943	12 352	10 491	13 709	12 767	9 624	9 626	37 175	52 396	45 726
Hydro Metal Markets	2 835	2 723	2 616	2 722	4 201	3 277	3 578	3 091	3 565	2 647	2 612	1 801	10 896	14 147	10 625
Hydro Extrusions	131	125	154	3	269	41	36	(62)	(48)	81	(80)	56	413	284	10
Other and Eliminations	(15 191)	(15 858)	(16 788)	(18 148)	(22 783)	(24 620)	(20 748)	(18 126)	(22 075)	(20 660)	(16 860)	(16 211)	(65 986)	(86 278)	(75 806)
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydro Energy	(23)	(32)	(25)	(25)	(28)	(39)	(32)	(81)	(67)	(59)	(57)	(110)	(104)	(180)	(293)
Hydro Aluminium Metal	147	513	336	513	383	626	340	200	154	264	179	135	1 509	1 549	733
Hydro Metal Markets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydro Extrusions	-	-	-	-	-	-	-	-	-	1	1	3	-	-	5
Other and Eliminations	1	(20)	(31)	(15)	22	(184)	118	12	8	(25)	47	17	(65)	(32)	47
Total	125	462	280	473	377	403	426	131	95	181	171	46	1 340	1 337	492

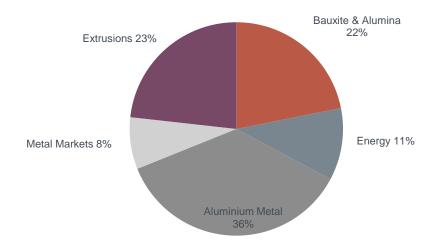


Return on average capital employed <sup>1)</sup> (RoaCE)

			Rep	orted RoaCE						Adju	isted RoaCE			
	2023	2022	2021	2020	2019	2018	2017	2023	2022	2021	2020	2019	2018	2017
Hydro Bauxite & Alumina	(12.7%)	1.3%	11.9%	5.4%	1.9%	4.6%	8.5%	(2.5%)	1.8%	12.0%	5.9%	2.5%	6.0%	8.5%
Hydro Energy 2)	10.4%	28.8%	26.5%	249.5%	13.4%	18.8%	17.5%	13.0%	29.5%	25.4%	8.7%	12.9%	18.8%	17.5%
Hydro Aluminium Metal	16.0%	35.1%	21.6%	1.9%	(3.9%)	5.6%	11.8%	13.8%	35.4%	28.3%	2.9%	(2.6%)	4.7%	12.6%
Hydro Metal Markets	7.6%	33.2%	24.0%	22.8%	20.7%	25.1%	18.6%	10.7%	31.0%	23.9%	21.6%	27.3%	19.4%	20.9%
Hydro Extrusions 3)	8.4%	10.5%	9.4%	1.3%	3.8%	5.3%	13.4%	8.8%	11.4%	10.3%	6.2%	5.7%	7.2%	6.6%
Hydro Group	4.1%	21.9%	16.3%	5.4%	(0.9%)	6.0%	11.2%	7.1%	22.2%	18.6%	3.7%	1.3%	6.6%	9.6%

#### Capital employed – upstream focus

NOK million	December 30 2023
Hydro Bauxite & Alumina	25 812
Hydro Energy	12 910
Hydro Aluminium Metal	42 647
Hydro Metal Markets	9 282
Hydro Extrusions	27 439
Other and Eliminations	(2 717)
Total	115 374



Graph excludes BNOK (2.7) in capital employed in Other and Eliminations

1) RoaCE at business area level is calculated using 25% tax rate. For Hydro Energy, 50% tax rate is used for 2023, 40% for 2022 and 2021, 80% for 2020 and 2019, 70% for 2018, and 65% for 2017

Hydro Energy reported RoaCE for 2020 higher than previous years due to the Lyse transaction
 Hydro Extrusions reflected as 50% equity accounted investment Q1-Q3 2017 and fully consolidated from Q4 2017



