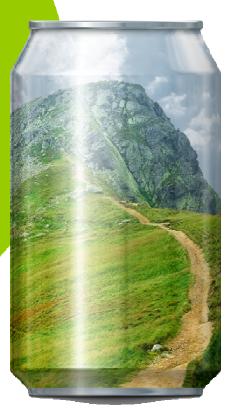


# Financial update Jørgen C. Arentz Rostrup

Capital Markets Day 2012



### Agenda



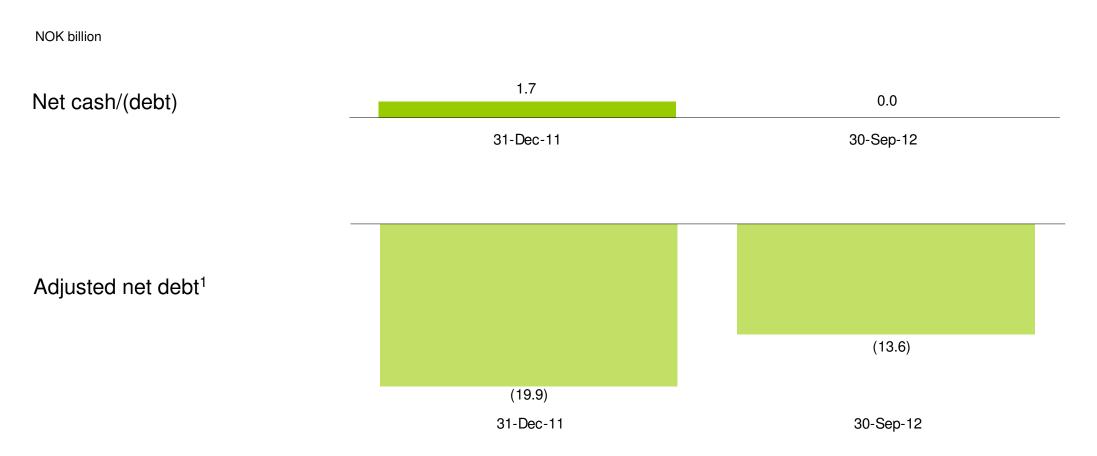
- Financial and shareholder policy
- Financial reporting going forward
- Improvement efforts
- Earning drivers



# Financial and shareholder policy



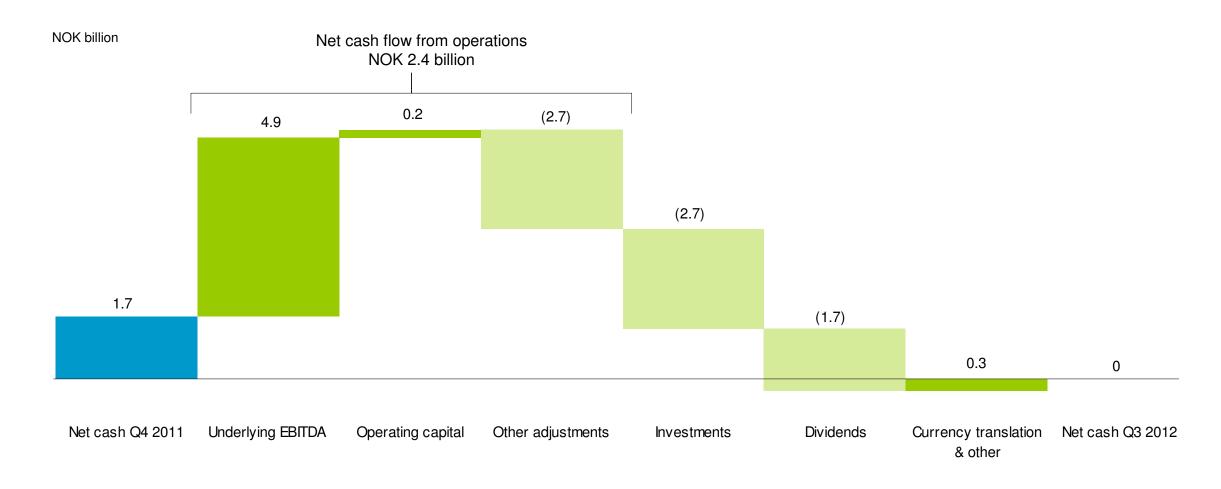
# **Robust financial position**



1) Net pension liability, operating lease commitments and other. Net interest-bearing debt in equity accounted investments taken out of adjusted net debt as of Sep 30, 2012, (NOK 6.3 billion) due to end of completion guarantee Qatalum.

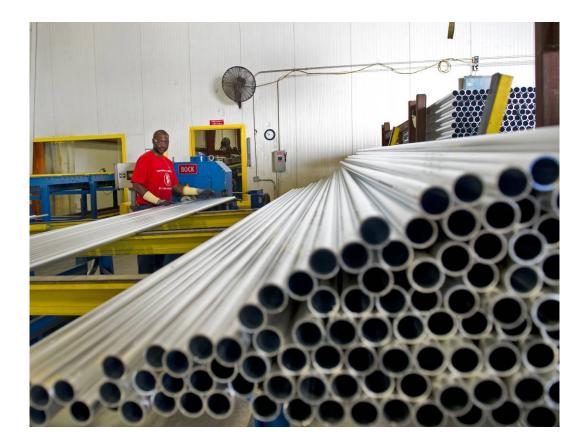


# Net cash development YTD 2012





### **Priorities for capital allocation**



- Maintain a solid balance sheet
- Ensure competitive return to shareholders
- Pursue disciplined and selected growth



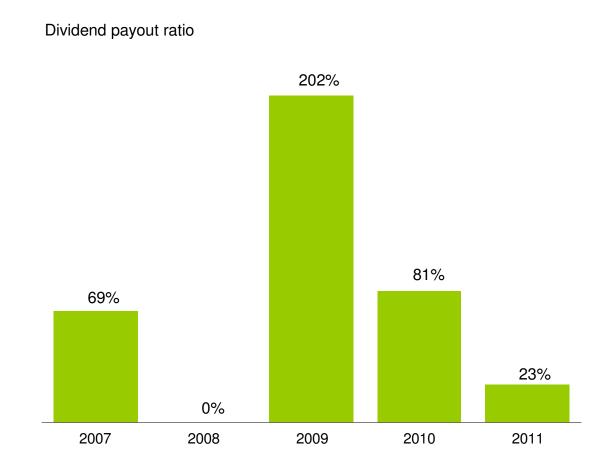
# Maintain financial flexibility



- Robust balance sheet
- Strong focus on liquidity
  - NOK 8.7 billion in cash and cash equivalents by end-Q3 2012
  - USD 1.7 billion facility with maturity 2014, currently undrawn
  - NOK 1.5 billion bond issued with maturity 2019
- Maintain investment grade rating
  - Current rating: BBB/Baa2



# Aiming for competitive returns to shareholders



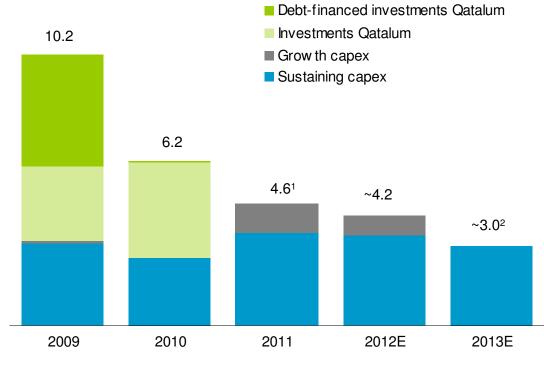
- Dividend payout ratio\* to average 30% over the cycle
  Average 71% 2007-2011
- Buyback of shares and extraordinary dividends considered when earnings, liquidity position and capital structure allow
- Ambition to maintain absolute dividend level for 2012

\*Dividend paid divided by net income attributable to equity holders



# **Capital allocation mainly upstream**

NOK billion



Excluding Vale assets acquisition
 Excluding Extruded Products

- Sustaining capex NOK 3 billion annually
- No major growth projects planned for 2013
- ~85% of capital to be allocated upstream in 2013
- Depreciation significantly higher than sustaining capex



# Financial reporting going forward



[02]

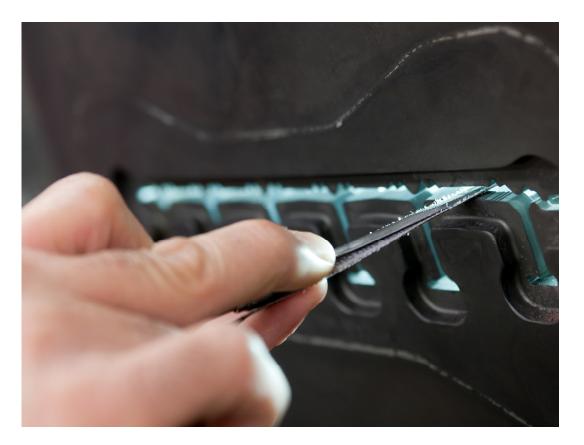
# **Reporting effects following Sapa joint venture**

#### **Until closing**

- Extruded Products reported as "discontinued operations" from Q4 2012
  - Continue to present Extruded Products details

#### After closing

- Expect to recognize a gain
- Sapa joint venture accounted for according to equity method
- Closing expected during first half 2013





### Pension

- Pension liability highly dependent on assumptions
  - Hydro estimate 2% discount rate in Norway
  - Ongoing discussion on what discount rate to use
- Net pension liability at fair value estimated up ~NOK 1 billion from end-2011 to end-2012
  - Reduced discount rates
  - Extruded Products as discontinued operations
- New IFRS pension regulations as of 2013
  - Total net pension liability on balance sheet
    - No unrecognized item, re-measurements taken towards equity
    - Unrecognized loss at end-2011 of ~NOK 1 billion
- 2013 pension cost estimated to increase
  - Partly as financial item





### New pricing formula for metal sales



#### Today

- 3-month forward pricing formula
  - 3-month LME price with 3.5-4 month lag
  - Done to match customer pricing behavior

#### From February 1, 2013

- 1-month forward pricing formula
  - Spot LME price with 1.5-2 month lag
  - Customer pricing metal closer to delivery following the financial crisis



# Short-term update: continued challenging markets

- Decreasing LME price
- Stable Platts alumina price
- Seasonal decline downstream
- Higher energy production and prices
- Macro uncertainty and weak markets





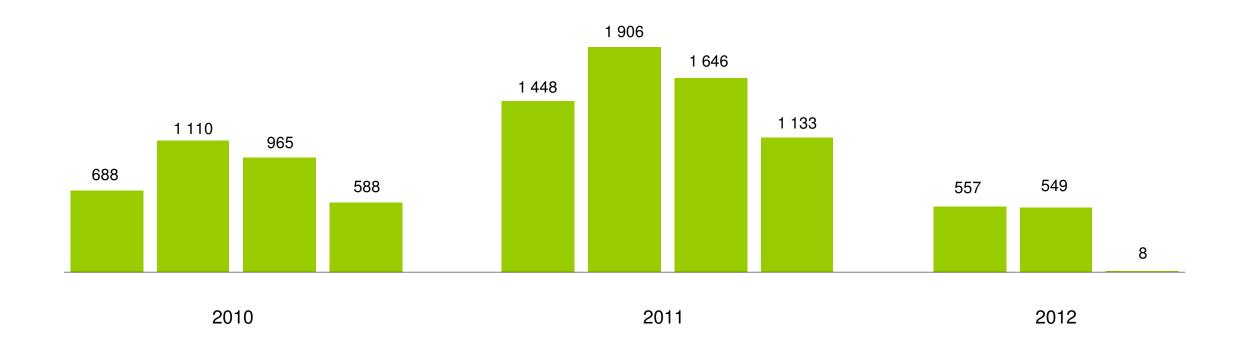
# Improvement efforts



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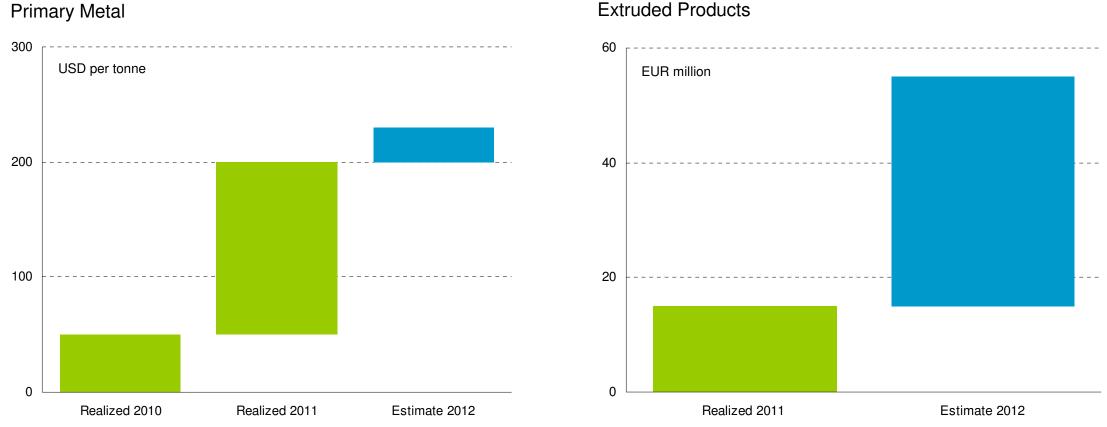
# Challenging markets

