

Business Area Seminar Hydro Aluminium

Düsseldorf
March 18/19 2003





Major acquisitions – new strategic platform

- **Full range aluminium company**
 - No. 1 in Europe – top three integrated globally
 - Complementary product portfolios

- **Low cost smelter assets in Australia and Canada**

- **Successful integration**
 - Significant synergies and value creation
 - Improved market positions
 - Enhanced competence and capabilities



The Innovative Global Force Delivery

- **Outperform competitors in key market segments**
- **Operational performance excellence**
 - **Benchmark in operation of key technologies**
 - **Ambitious cost reduction and value capturing programs**
 - **Continuous safety improvements**
 - **Strong environmental focus**
- **Turnaround/exit under-performing assets**
- **Leading financial performance among peers**



The Innovative Global Force Differentiation

- **Customer responsiveness**
- **Agile and flexible organisation**
- **Unique portfolio composition**



The Innovative Global Force Strategic direction

- **Short- and medium term focus: Performance improvements**
- **Restructure upstream portfolio – improve relative cost position**
- **Leverage value of number one positions mid- and downstream in Europe – also globally**



Our value chain

Bauxite/
alumina

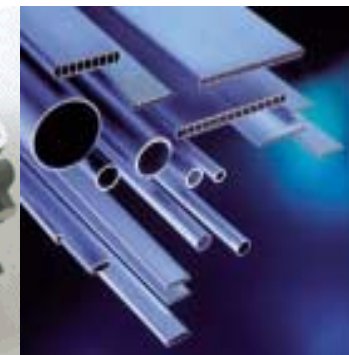
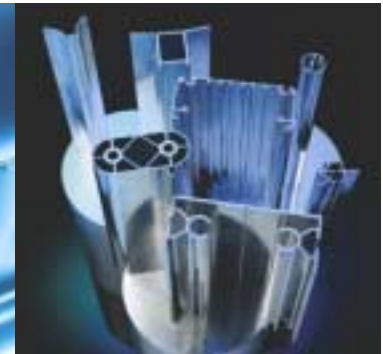
Electrolysis
metal

Casthouse
products

Rolling Extrusion

Fabrication
& Systems

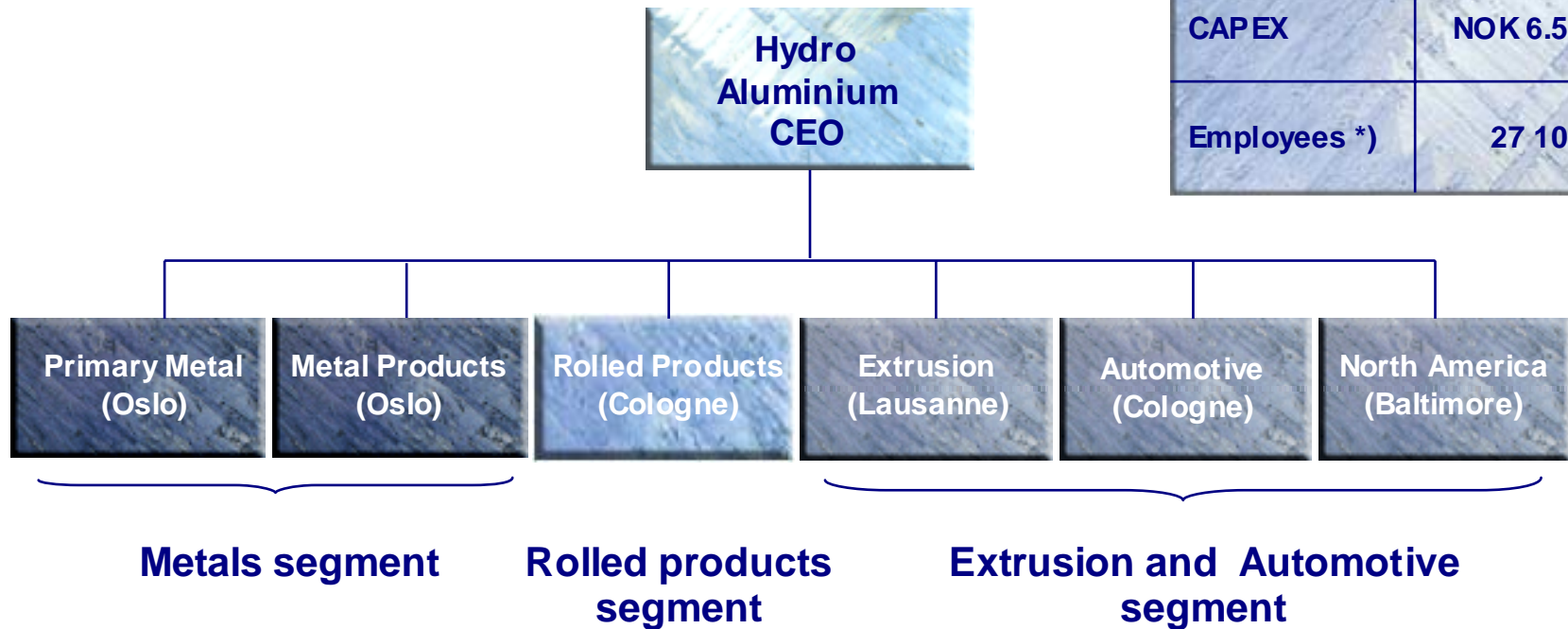
Automotive





Hydro Aluminium 2002

Revenues	NOK 65 bn
EBITDA CROGI	NOK 4.3 bn 7.1%
Gross Investment *)	NOK 64 bn
CAPEX	NOK 6.5 bn
Employees *)	27 100