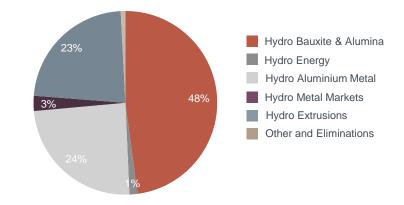
#### Depreciation, amortization and impairment

NOK million	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Bauxite & Alumina	443	472	589	514	553	633	624	687	659	729	703	4 523	2 018	2 496	6 614
Hydro Energy	49	48	48	49	47	47	47	48	48	49	49	50	194	190	196
Hydro Aluminium Metal	694	736	756	972	605	651	698	711	666	687	674	1 326	3 158	2 664	3 353
Hydro Metal Markets	36	35	37	41	38	39	39	44	42	45	87	194	149	161	368
Hydro Extrusions	628	573	645	804	746	767	748	1 036	741	792	779	859	2 649	3 297	3 171
Other and Eliminations	27	28	27	31	32	31	28	30	31	38	34	10	113	121	113
Total	1 876	1 892	2 102	2 411	2 020	2 168	2 185	2 556	2 186	2 340	2 327	6 962	8 281	8 929	13 815

#### Indicative depreciation currency exposure by business area

Percent	USD	EUR	BRL	NOK & Other
Hydro Bauxite & Alumina			100%	
Hydro Energy				100%
Hydro Aluminium Metal	30%		20%	50%
Hydro Metal Markets	20%	30%		50%
Hydro Extrusions	40%	35%		25%
Other and Eliminations		15%	10%	75%

#### Depreciation by business area 2023, 13.8 BNOK



### Operational data



Hydro Bauxite & Alumina	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Alumina production (kmt)	1 540	1 586	1 579	1 600	1 519	1 536	1 579	1 559	1 550	1 542	1 522	1 571	6 305	6 193	6 185
Sourced alumina (kmt)	698	737	806	765	741	758	764	593	686	553	692	909	3 006	2 856	2 840
Total alumina sales (kmt)	2 269	2 349	2 355	2 655	2 251	2 305	2 344	2 220	2 171	2 153	2 229	2 487	9 628	9 121	9 040
Realized alumina price (USD) 1)	287	287	284	393	391	430	364	342	367	373	349	349	313	382	359
Implied alumina cost (USD) <sup>2)</sup>	235	244	233	310	327	378	337	337	347	336	345	331	254	345	340
Bauxite production (kmt) 3)	2 813	2 660	2 756	2 696	2 638	2 736	2 814	2 824	2 648	2 630	2 848	2 771	10 926	11 012	10 897
Sourced bauxite (kmt) 4)	1 103	1 676	1 472	1 427	856	1 674	1 220	1 861	1 078	1 100	1 204	2 001	5 677	5 611	5 383
Adjusted EBITDA margin 5)	16.6%	14.3%	15.1%	27.8%	16.1%	11.9%	7.3%	1.3%	5.3%	9.2%	1.1%	4.8%	19.3%	9.2%	5.1%
Hydro Energy	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Power production, GWh	2 857	2 374	1 688	2 136	2 7 3 0	1 602	1 330	2 002	2 610	2 431	2 216	2 440	9 055	7 664	9 697
Net spot sales, GWh	1 126	334	(401)	305	986	(433)	(703)	511	817	333	24	101	1 364	361	1 275
Nordic spot electricity price, NOK/MWh	435	423	704	969	1 090	1 211	1 757	1 414	934	647	949	515	634	1 370	642
Southern Norway spot electricity price (NO2), NOK/MWh	469	493	807	1 271	1 504	1 752	3 519	1 719	1 182	958	664	818	762	2 128	904
Adjusted EBITDA margin 5)	35.9%	34.4%	22.0%	49.5%	52.5%	33.6%	11.2%	50.8%	21.0%	39.5%	23.1%	30.4%	37.3%	39.0%	27.2%

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

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) Adjusted EBITDA divided by total revenues