Underlying EBIT in NOK million





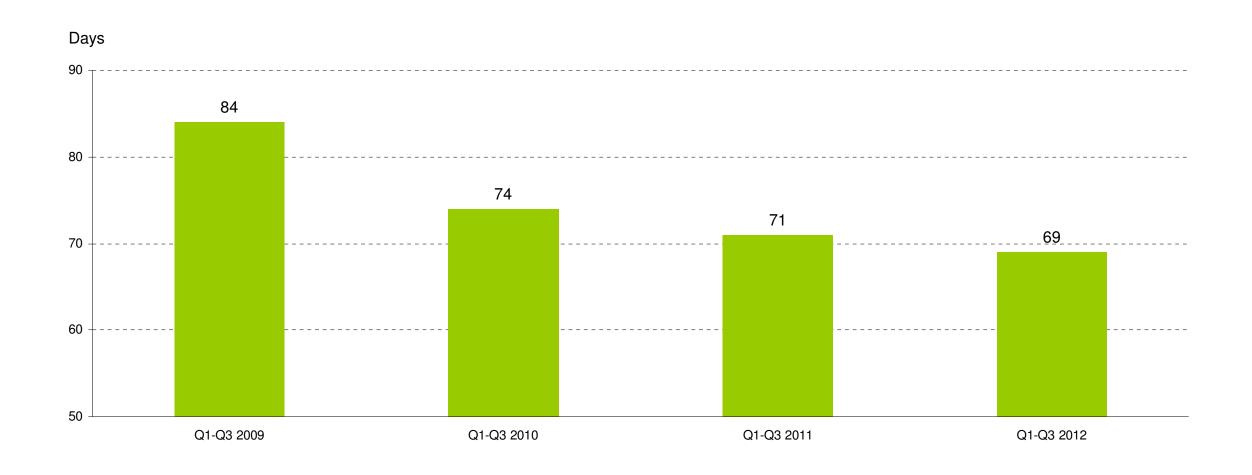
# Significant achievements in ongoing improvement efforts



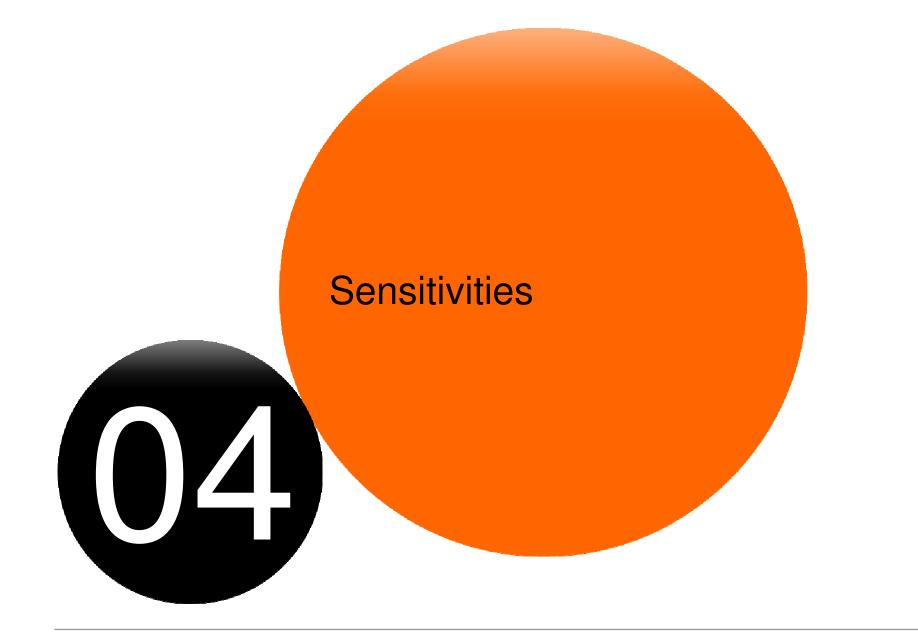
#### **Extruded Products**



# Positive trend in net operating capital days









# Understanding of Hydro's earning drivers

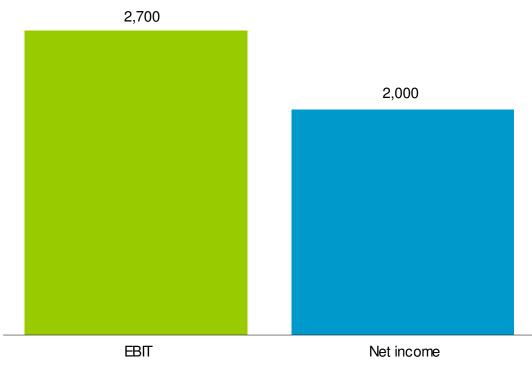


- Starting point and assumptions
- Simplified models
- Negative correlations
- Complexity



### **Price and currency sensitivities**

#### Aluminium price sensitivity +10% NOK million



#### Currency sensitivities +10%

NOK million	EBIT	Financial items	Income before tax	Net income
USD	2 100	(700)	1 400	1 000
BRL	(850)	650	(200)	(100)
EUR	(150)	(1 400)	(1 550)	(1 100)

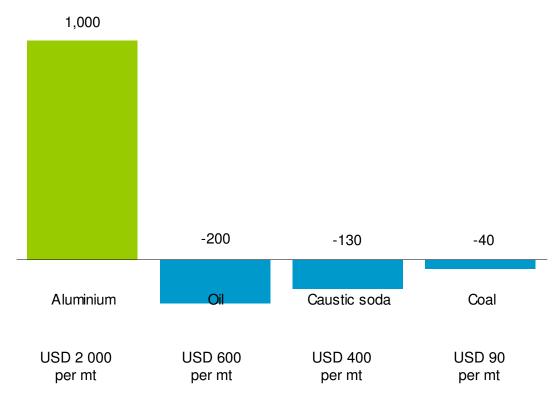
 Annual sensitivities based on expected business volumes for 2013, LME USD 2 000, NOK/USD 5.80, NOK/BRL 2.80 and NOK/EUR 7.40

- Aluminium price sensitivity is net of aluminium price indexed costs and excluding unrealized effects related to operational hedging
- USD sensitivity on financial items is based on estimated year-end financial position
- Currency sensitivities on financial items includes effects from intercompany positions



# **Bauxite & Alumina sensitivities**

# Sensitivities on underlying EBIT if +10% in price NOK million



#### **Revenue impact**

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

#### **Cost impact**

#### Bauxite

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

#### Caustic soda

- ~0.1 tonnes per tonne alumina
- Prices based on average of CMAI and Harriman US, pricing quarterly or per shipment

#### Energy

- ~0.11 tonnes coal per tonne alumina, one year contracts
- ~0.11 tonnes heavy fuel oil per tonne alumina, market prices
- Increased use of coal as energy source in Alunorte



# **Primary Metal sensitivities**

# Sensitivities on underlying EBIT if +10% in price NOK million

1,650			
	-200	-60	
Aluminium	Petroleum coke	Pitch	
Aluminium	T ettoleum coke	The fi	
USD 2 000 per mt	USD 400 per mt	EUR 500 per mt	
permit	perm	perm	

#### **Revenue impact**

Realized price lags LME spot by ~1-2 months

#### **Cost impact**

#### Alumina

- ~1.9 tonnes per tonne aluminium
- ~14% of 3-month LME price per tonne alumina, increasing volumes priced on Platts index
- ~Two months lag
- ~2.5 million tonnes alumina in transatlantic freight

#### Carbon

- ~0.35 tonnes petroleum coke per tonne aluminium
- ~0.08 tonnes pitch per tonne aluminium
- Half-yearly pricing

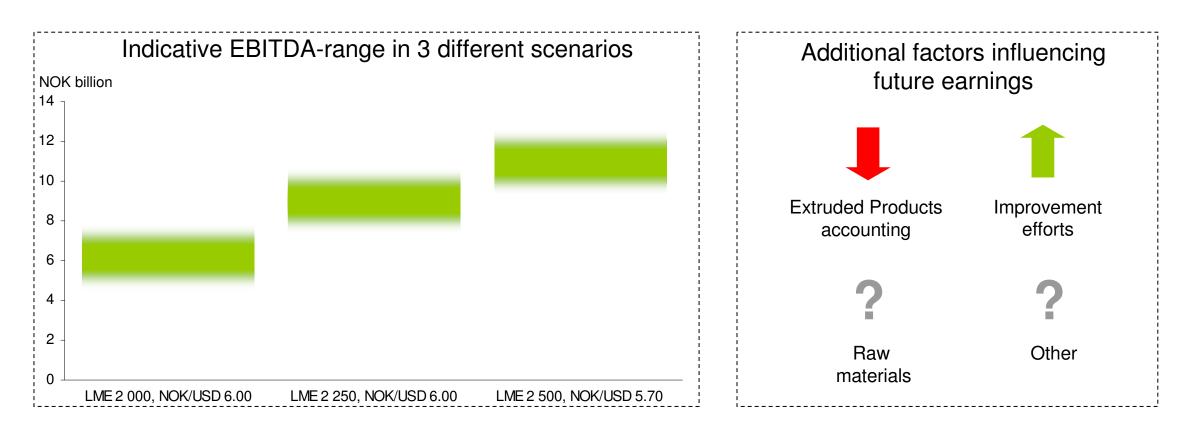
#### Power

- 13.8 MWh per tonne aluminium
- · Long-term power contracts with indexations



# Annualized underlying EBITDA scenarios

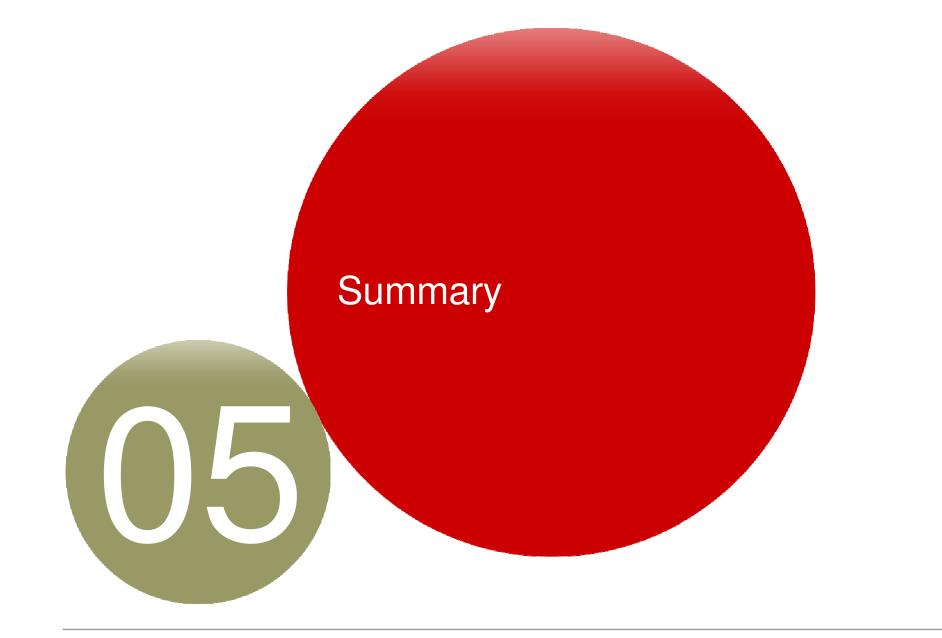
Scenarios are not forecasts, but represent earnings potential based on sensitivities



#### Solid operational cash flow

Last 4 quarters underlying EBITDA as basis. Non-LME related revenues/cost and other currencies unchanged. Uncertainty on several items compared to baseline, including Bauxite & Alumina production increases, raw material cost development, Energy, Metal Markets and Rolled Products earnings development. Extruded Products joint venture with Sapa expected to close in first half 2012.