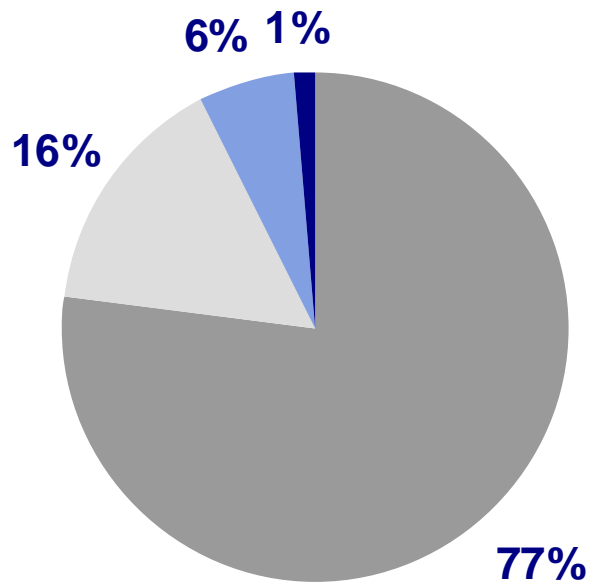
All figures exclude Flexible packaging.

* Gross Investment and employees by 31.12.2002

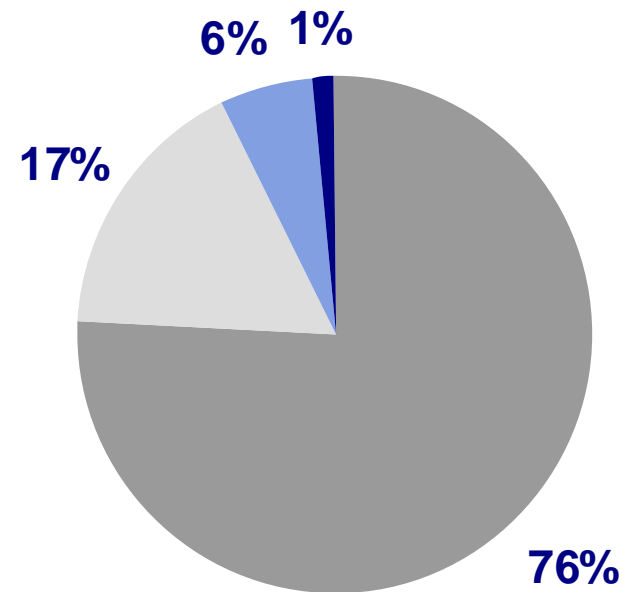


Geographical presence 2002

Revenues per Continent
Total NOK 65 billion



Employees per Continent
Total 27 100 employees

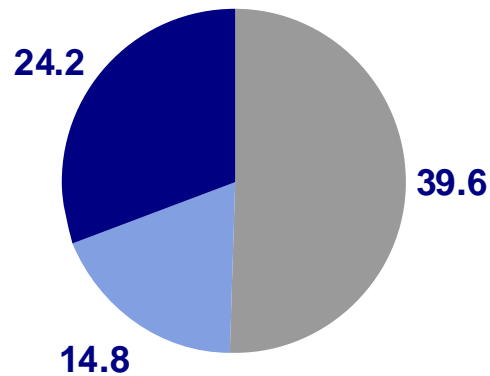


- Europe
- North America
- Asia/Oceania
- Rest of World

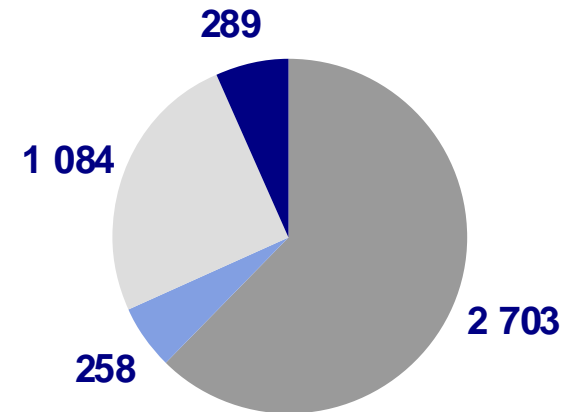


Segment split 2002

Revenues (NOK billion) *)

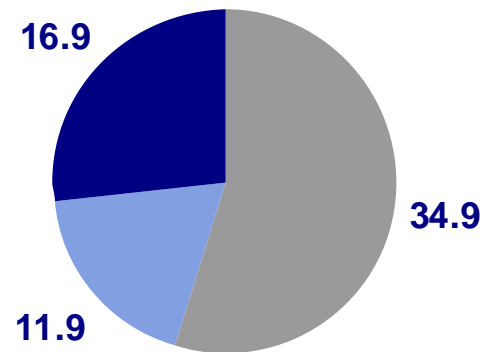


EBITDA (NOK million)



Gross Investment (NOK million)

(31.12.2002)