### Operational data



Hydro Aluminium Metal <sup>1)</sup>	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Realized aluminium price LME, USD/mt	1 994	2 210	2 419	2 675	2 662	3 031	2 497	2 246	2 291	2 273	2 146	2 129	2 317	2 599	2 218
Realized aluminium price LME, NOK/mt <sup>3)</sup>	17 008	18 528	20 910	23 087	23 542	28 461	24 706	22 813	23 566	24 417	22 456	23 143	19 819	24 739	22 995
Realized premium above LME, USD/mt <sup>2)</sup>	264	332	449	565	786	870	801	577	503	456	432	348	400	756	435
Realized premium above LME, NOK/mt <sup>2)3)</sup>	2 253	2 780	3 878	4 873	6 954	8 167	7 920	5 857	5 169	4 894	4 521	3 778	3 420	7 197	4 511
Realized NOK/USD exchange rate <sup>3)</sup>	8.53	8.38	8.64	8.63	8.84	9.39	9.89	10.16	10.29	10.74	10.47	10.87	8.55	9.52	10.37
Implied primary cost (USD) 4)	1 500	1 525	1 450	1 600	1 550	1 500	1 550	1 650	1 700	1 725	1 750	1 775	1 500	1 550	1 750
Implied all-in primary cost (USD) 5)	1 825	1 900	1 925	2 175	2 450	2 500	2 350	2 250	2 275	2 250	2 200	2 125	1 950	2 375	2 225
Hydro Aluminium Metal production, kmt	539	561	573	571	540	532	543	522	499	506	512	514	2 244	2 137	2 031
Casthouse production, kmt	534	553	560	568	555	542	547	522	513	519	523	512	2 214	2 166	2 067
Total sales, kmt <sup>6)</sup>	599	594	583	572	600	581	533	542	559	577	539	541	2 347	2 256	2 217
Adjusted EBITDA margin <sup>8)</sup>	19.6%	29.6%	42.8%	33.0%	43.0%	28.4%	38.8%	36.2%	26.1%	17.7%	12.1%	14.3%	31.7%	35.1%	18.0%
Hydro Metal Markets	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2021	Year 2022	Year 2023
Hydro Metal Markets Remelt production (1 000 mt)	<b>Q1 2021</b> 143	<b>Q2 2021</b> 154	<b>Q3 2021</b> 132	<b>Q4 2021</b> 144	<b>Q1 2022</b> 151	<b>Q2 2022</b> 158	<b>Q3 2022</b> 124	<b>Q4 2022</b> 115	<b>Q1 2023</b> 132	<b>Q2 2023</b> 146	<b>Q3 2023</b> 176	<b>Q4 2023</b> 166	<b>Year 2021</b> 572	<b>Year 2022</b> 548	<b>Year 2023</b> 620
•															
Remelt production (1 000 mt)	143	154	132	144	151	158	124	115	132	146	176	166	572	548	620
Remelt production (1 000 mt) Third-party sales (1 000 mt)	143 77	154 78	132 72	144 85	151 72	158 74	124 76	115 81	132 78	146 81	176 92	166 81	572 311	548 304	620 331
Remelt production (1 000 mt) Third-party sales (1 000 mt) Hydro Metal Markets sales excl. ingot trading (1 000 mt) <sup>7</sup>	143 77 742	154 78 735	132 72 675	144 85 681	151 72 731	158 74 710	124 76 635	115 81 614	132 78 674	146 81 691	176 92 652	166 81 645	572 311 2 833	548 304 2 691	620 331 2 662
Remelt production (1 000 mt) Third-party sales (1 000 mt) Hydro Metal Markets sales excl. ingot trading (1 000 mt) <sup>7)</sup> Hereof external sales excl. ingot trading (1 000 mt)	143 77 742 588	154 78 735 607	132 72 675 573	144 85 681 574	151 72 731 610	158 74 710 607	124 76 635 536	115 81 614 530	132 78 674 566	146 81 691 590	176 92 652 567	166 81 645 567	572 311 2 833 2 342	548 304 2 691 2 284	620 331 2 662 2 290
Remelt production (1 000 mt) Third-party sales (1 000 mt) Hydro Metal Markets sales excl. ingot trading (1 000 mt) <sup>7)</sup> Hereof external sales excl. ingot trading (1 000 mt) External revenue (NOK million)	143 77 742 588 10 789	154 78 735 607 12 552	132 72 675 573 13 831	144 85 681 574 16 993	151 72 731 610 18 472	158 74 710 607 24 420	124 76 635 536 18 796	115 81 614 530 15 132	132 78 674 566 17 308	146 81 691 590 19 837	176 92 652 567 16 716	166 81 645 567 16 829	572 311 2 833 2 342 54 165	548 304 2 691 2 284 76 821	620 331 2 662 2 290 70 690
Remelt production (1 000 mt) Third-party sales (1 000 mt) Hydro Metal Markets sales excl. ingot trading (1 000 mt) <sup>7)</sup> Hereof external sales excl. ingot trading (1 000 mt) External revenue (NOK million) Hydro Extrusions	143 77 742 588 10 789 Q1 2021	154 78 735 607 12 552 <b>Q2 2021</b>	132 72 675 573 13 831 <b>Q3 2021</b>	144 85 681 574 16 993 <b>Q4 2021</b>	151 72 731 610 18 472 <b>Q1 2022</b>	158 74 710 607 24 420 <b>Q2 2022</b>	124 76 635 536 18 796 <b>Q3 2022</b>	115 81 614 530 15 132 <b>Q4 2022</b>	132 78 674 566 17 308 Q1 2023	146 81 691 590 19 837 <b>Q2 2023</b>	176 92 652 567 16 716 <b>Q3 2023</b>	166 81 645 567 16 829 Q4 2023	572 311 2 833 2 342 54 165 Year 2021	548 304 2 691 2 284 76 821 <b>Year 2022</b>	620 331 2 662 2 290 70 690 Year 2023