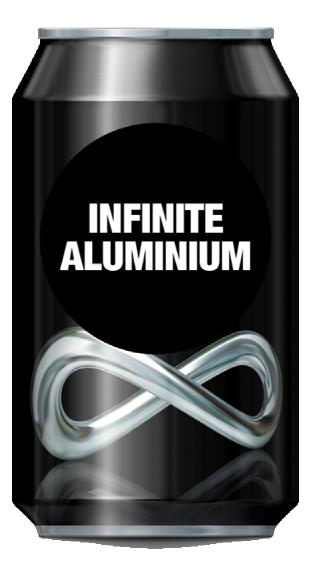






# **Financial priorities**

- Continuous improvements
- Margin management
- Cash flow and financial flexibility
- Shareholder returns





# **Hedging policy**



#### Upstream

- Remain primarily exposed to LME prices
  - Partly off-setting effects through raw material prices and negative currency correlations with LME
- Operational LME hedging
  - One month forward sales
- Currency exposure, mainly USD and BRL
  - Policy of maintaining long-term debt in USD
  - Partly natural hedge through negative correlation between LME and major exposed currencies

#### Mid- and downstream

- Operational LME and currency hedging to secure margin

Volatility mitigated by strong balance sheet

Flexibility to hedge LME or currency in certain cases



## Adjusted net debt

NOK billion	Dec 31, 2009	Dec 31, 2010	Dec 31, 2011	Sep 31, 2012
Cash and cash equivalents	2.5	10.9	8.4	8.7
Short-term investments	1.5	1.3	1.8	2.5
Short-term debt	(1.9)	(0.9)	(4.3)	(6.3)
Long-term debt	(0.1)	(0.3)	(4.2)	(4.8)
Net cash/(debt)	2.0	11.0	1.7	0.0
Cash and short-term investments in captive insurance company Net pension liability at fair value, net of expected tax benefit Operating lease commitments, net of expected tax benefit Net interest-bearing debt in equity accounted investments <sup>*</sup> Other financial obligations, net of expected tax benefit	(1.5) (5.6) (1.7) (8.0) (0.9)	(1.4) (5.5) (1.7) (7.8) (0.9)	(1.3) (6.9) (3.1) (7.4) (2.9)	(1.3) (6.6) (3.1) - (2.6)
Net adjusted cash/(debt)	(15.5)	(6.4)	(19.9)	(13.6)

\* Net interest-bearing debt in equity accounted investments taken out of adjusted net debt as of Sep 30, 2012, (NOK 6.3 billion) due to end of completion guarantee Qatalum.





# Creating a global leader

# Svein Richard Brandtzæg

Capital Markets Day 2012



# Hydro's path towards global leadership

**Curtailing 26% of primary** Launching USD 300 program Announcing SAPA JV metal capacity Creating the world's leading aluminium solutions provider 2009 2010 2011 2012 Acquiring bauxite and Starting up Qatalum alumina assets



# Qatalum

and and the star at

Building a world-class, first-quartile smelter

# **Bauxite & Alumina**

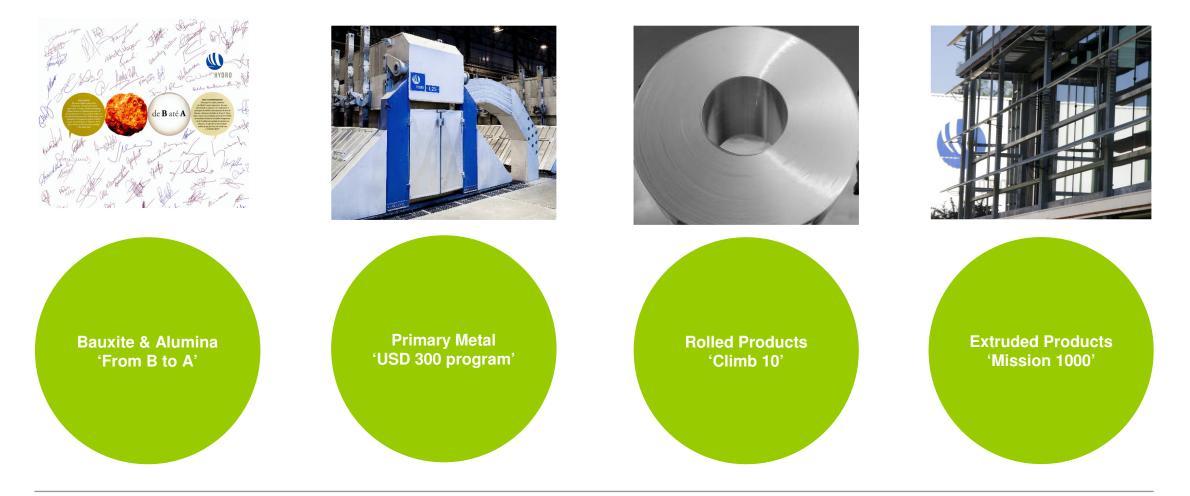
Acquiring high-quality raw materials in Brazil 👗

# Sapa joint venture

Establishing a global extrusion champion

# The industry's most ambitious repositioning drive

Implementing improvement programs across the value chain





# Hydro Capital Markets Day 2011

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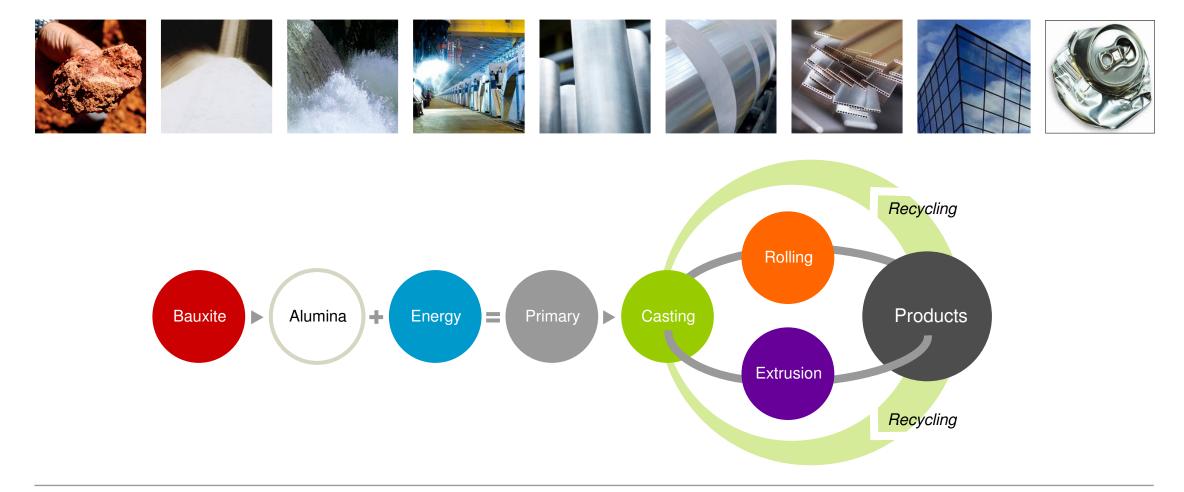
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Recap

- Improve relative position
- Focus on operational excellence
- Develop commercial opportunities
- Manage portfolio actively

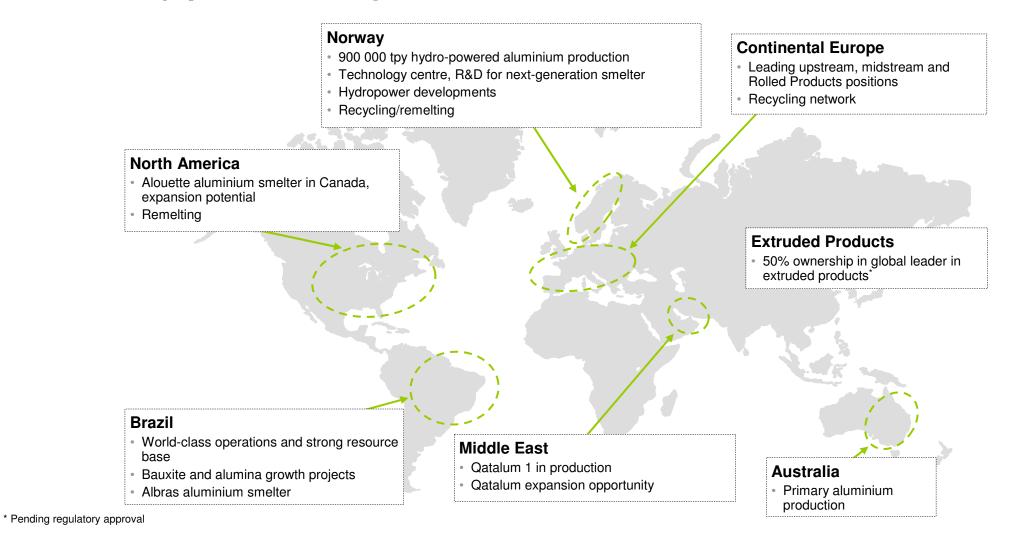
## A resource-rich global aluminium company

Robust positions across the value chain





#### Attractively positioned, global reach



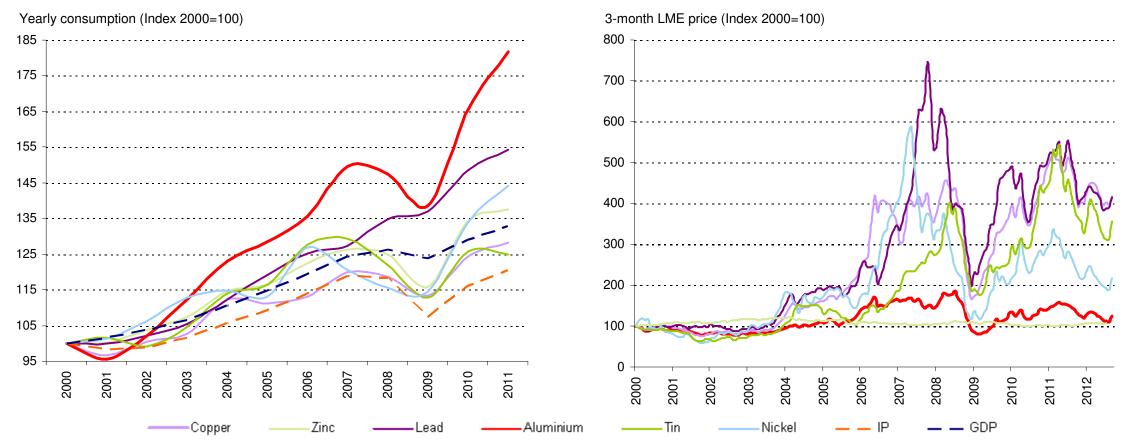


Challenging markets, positive long-term trends



# Solid history of growth in aluminium demand

Yet industry's ability to capitalize on the rising trend remains a concern



Source: CRU/Global Insight



#### Volatile world economy

#### **North America**

- Labor market improving
- Consumer sentiment picking up
- Industrial production moderating