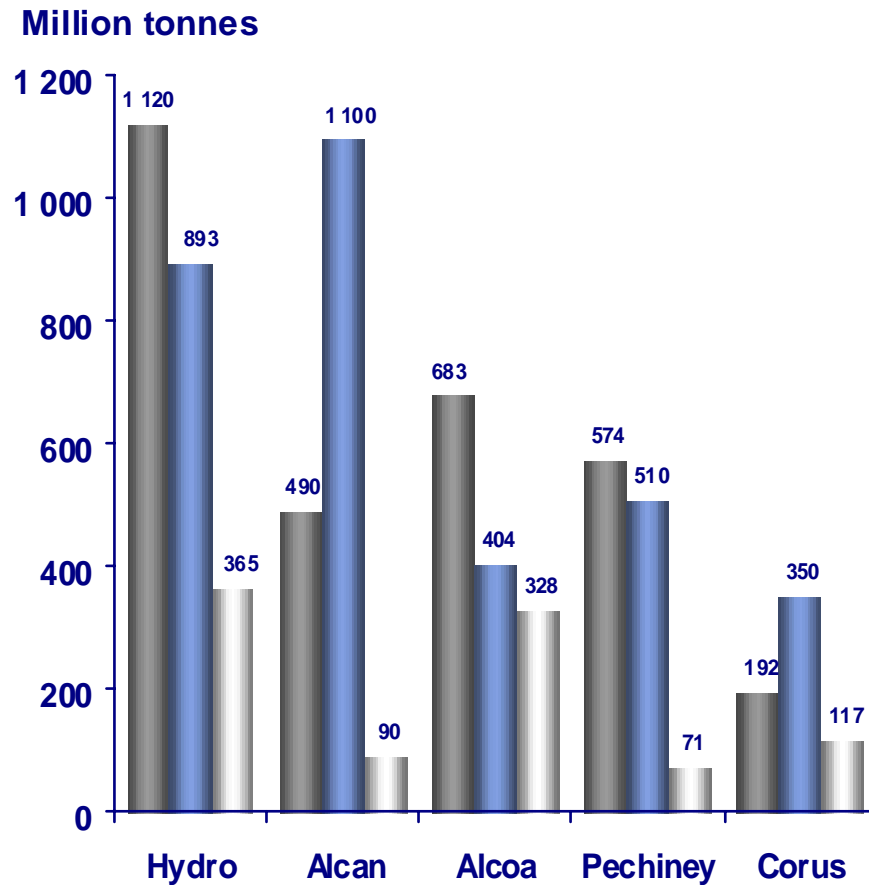
- Metals
- Rolled Products
- Extrusions and Automotive
- Eliminations