1) 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

2) Average realized premium above LME for casthouse sales from Hydro Aluminium Metal

3) Including strategic hedges /hedge accounting applied

 Realized LME price minus Adjusted EBITDA margin (incl. Qatalum) per mt primary aluminium produced. Includes net earnings from primary casthouses 5) Realized all-in price minus Adjusted EBITDA margin (incl. Qatalum) per mt primary aluminium sold. Includes net earnings from primary casthouses

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

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

8) Adjusted EBITDA divided by total revenues

### Hydro Extrusions, information by business area

(94) (281)

(25) (48)

Adjusted EBIT (NOKm)

(82)

(51)

(68)

(94)

(294)

(50)

(86)

(50)



Precision Tubing	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Year 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Year 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2023	Extrusion Europe	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Year 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Year 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2023
Volume (kmt)	35	33	30	29	127	31	28	30	28	117	31	32	31	29	124	Volume (kmt)	144	147	129	130	550	151	144	119	106	520	124	121	99	92	436
Operating revenues (NOKm)	1 718	1 742	1 715	1 822	6 997	2 091	2 038	2 129	2 020	8 278	2 279	2 429	2 344	2 204	9 256	Operating revenues (NOKm)	6 529	6 916	6 827	7 527	27 799	9 532	10 147	8 696	7 787	36 162	9 035	8 926	6 864	6 625	31 450
Adjusted EBITDA (NOKm)	210	173	184	56	622	184	95	135	50	464	152	185	259	131	727	Adjusted EBITDA (NOKm)	705	716	563	471	2 456	1 035	1 025	669	480	3 209	867	819	327	305	2 318
Adjusted EBIT (NOKm)	157	103	115	(38)	337	82	(3)	35	(51)	63	61	87	161	37	346	Adjusted EBIT (NOKm)	501	502	318	203	1 525	782	767	415	231	2 196	623	564	79	26	1 291
Building Systems	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Year 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Year 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2023	Extrusion North America	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Year 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Year 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2023
Volume (kmt)	21	22	20	22	85	24	24	19	18	85	19	19	17	19	75	Volume (kmt)	137	140	136	120	534	142	141	134	112	529	126	121	113	95	455
Operating revenues (NOKm)	2 315	2 434	2 268	2 448	9 465	2 854	3 168	2 657	2 617	11 296	3 056	3 208	2 736	2 938	11 939	Operating revenues (NOKm)	5 904	6 501	7 319	7 002	26 726	9 096	10 263	9 412	7 750	36 522	8 684	8 304	7 535	6 622	31 146
Adjusted EBITDA (NOKm)	245	299	212	161	918	264	287	152	171	873	261	240	170	256	927	Adjusted EBITDA (NOKm)	663	689	562	67	1 980	895	1 042	476	330	2 743	965	813	592	317	2 686
Adjusted EBIT (NOKm)	149	196	108	44	497	156	179	43	57	435	149	116	49	126	440	Adjusted EBIT (NOKm)	518	517	355	(238)	1 152	618	743	196	25	1 582	677	508	288	11	1 484
Other and eliminations	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Year 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Year 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Year 2023																
Adjusted EBITDA (NOKm)	(78)	(47)	(65)	(90)	(280)	(47)	(83)	(47)	(91)	(268)	(22)	(44)	(26)	(86)	(178)																