#### Europe

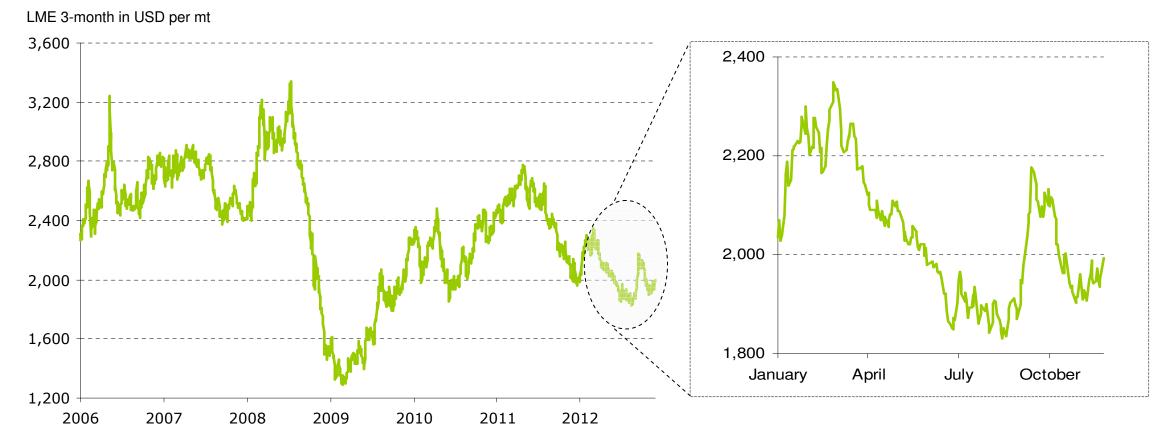
- Ongoing sovereign debt crisis
- Weak growth in industrial production in line with poor PMI
- ECB shows strong willingness to support the euro

#### China

- Economic growth softening
- Exports subdued by weaker global demand
- Rebalancing of the economy



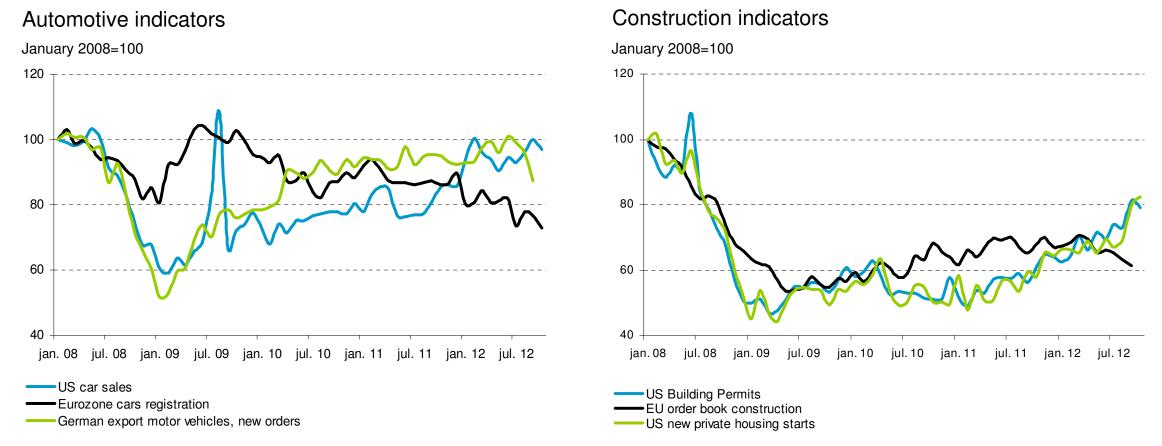
#### Aluminium prices reflecting current macroeconomic uncertainty



Source: Reuters Ecowin



## Demand-side indicators illustrating multi-speed world economy



Source: US Department of Commerce, Deutsche Bundesbank, ECB, Directorate General for Economic and Financial Affairs



## Global megatrends favor continued rise in aluminium demand

#### Megatrends



#### Impact

- Industrialization
- Infrastructure
- Transport
- Construction
- Consumer products

#### Aluminium industry effect

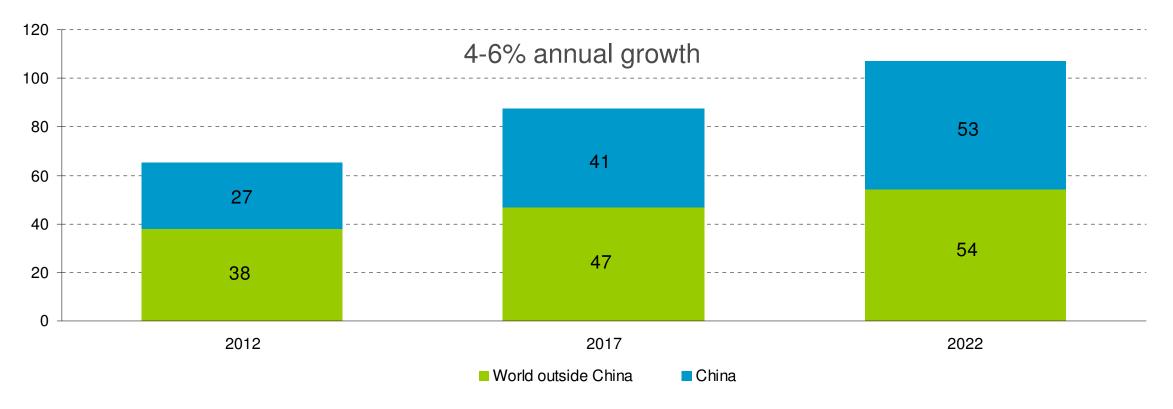
- Automotive, rail and aerospace •
- Electrical cables
- Consumer goods •
- Packaging
- Construction

- CO<sub>2</sub>/GHG legislation
- Renewable energy
- Energy efficiency
- New transport trends

- Smelter efficiency •
- **Energy-efficient buildings** .
- Stronger recycling focus
- Automotive light-weighting •
- Materials substitution •



# Positive long-term outlook for growth in aluminium demand

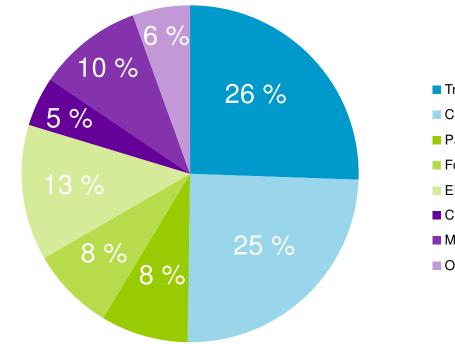


Demand for semis in million mt

Source: CRU



#### Highly versatile metal, broad range of applications



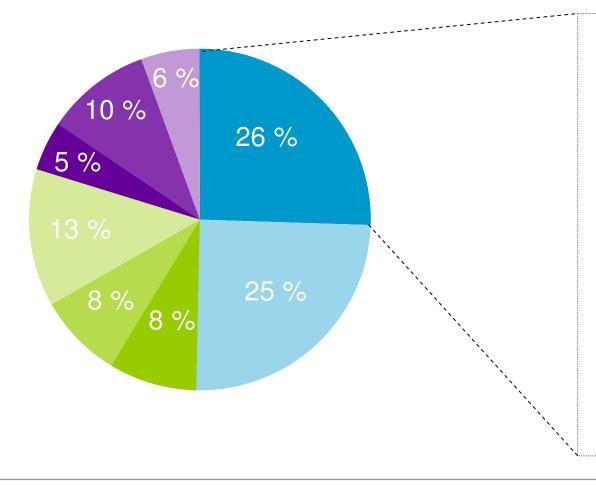
- Transport
- Construction
- Packaging
- Foil
- Electrical
- Consumer durables
- Machinery & Equipment
- Other

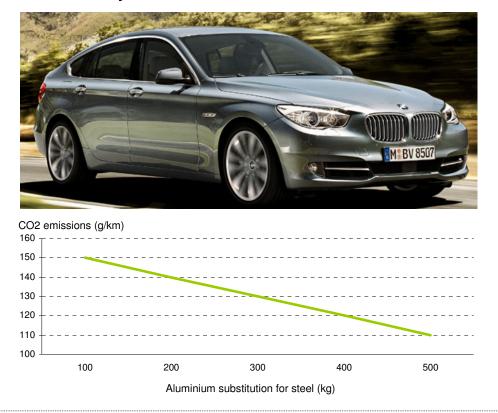
Source: CRU. Global demand per segment demand, 2011.