* Including internal sales

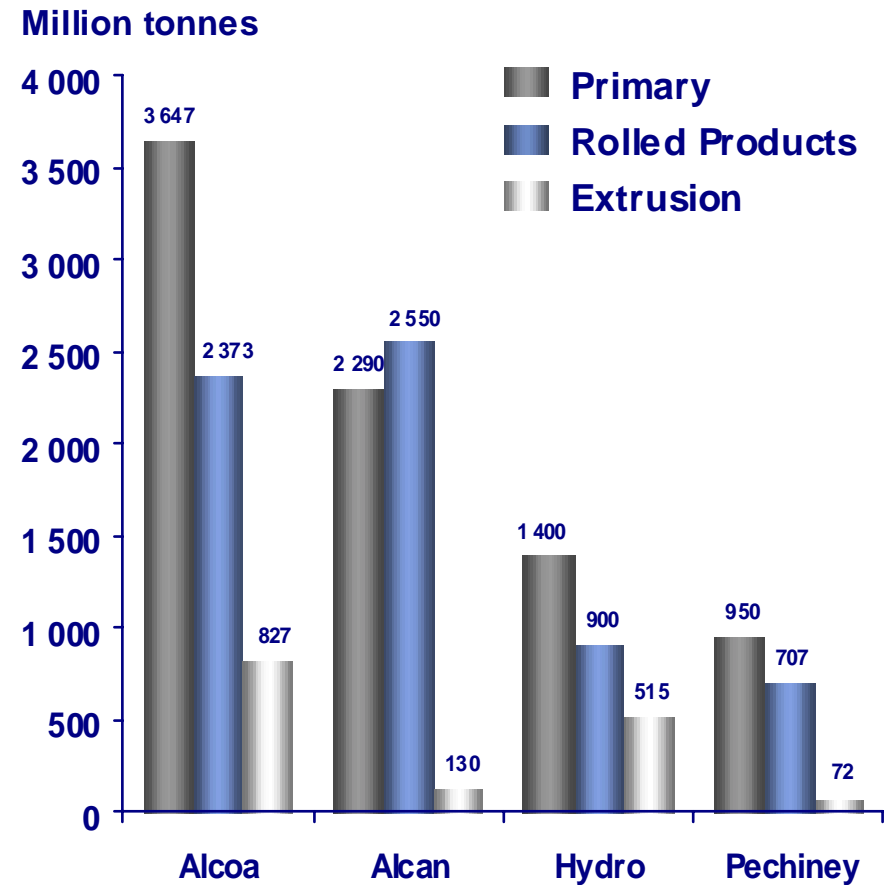


No. 1 in Europe – top three integrated globally

Europe



Global



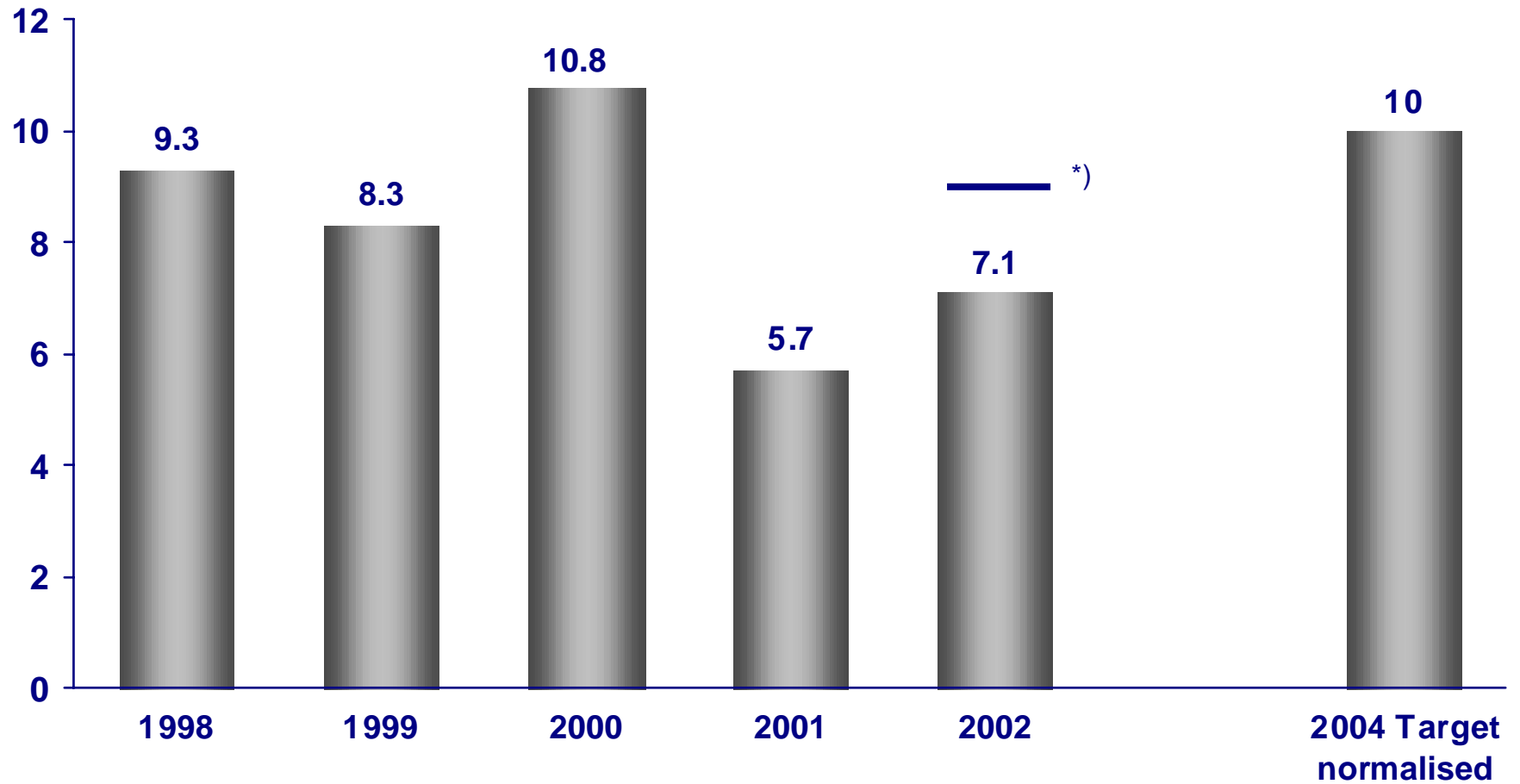
Source: CRU. Hydro Aluminium full year (proforma). Production volumes 2002.



CROGI – our main challenge

CROGI 1998 – 2002: Actual prices

Percent



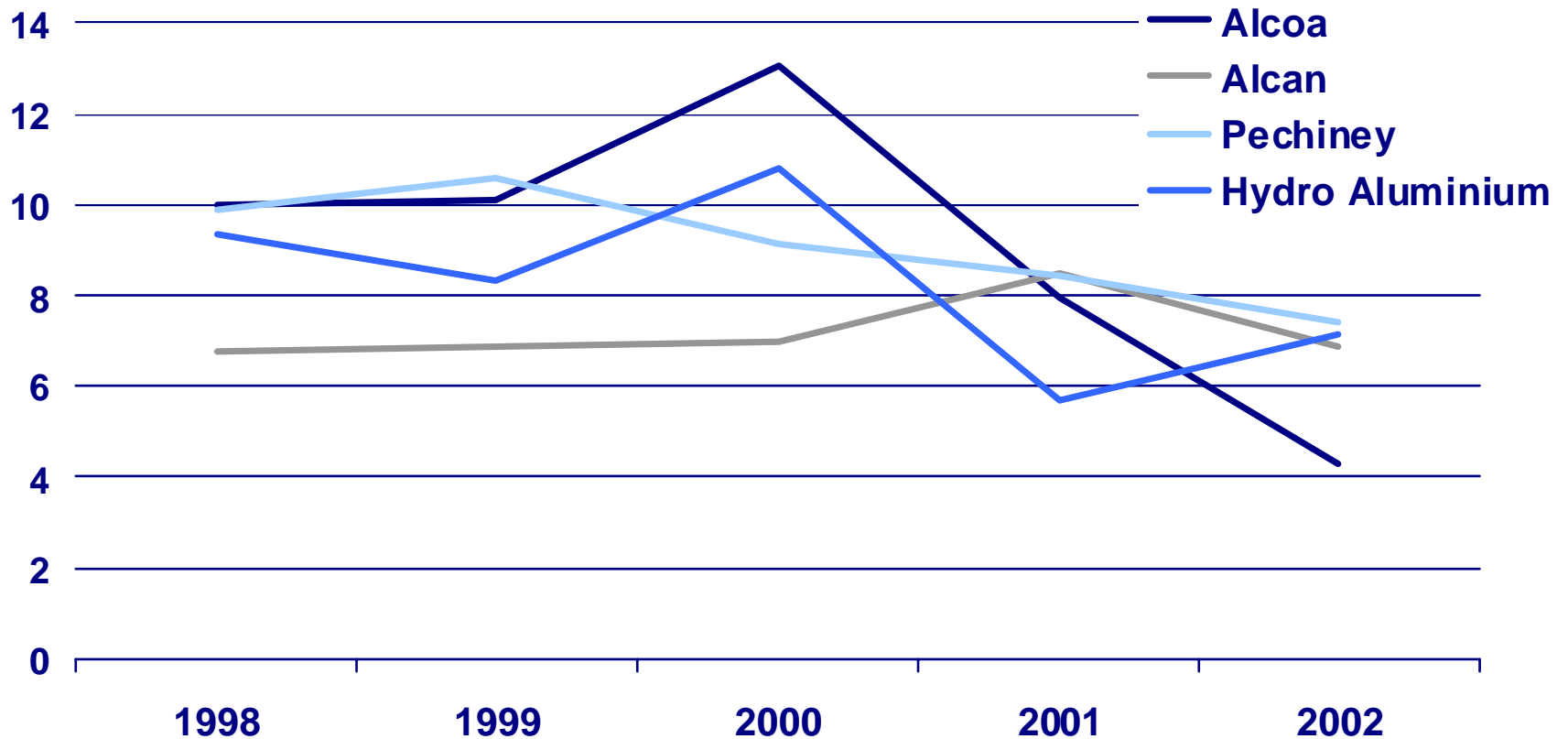
* With normalised LME-price (1 500 USD/tonnes) and 8 NOK/USD