(211)

(29) (109)

# Assumptions behind scenarios in profitability roadmaps



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Scenarios are not forecasts, but illustrative earnings, cash flow and return potential based on sensitivities

- Starting point AEBITDA Q3-23 LTM
- Cash flow calculated as AEBITDA less EBIT tax and long-term sustaining capex, less lease payments and interest expenses for the Hydro Group
  - Tax rates: 25% for business areas, 40% for Energy, 28% (LTM) for Hydro Group
- ARoaCE calculated as AEBIT after tax divided by average capital employed
  - Average capital employed assumed to increase with growth capex and return-seeking capex above LT sustaining CAPEX 2024-2026
- The actual earnings, cash flows and returns will be affected by other factors not included in the scenarios, including, but not limited to:
  - Production volumes, raw material prices, downstream margin developments, premiums, inflation, currency, depreciation, taxes, investments, interest expense, competitors' cost positions, and others
- External scenario is based on CRU price and premium assumptions and S&P Global FX assumptions, with adjustments as specified in the footnotes

#### Price and FX assumptions

Assumptions used in		2024		2030	
scenarios	Q3 2023 LTM	forward real	Forward real 2023	Last 5 year average	CRU / S&P Globa real 2023
LME, USD/mt	2,240	2,240 (deflated by 2.5%)	2,300 (deflated by 2.5%)	2,180	2,560 (deflated by 2.5%)
Realized premium, USD/mt	490	380 <sup>1)</sup>	380 <sup>1)</sup>	430	570 <sup>4)</sup> (deflated by 2.5%)
PAX, USD/mt	350	320 (deflated by 2.5%)	340 <sup>2)</sup> (deflated by 2.5%)	330	380 (deflated by 2.5%)
Caustic soda, USD/mt	650	320 <sup>1)</sup>	320 <sup>1)</sup>	430	410 (deflated by 2.5%
Coal, USD/mt	150	110 (deflated by 2.5%)	100 <sup>3)</sup> (deflated by 2.5%)	130	100 <sup>7)</sup> (deflated by 2.5%)
Pitch, EUR/mt	1,260	970 <sup>1)</sup>	970 <sup>1)</sup>	840	920 <sup>5)</sup> (deflated by 2.5%)
Pet coke, USD/mt	610	470 <sup>1)</sup>	470 <sup>1)</sup>	450	500 <sup>5)</sup> (deflated by 2.5%)
NO2, NOK/MWh Nordic system, NOK/MWh	1,150 850	770 <sup>6)</sup> 480 (deflated by 2.5%)	650 <sup>6)</sup> 400 (deflated by 2.5%)	840 620	650 <sup>7)</sup> 400 <sup>7)</sup> (deflated by 2.5%)
USDNOK	10.41	10.68	10.38	9.28	8.15 <sup>8)</sup>
EURNOK	11.11	11.77	12.25	10.35	9.58 <sup>8)</sup>
BRLNOK	2.06	2.19	2.15	1.93	1.47 <sup>8)</sup>

### Next event First quarter results April 24, 2024

For more information see www.hydro.com/ir

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Industries that matter