# Strong trend in automotive light-weighting

Gaining ground in high-volume segments



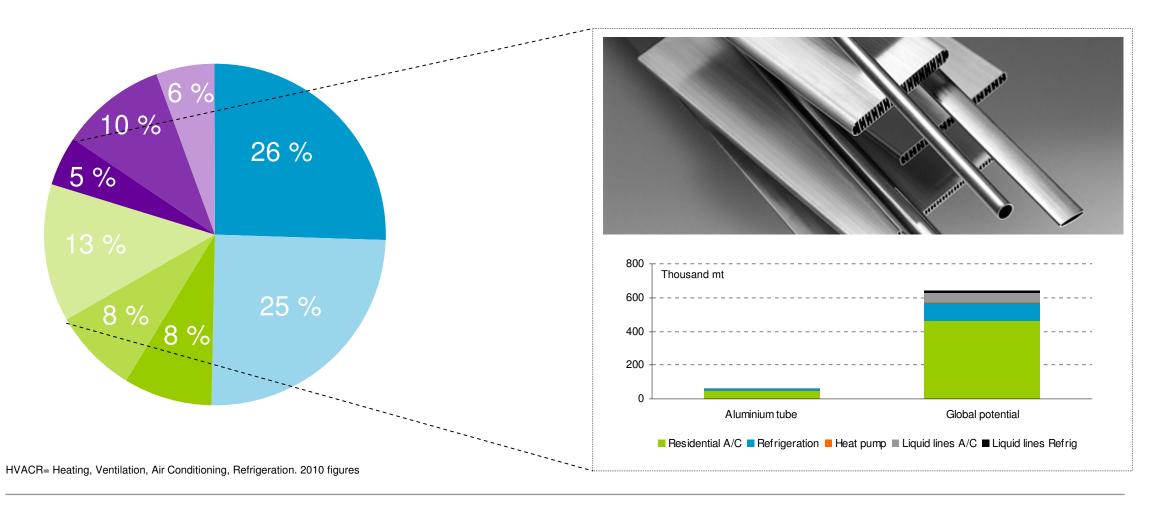


Body-In-White – 16% CAGR estimated



# Aluminium gaining from materials substitution

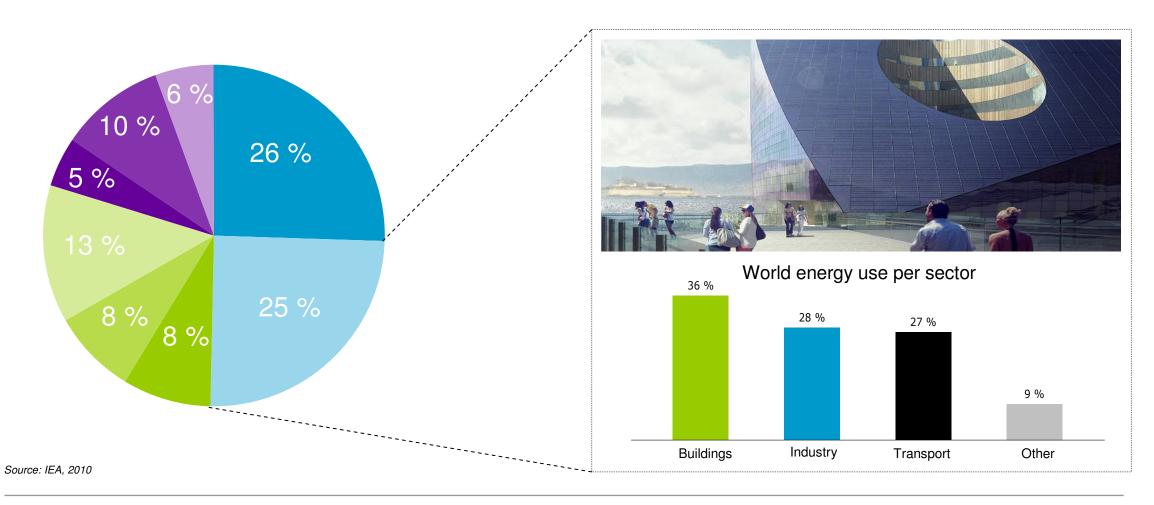
#### Strong potential in HVACR market





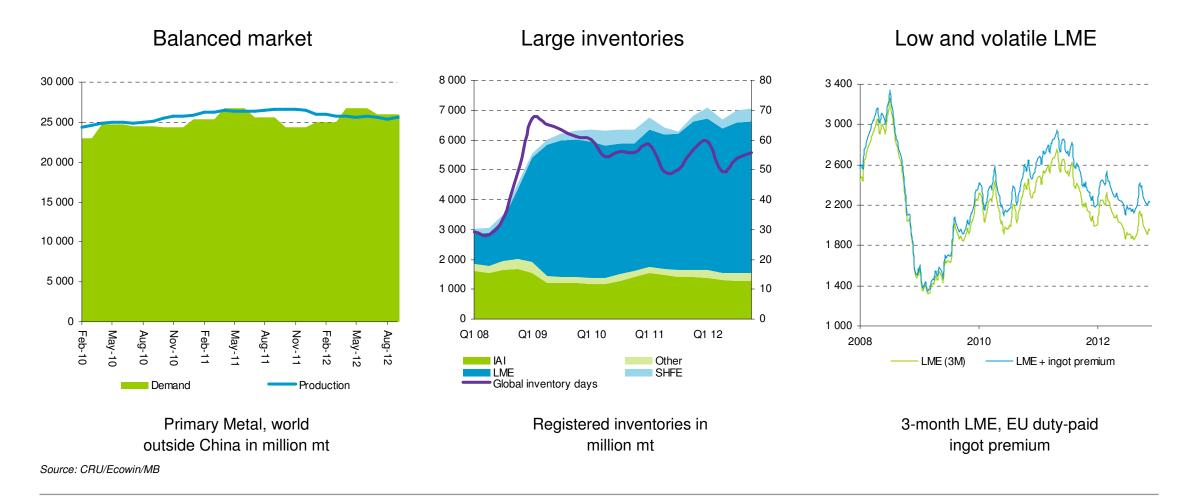
# Construction turns to aluminium to create energy-efficient solutions

Considerable global potential



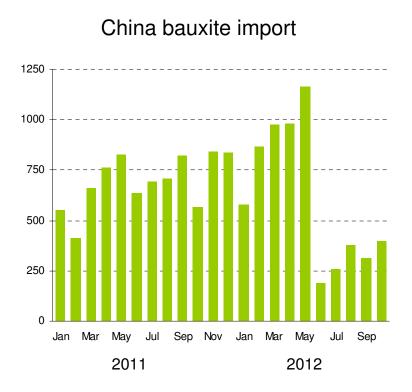


#### Low prices despite balanced primary metal market





#### Bauxite and alumina market in transition



<sup>1250</sup> 1000 750 500 250 0 Jan Mar May Jul Sep Nov Jan Mar May Jul Sep 2011 2012

China alumina import

#### Commercialization



Bauxite imports to China, thousand tonnes (aluminium equivalents) Alumina imports to China, thousand tonnes (aluminium equivalents)

#### Platts alumina index

HYDRO

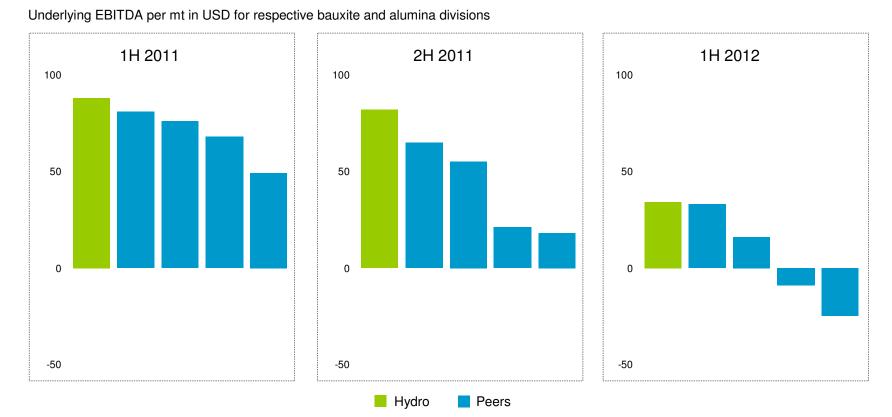
Source: Chinese customs/Platts

# Aiming to become the industry benchmark



# Highly attractive bauxite and alumina position

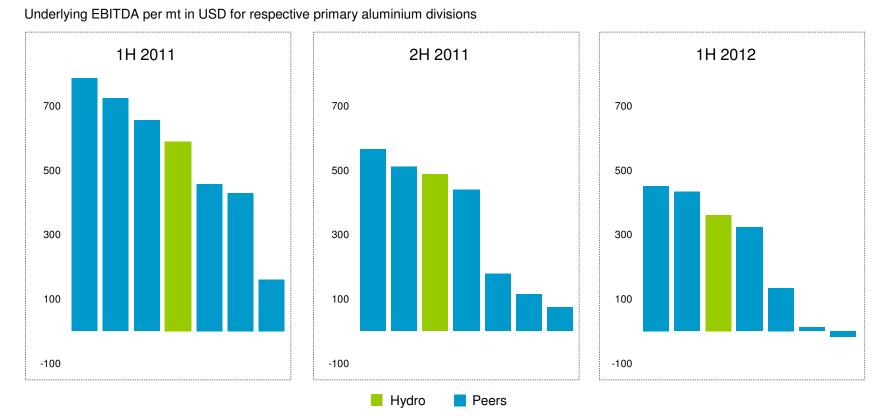
#### Despite lower LME and weak EBITDA



All figures based on public accounting data, not verified by Hydro. Data not adjusted for different accounting principles and non-specified underlying items. Hydro makes no representation as to the accuracy or completeness of such information. The analyses are based on assumptions subject to uncertainty and therefore intended only for general comparisons across companies and should not be used to support any individual investment decision. All results are provided for informational purposes only.



#### Improvement drive yields results in primary production



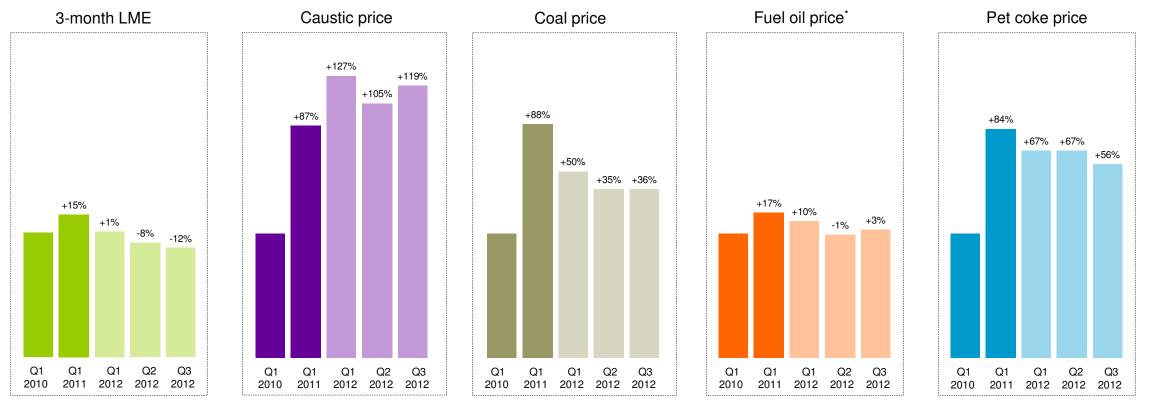
All figures based on public accounting data, not verified by Hydro. Data not adjusted for different accounting principles and non-specified underlying items. Hydro makes no representation as to the accuracy or completeness of such information. The analyses are based on assumptions subject to uncertainty and therefore intended only for general comparisons across companies and should not be used to support any individual investment decision. All results are provided for informational purposes only. Hydro figures includes Primary Metal, Metal Markets and attributable share of EBITDA and production in Qatalum.



## Upstream raw material cost challenge

#### LME continues to lag key raw material prices

Indexed (Q1 2010=100)



Source: EcoWin (LME), CMAI/Harriman (Caustic soda), Platts Bolivar Index (Coal), ANP (Fuel oil) \* ICMS effect not included in graph for 2012



# Strengthening the competitiveness of Bauxite & Alumina

#### From B to A

#### Alunorte

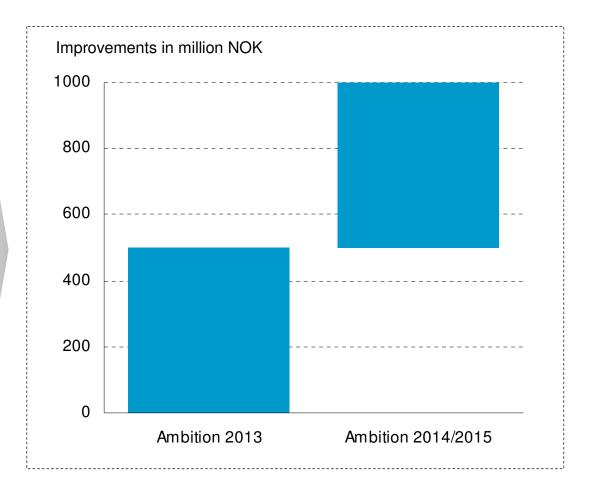
- Increase productivity and rightsize organization
- Stabilize performance at nameplate capacity
- Improve logistics efficiency

#### Paragominas

- Increase productivity and rightsize organization
- New methods to support production at nameplate capacity
- Improve product flow and minimize tailings

#### Commercial

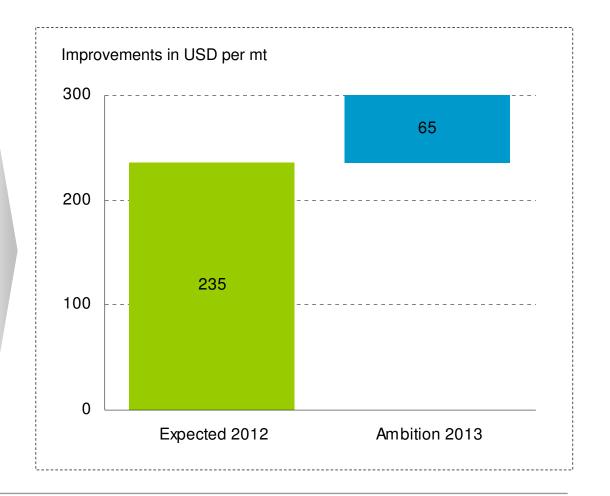
- Base bauxite and alumina pricing on fundamentals
- Increase logistical flexibility and optimize scheduling





# Primary Metal to complete USD 300 improvement program in 2013

- Estimated to deliver according to target for 2012
  - USD 235 per mt improvements by end-2012
  - Challenging markets put pressure on margin above standard ingot premium
  - Outperforming on cost reductions and operational improvements
- Target to deliver remaining USD 65 per mt in 2013





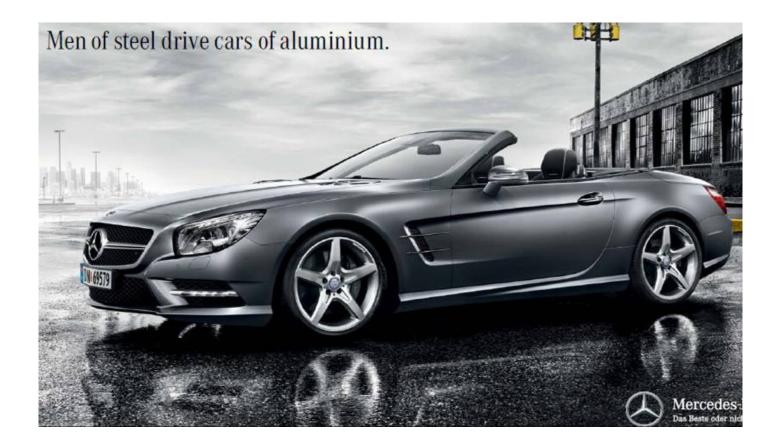
### **Extruded Products improvement program continues**