Aluminium industry affected by general economic downturn

CROGI proxy *)

Percent

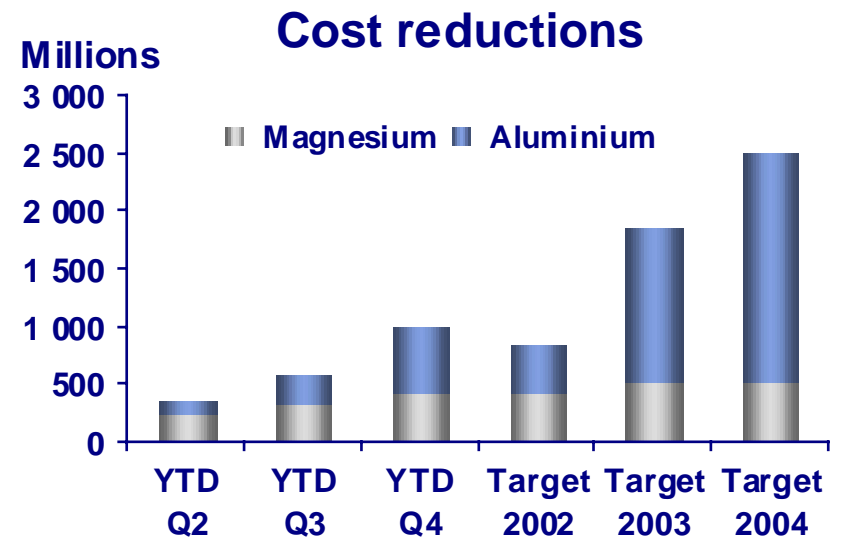
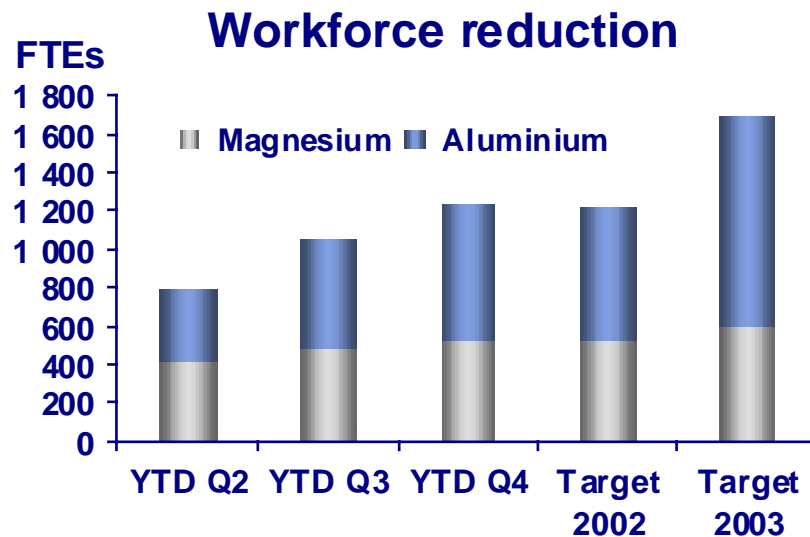


* EBITDA less actual tax/Average Gross investment. Calculated proxy where needed to get comparable figures. Calculated tax for Hydro Aluminium.

Source: Company reports. Hydro Aluminium



Improvement program on track



Restructuring and rationalization costs (NOK million)				
	Realized		Remaining	Total
	2001	2002	Estimate	
Magnesium	700	-10	24	714
Aluminium	-	300 *)	370	670

Workforce and cost reductions relative to 2001.

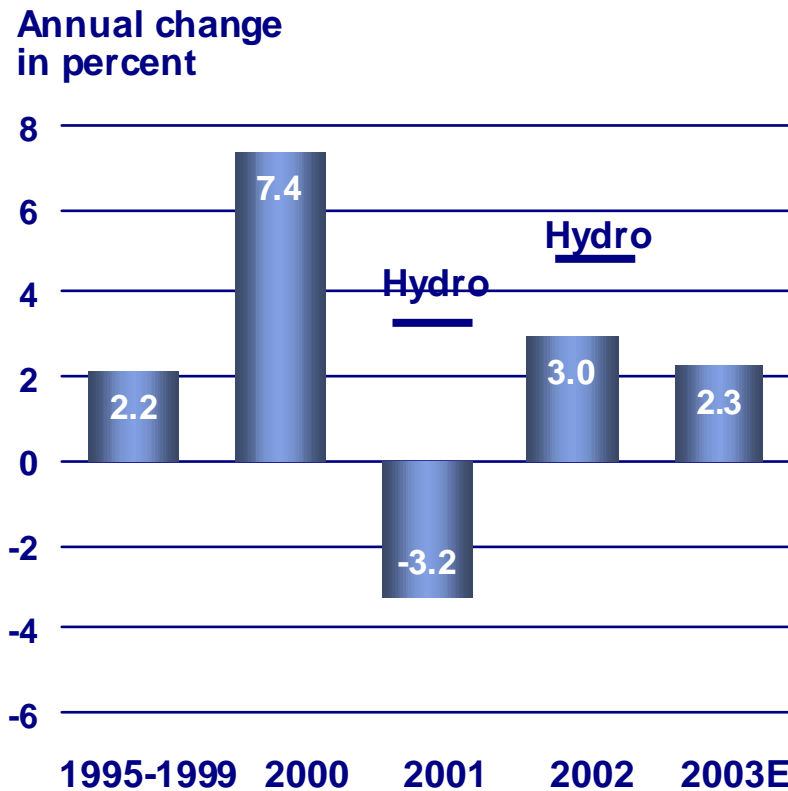
* Of which NOK 89 million charged to VAW opening balance.



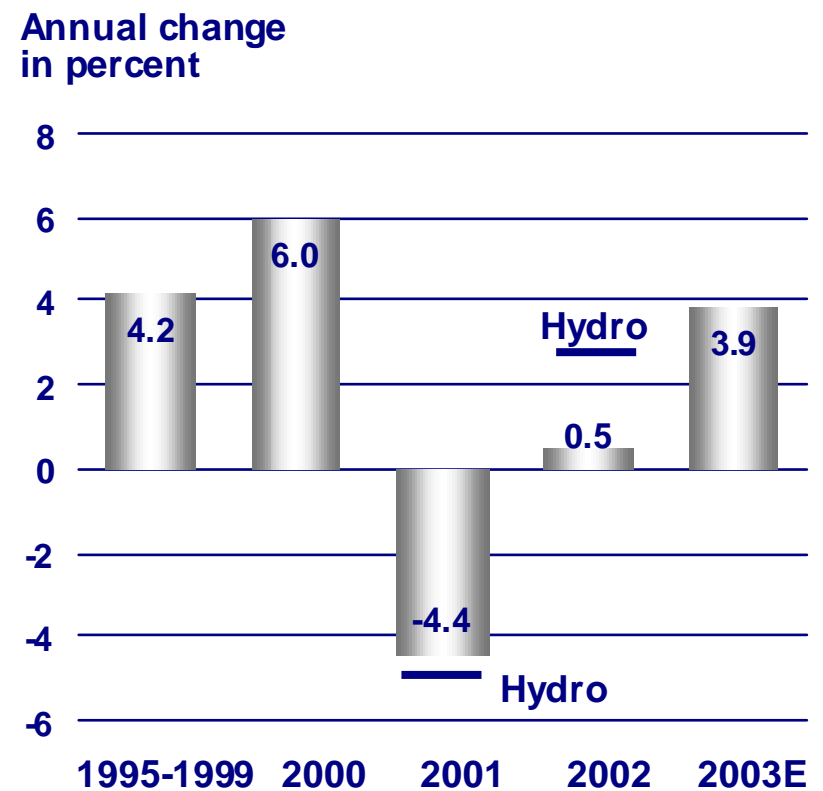
Europe

We outperformed the market in 2002

Rolled products shipments



Extrusion shipments



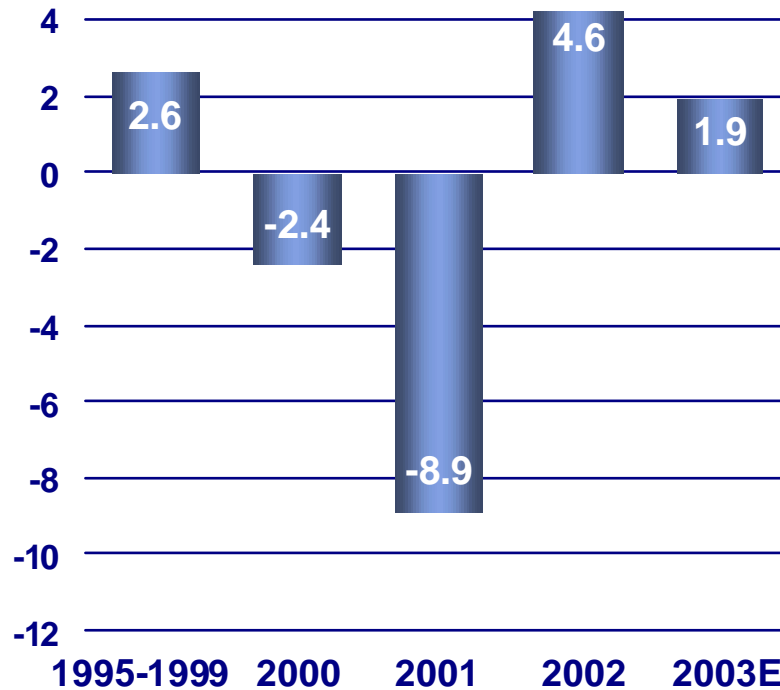
Source: EAA. Hydro Aluminium incl. VAW and Technal proforma 2001 and 2002