## **Enhancing performance in Rolled Products**

- Portfolio optimization
- High-grading product portfolio
- Cost programs and margin management
- Capital discipline





## No. 1 flat rolled products producer in Europe



- World leader in high-end products foil and litho
- Focus production system on core assets
  - -Alunorf (50%) world's largest rolling mill
  - -Grevenbroich plant world's largest finishing mill
- Technology leadership and innovation
  - Developing new products and applications



# Energy: optimization of equity hydropower production

- First-class hydropower assets in Norway
  - -9.5 TWh normal annual production
  - Highly competitive cost position
  - Stable operations
- Focus on optimization
  - Commercial activities
  - Production
- Solid cash-flow generation





## Securing energy across the value chain and growing equity portfolio

- Sourcing energy across the value chain
  - 2012 achievements: competitive power secured for Neuss and Søral
  - 2013 focus: new contract for Slovalco and improved framework for Albras

- Growing and upgrading portfolio
  - Expansions completed: Holsbru, Vasstøl
  - Successful Rjukan upgrade (first stage)
  - Target: lifting normal production to 10 TWh/year



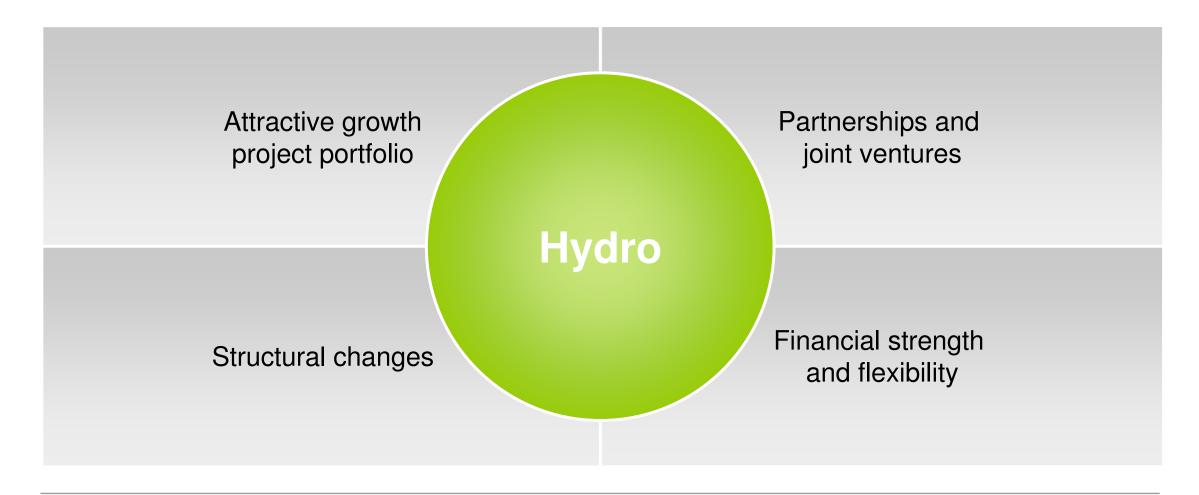


#### HSE, CSR and compliance are key components in a performance culture





#### Ideally positioned for growth





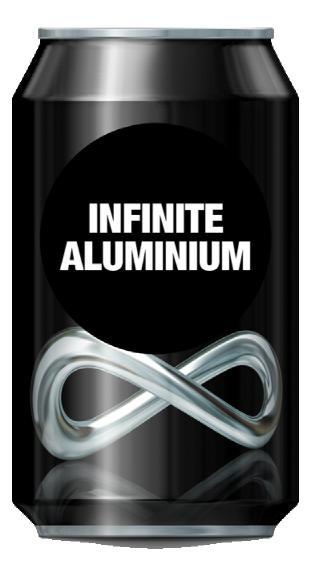
# Our value proposition







- Improve relative industry position
- Capitalize on raw material positions
- Maintain financial strength and flexibility
- Ensure competitive shareholder return







# Primary Metal Improving robustness

Hilde M. Aasheim

Capital Markets Day 2012



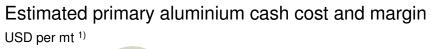
#### **Primary Metal's smelter portfolio**

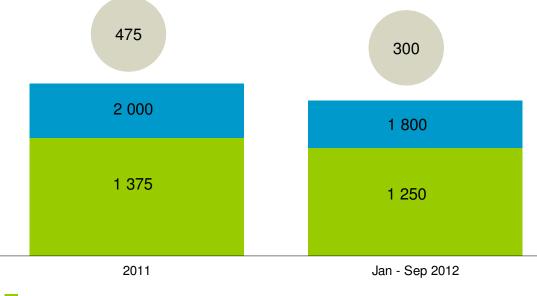


Consolidated capacity: 2.2 million mt - Slovalco and Albras are fully consolidated, Qatalum and Søral are equity accounted. 300.000 tons of capacity currently curtailed in Kurri-Kurri, Sunndal and Søral



# Primary Metal main agenda – repositioning





Estimated cash cost excluding LME-linked alumina cost <sup>2)</sup> Estimated LME-linked alumina cost <sup>2)</sup> Estimated EBITDA margin

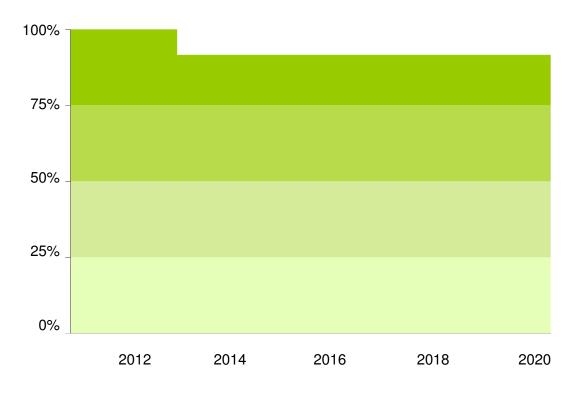
- 1) Realized aluminium price minus EBITDA margin per mt primary aluminium. Includes net earnings from primary casthouses. Qatalum EBITDA and production included from 2012.
- 2) ~13.5% of LME 3 month price with 2.5 months delay

- Curtailed high-cost capacity
- Qatalum first-quartile cost position confirmed
- Improvement efforts progressing within all existing assets
- Securing competitive energy supply



#### **Robust power coverage**

Power coverage (%), based on consolidated production in 2012, year-end level

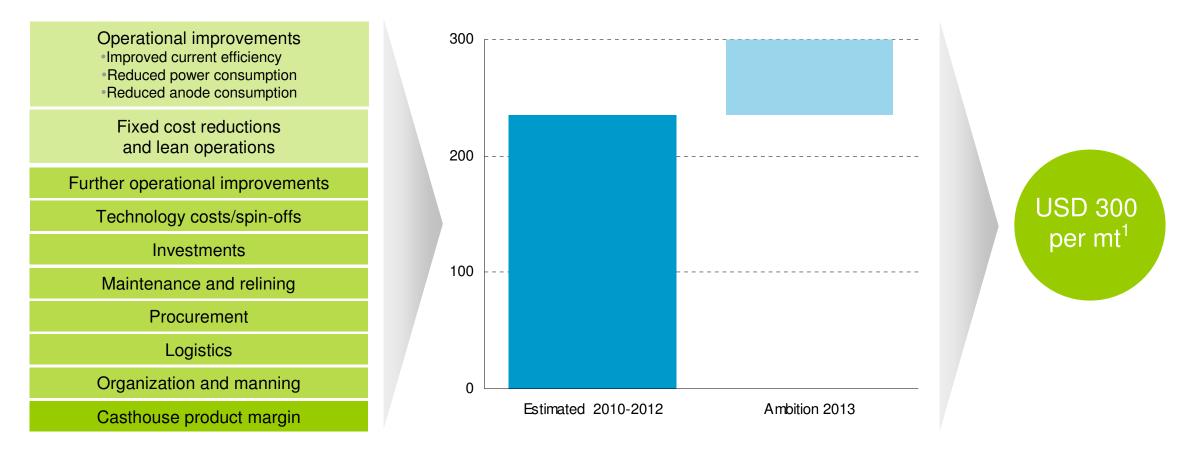


- Alouette power contract extended for current capacity, power for potential expansion secured
- EU CO2 compensation framework in place
  Norway committed to implement compensation
- Søral power contract secured
- Continued effort to secure power for Slovalco and improve power framework for Albras
- ~90% of current production has power coverage until 2020 or beyond
- ~2/3 based on hydropower



# Primary Metal delivers on improvement program

#### USD 300 to be delivered by end-2013



1) Compared to 2009 cost level. USD 300 per mt real term target for fully owned smelters excluding Neuss with 2009 as baseline. Effect of exchange rates and raw materials cost changes are neutralized



### Improvement focus will continue

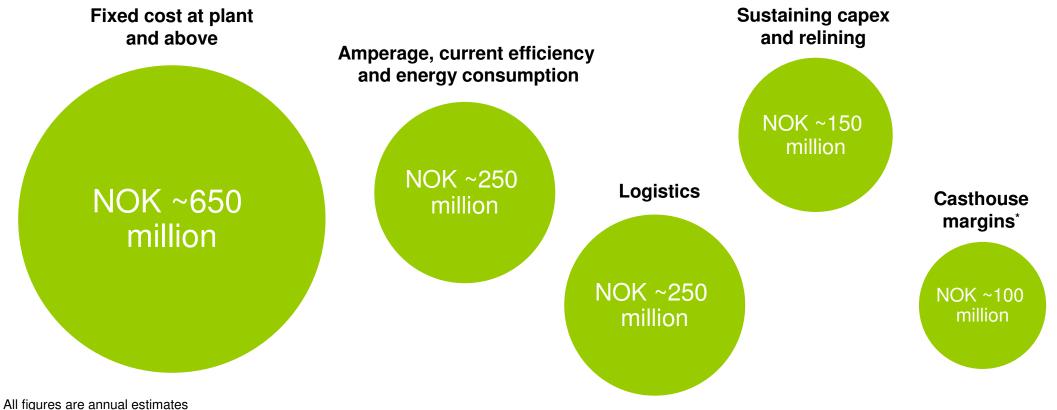
- Continuing USD 300 improvement program in all areas based on Primary Metal production system (AMPS)
- New areas will be explored
  - Commercial optimization after Primary Metal and Metal Markets combined under one management
  - Black raw materials
    - Using new coke qualities
    - Qualifying new coke and anode suppliers
  - Further effect of technology spin-offs
    - Larger anodes
    - New cathode design





# Estimated USD 300 improvement program achievements end-2013

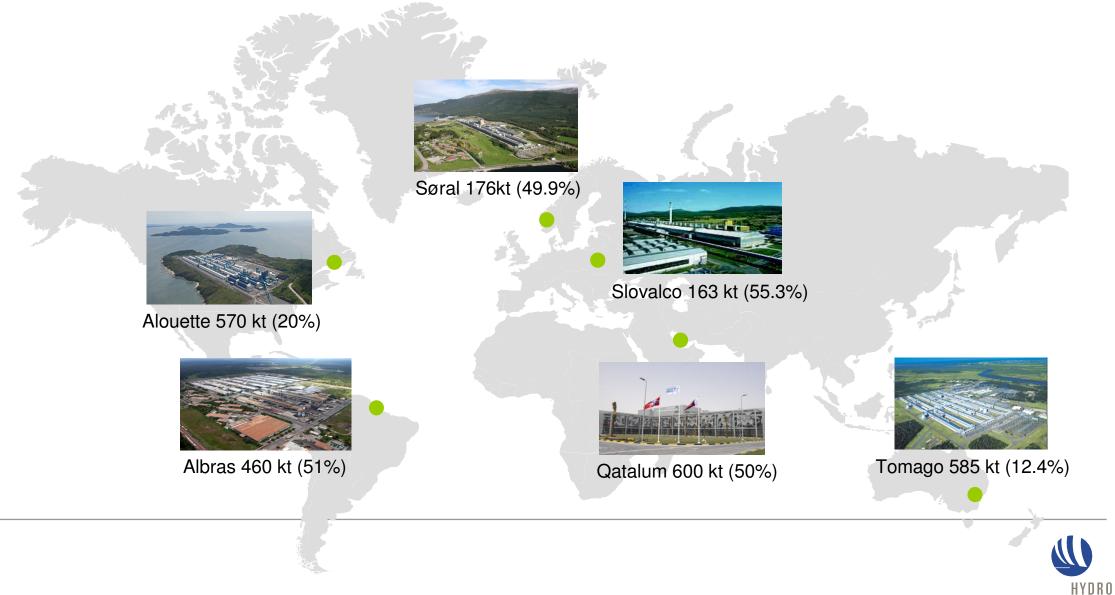
Total annual effects in real terms NOK ~1.4 billion



\*Casthouse margins including fixed cost and process improvements in casthouses



### Working with partners for improvements in the six joint venture smelters



### **Qatalum – world-class smelter**

### Smelter

- Full electrolysis capacity from 21 September, 2011
- Estimate above 600 000 tonnes liquid metal in 2012
- High-quality anode operation
- Casthouse production >90% value-added products
- Technology verified

### **Power Plant**

- Seawater cooling tower in full operation
- All turbines in operation
- Focus on robustness





### **Qatalum – first quartile cost position confirmed**



- Business operating cost ~USD 1 450 1 500 at current market conditions
- Further operational streamlining and cost optimization
- Further creep potential beyond 2012 level



### Albras – promising changes in energy framework

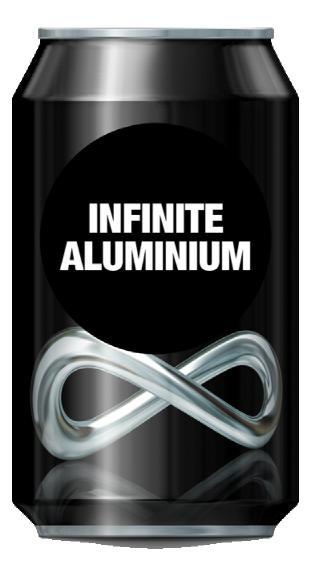
- Business environment improved
  - Exchange rates significantly improved
  - Positive governmental announcements on power framework
  - Actual impact and implementation needs further clarification

Focus on operational improvements



# **Primary Metal priorities**

- Continued drive to reposition portfolio
- Deliver on USD 300 program by end-2013
- Intensified improvement focus in JVs
- Power sourcing
- Optimizing casthouse operations after combining Primary Metal and Metal Markets







# Bauxite & Alumina

Johnny Undeli

Capital Markets Day 2012



### **Bauxite & Alumina – key priorities**

- Deliver on ambitious improvement program
- Strengthen cash generation
- Lift and stabilize production
- Continue commercial focus
- Focus on HSE and CSR

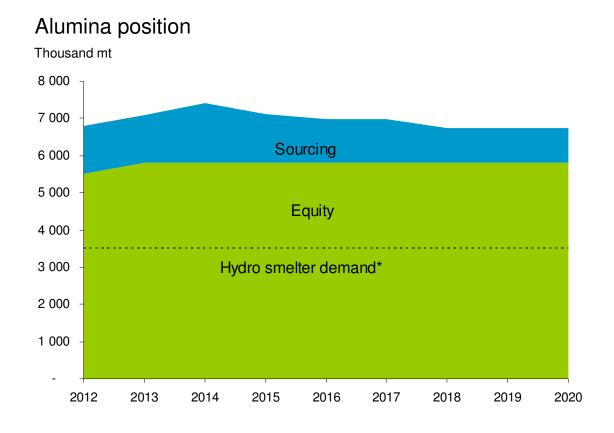




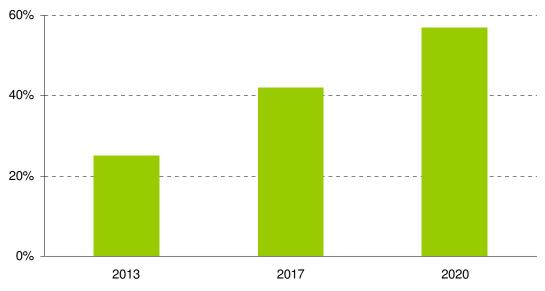
# Commercial 01



### Attractive alumina portfolio



Estimated index exposure in external sales portfolio



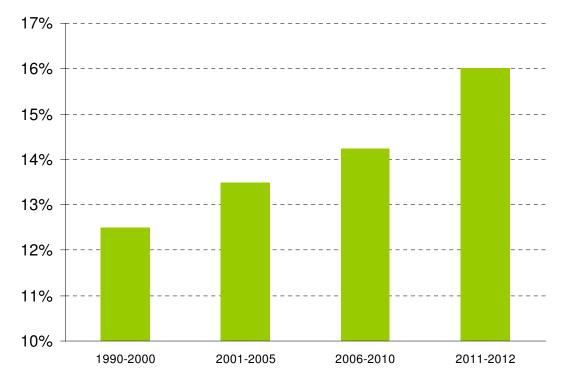
• Legacy contracts limiting index exposure next few years

Increasingly long from 2016

\*Joint ventures treated on a pro-rata basis

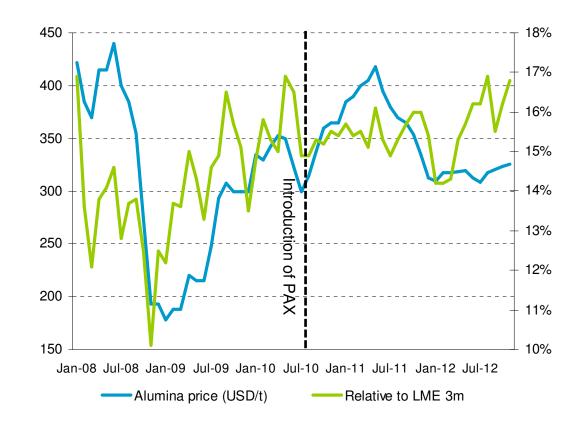


### Index pricing gaining ground



Short/medium-term contract prices in % of LME

Alumina price development



Source: Platts, CRU, Hydro



# **Optimizing global bauxite and alumina positions**

### **Estimated shipments 2012**

- 7.3 million mt alumina
- 2.6 million mt bauxite

### External sourcing and swapping

- Saving logistical cost and improving margins
- Ensuring global reach
- Enabling market opportunities





### **Commercial strategy**



### Increasing alumina index exposure

- All new contracts to be based on index pricing
- Allowing alumina to be priced on own fundamentals

### Alumina marketing targets

- Increase sales on CIF<sup>\*</sup> basis
- Establish premium for Alunorte quality

### **Bauxite marketing targets**

- Improve margins on 2-3 million mt annual sales
- Focus on the Atlantic market, develop China as important alternative

\* Cost insurance and freight



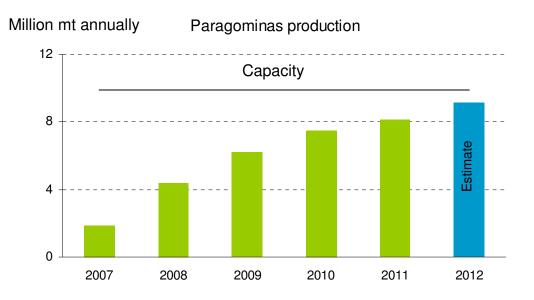
# Ambitious improvement program "From B to A"



[02]

### Paragominas – one of the world's largest bauxite mines



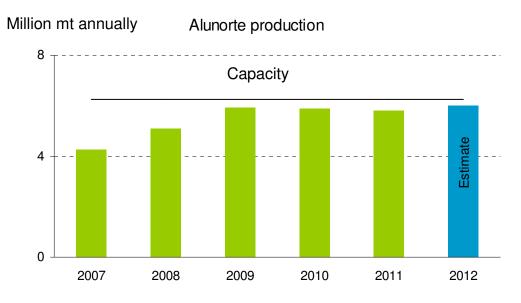


- High-quality gibbsite bauxite
- Efficient integrated system with mine, pipeline and refinery
- Record production in 2012



### Alunorte – world's largest alumina refinery



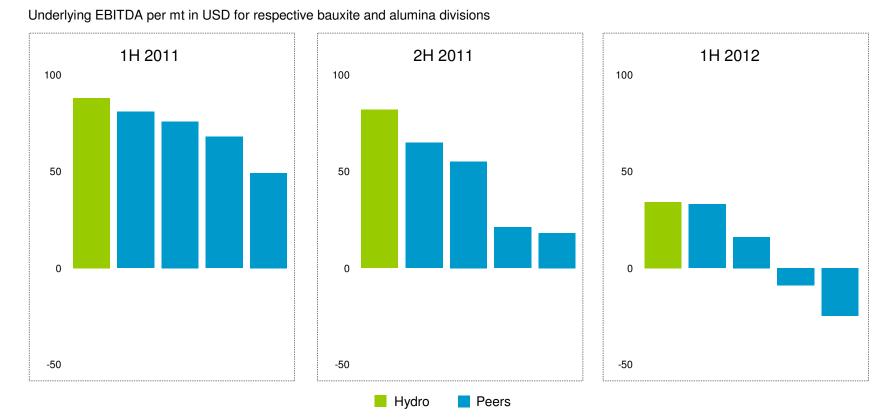


- Premium alumina quality
- Benchmark energy consumption
- Ambition to reach nameplate capacity
- Continue to improve production stability



# Hydro's position – competitive compared to peers

### Despite lower LME and weak EBITDA



All figures based on public accounting data, not verified by Hydro. Data not adjusted for different accounting principles and non-specified underlying items. Hydro makes no representation as to the accuracy or completeness of such information. The analyses are based on assumptions subject to uncertainty and therefore intended only for general comparisons across companies and should not be used to support any individual investment decision. All results are provided for informational purposes only.



### "From B to A"



- Total contribution of NOK 1 billion
   Full impact in 2015
  - $-\,50\%$  in 2013
- Defined actions in Alunorte, Paragominas and Commercial
- Production stability, volumes and costs
- Focus on underlying performance improvements



# Target 20% demanning by end-2015

# <sup>8</sup> 2012 2013 2014 2015 0 10 Target 20 30

### % demanning versus 2011 headcount

• Baseline 6 000 employees, including contractors

- Target reduction of 1 200, primarily contractors
  - Centralization of contract management
  - Major potentials in the area of transportation, cleaning and maintenance



### Paragominas cost ambition

# Paragominas production cash costs Paragominas influencable costs % shares of costs % shares of costs Targeted reduction 20% reduction of influencable costs Influencable Materials



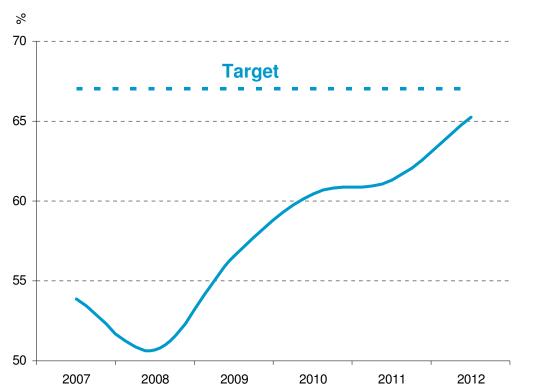
### Paragominas – improving productivity with surface miners



- Surface miner increasing productivity and reducing unit costs
  - Increasing productivity in the mining process, from 400 t/h to 800 t/h
  - Operating over wider mining areas
  - Reducing ore losses



### Paragominas – increasing mass recovery



### Development of mass recovery since start-up

### Target

- Increase life of mine
- Increase production
- Decrease tailing volumes and reduce investments

### Actions

- Installation of a "crossover"
  - Allowing use of most suitable line
- Increase of fines to Alunorte



### Pipeline – installing second pump station



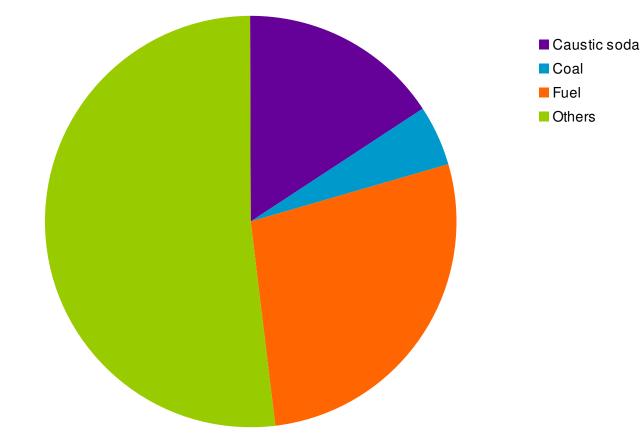
- Bauxite slurry flow currently provided through pump station in Paragominas
- Construction of second pump station halfway to Alunorte
- Improved operations
  - Availability
  - Flexibility
  - Prolonged lifetime
  - Safety and environment



# Raw materials represent significant share of total costs

Caustic soda, coal and fuel accounting for  ${\sim}50\%$ 

Cost split Bauxite & Alumina YTD September 2012





### **Alunorte – reduction of influencable costs**

# Alunorte production cash costs % shares of costs

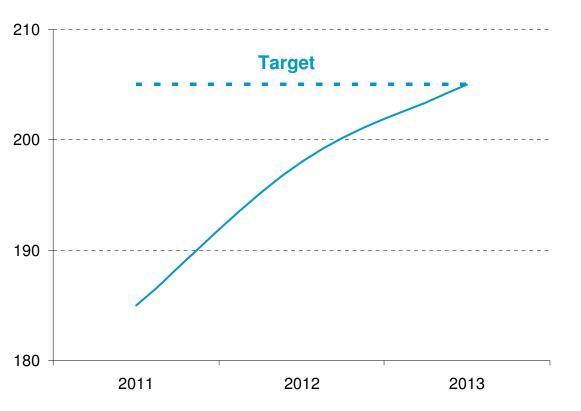


Alunorte influencable costs

% shares of costs



# Alunorte – stabilizing hydrate production lines 1/2/3

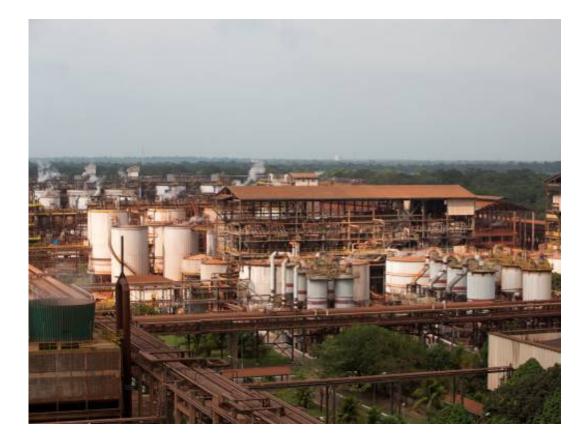


Hydrate production in mt per month

- Alunorte hydrate production lines 1/2/3 with production below design capacity
- Identified actions
  - House-keeping of tanks and digesters
  - Review of critical operational procedures
  - Overhaul of calciners and thickeners



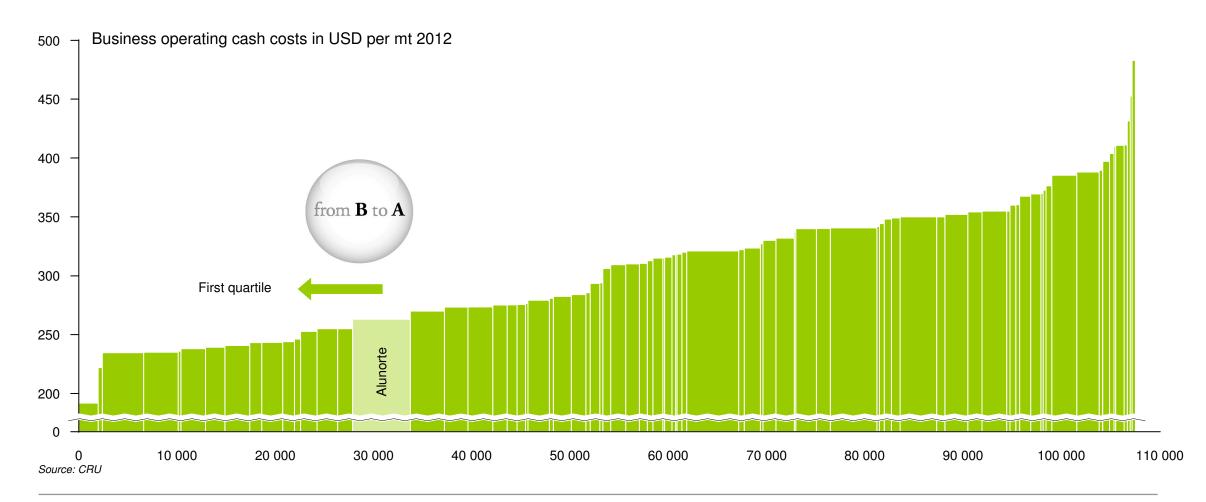
### Alunorte – emergency preparedness towards external power outage



- Ensure 100% energy availability to avoid production losses
- Identified actions
  - Install emergency generation in precipitation area
  - Implement rejection load system to keep operation during power grid system failure
  - Recovery towers of transmission lines to keep reliability of power supply system
  - Preventive maintenance in power distribution systems, substations and emergency generation

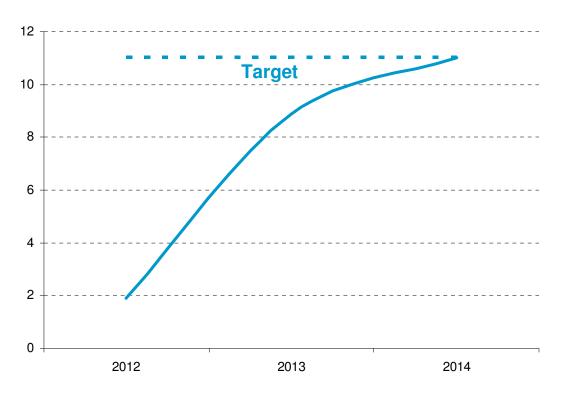


# Alunorte – improving cost position





### **Commercial – reducing demurrage costs**



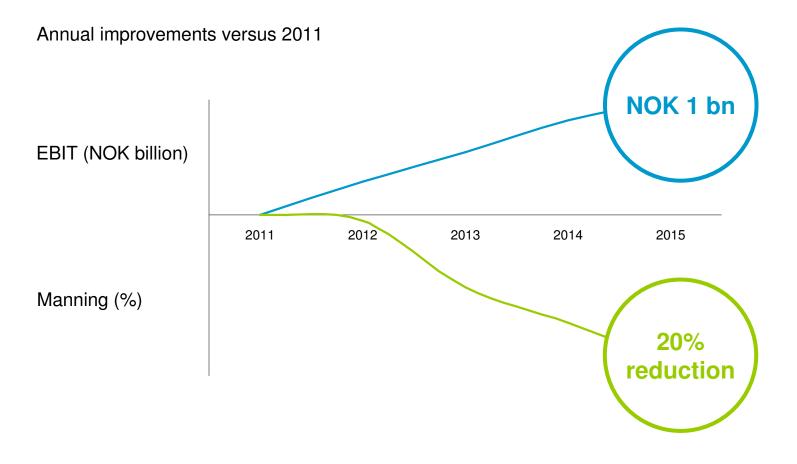
Annual demurrage cost savings in USD million

- Identified actions
  - "Bauxiteiro" vessels for transport from MRN to Alunorte
  - Dredging in Alunorte port
  - Upgrade Alunorte port for rainy season
  - Stabilize production volumes



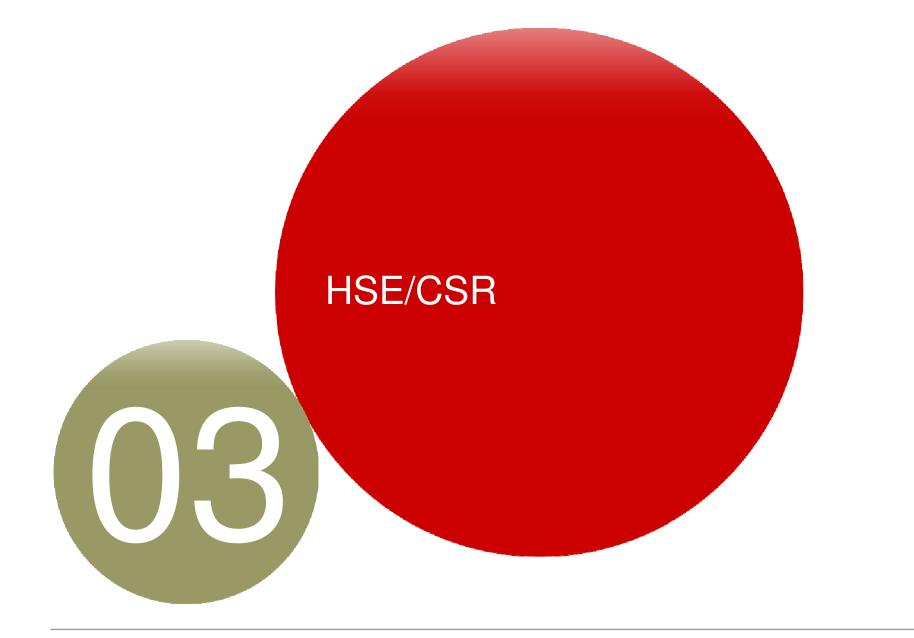
# Ambitious improvement program "From B to A"

EBIT improvement of NOK 1 billion and 20% manning reduction



- "From B to A" improving result significantly
- Additional impact from inflationary pressure and exchange rates







### Safety – The Hydro Way



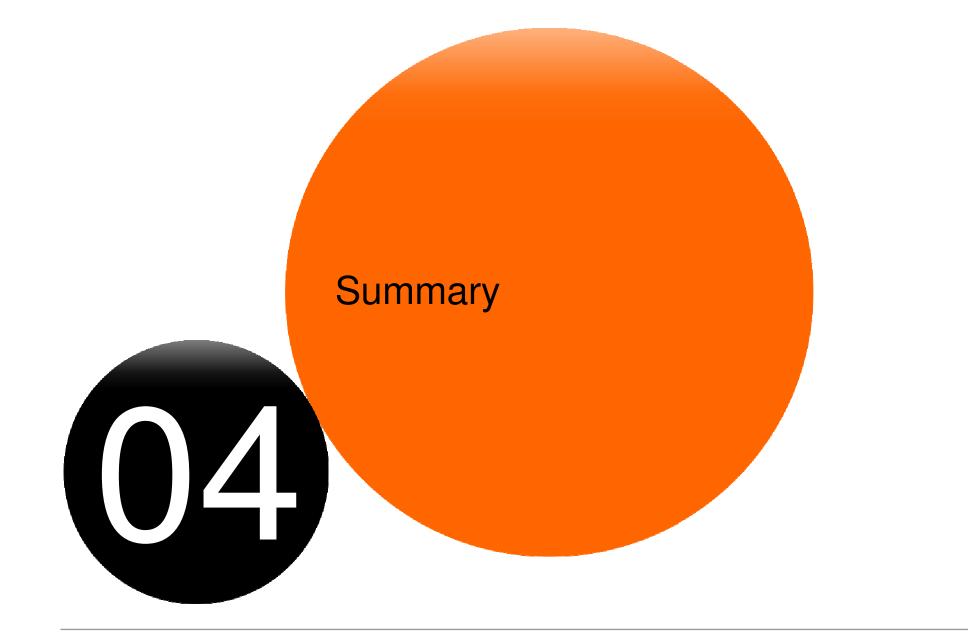


### Social and environmental commitment

- Health, safety and environment culture is the foundation for excellent operations
- Environment
  - Mining 1:1 ratio of opening and rehabilitating land in 2017
  - Letter of intent with University of Oslo on biodiversity and climate
  - Supporting Para Green Municipalities program
  - Established environmental network between bauxite mines in Para
- Dialogue established with all key stakeholders









### **Deliver on "From B to A"**