US Truck market hit our total position in 2002

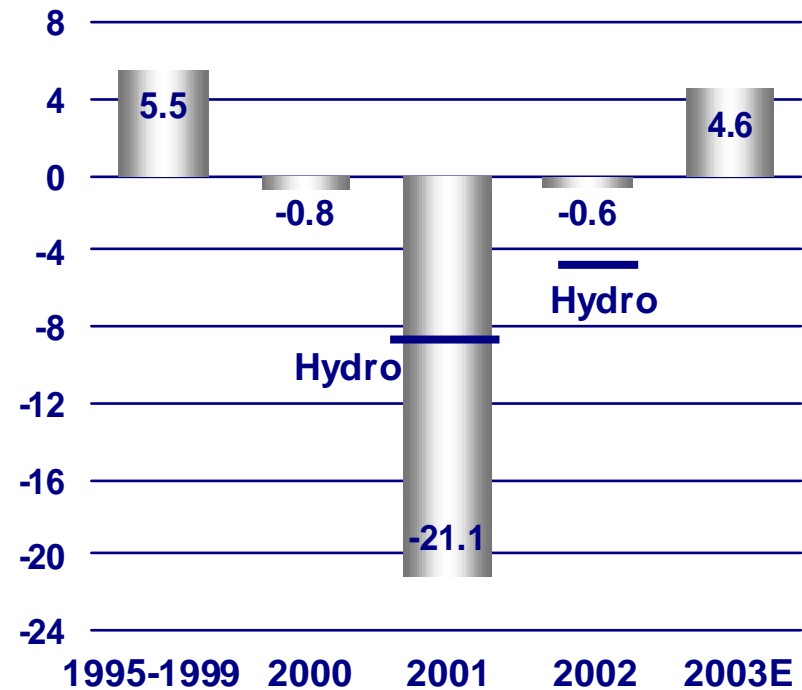
Rolled products shipments

Annual change
in percent



Extrusion shipments

Annual change
in percent

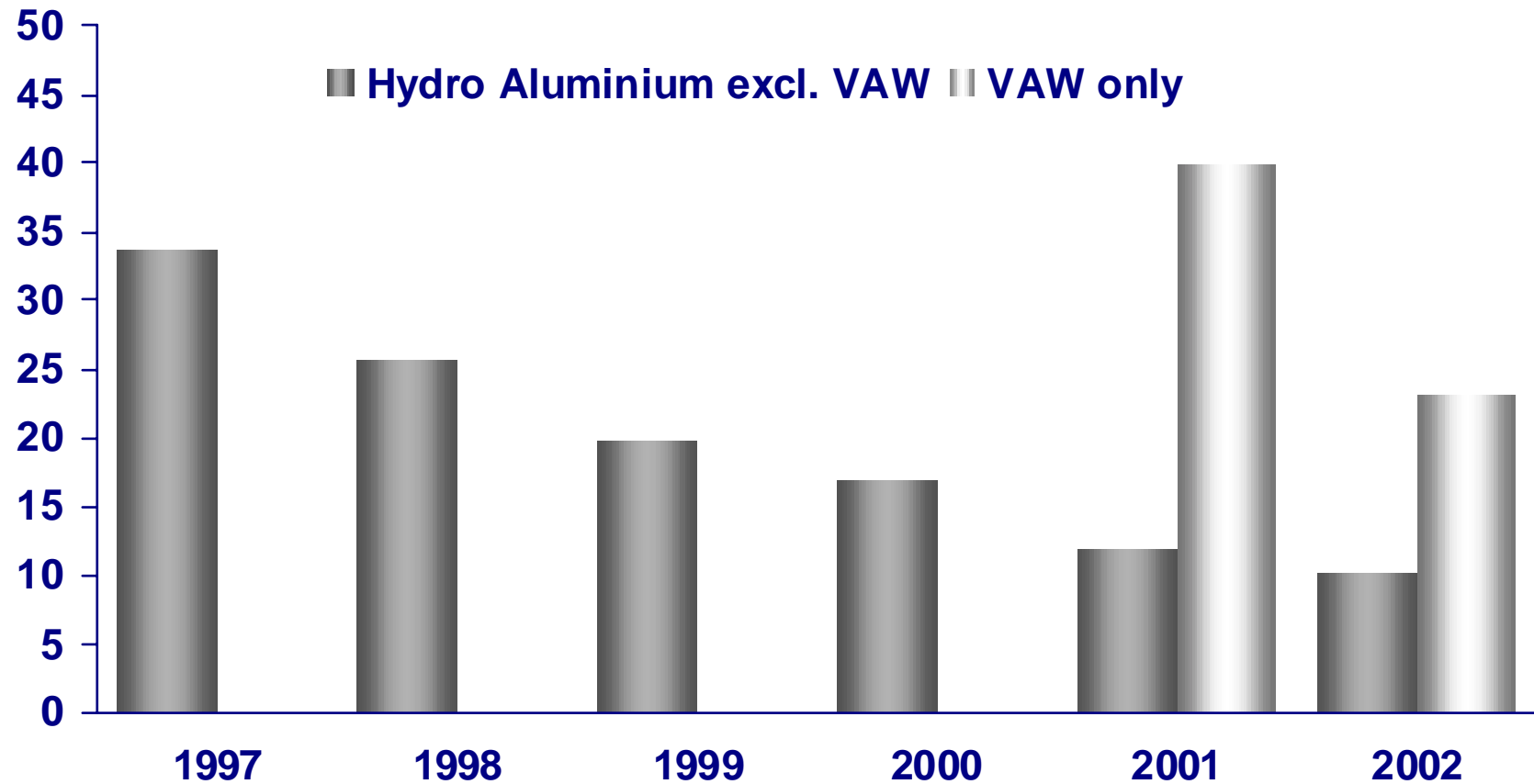


Source: CRU. Hydro Aluminium incl. VAW proforma 2001 and 2002



Continuous safety improvements

Total recordable injuries per million worked hours





Differentiation

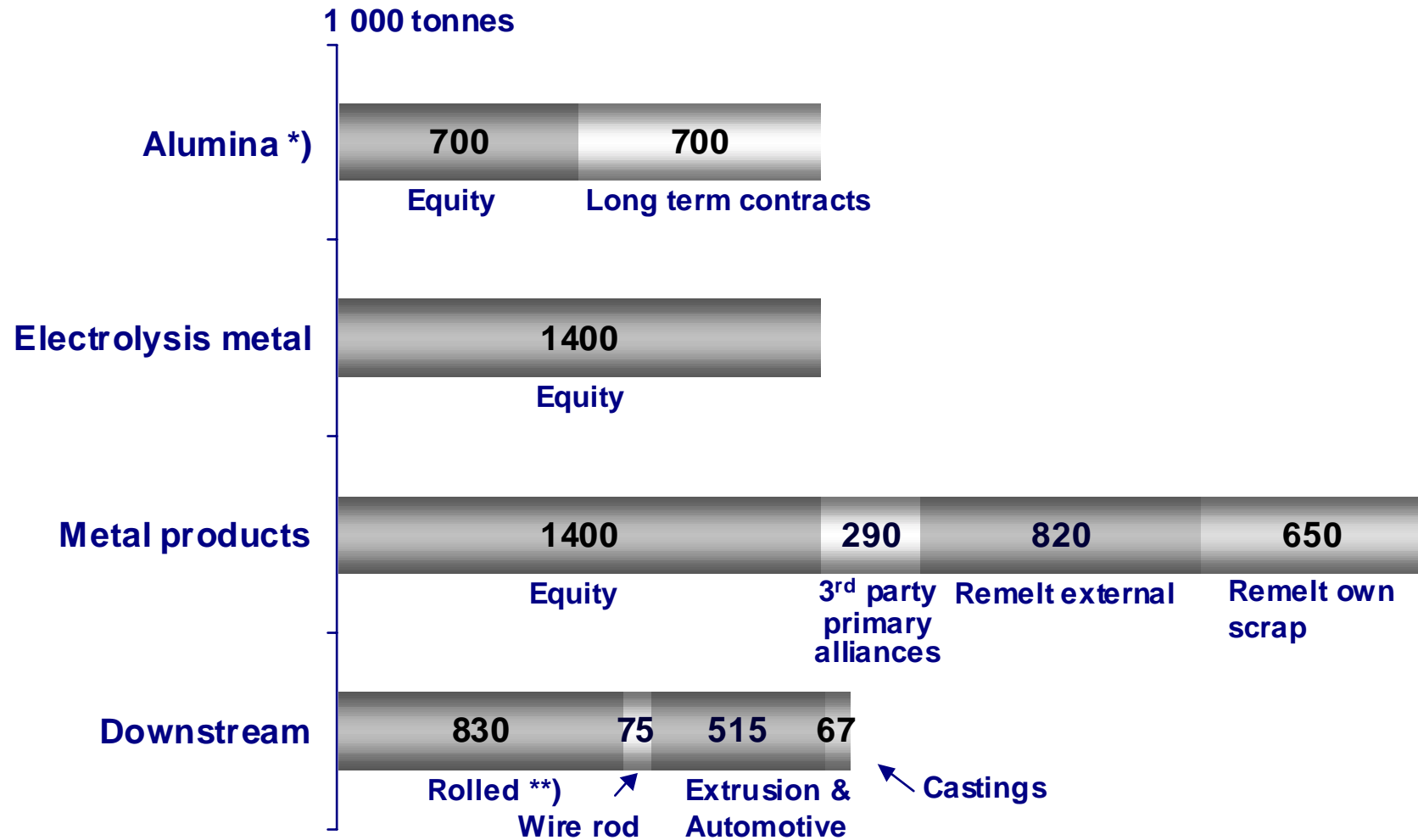
- **Customer responsiveness**
 - Tailored offering to customer needs
 - Innovative business solutions

- **Agile and flexible organisation**
 - Agile organisation with local accountability
 - Mirror our customers:
 - Local business model in extrusion – in a global network
 - Local/regional model in Metal Products
 - Global business model in Automotive
 - Efficient systems for best practice sharing and performance review
 - Culture of openness and dialogue

- **Unique portfolio composition**



A different portfolio composition



Proforma full year figures 2002

* Aluminium equivalents (2 tonnes alumina per tonne aluminium)

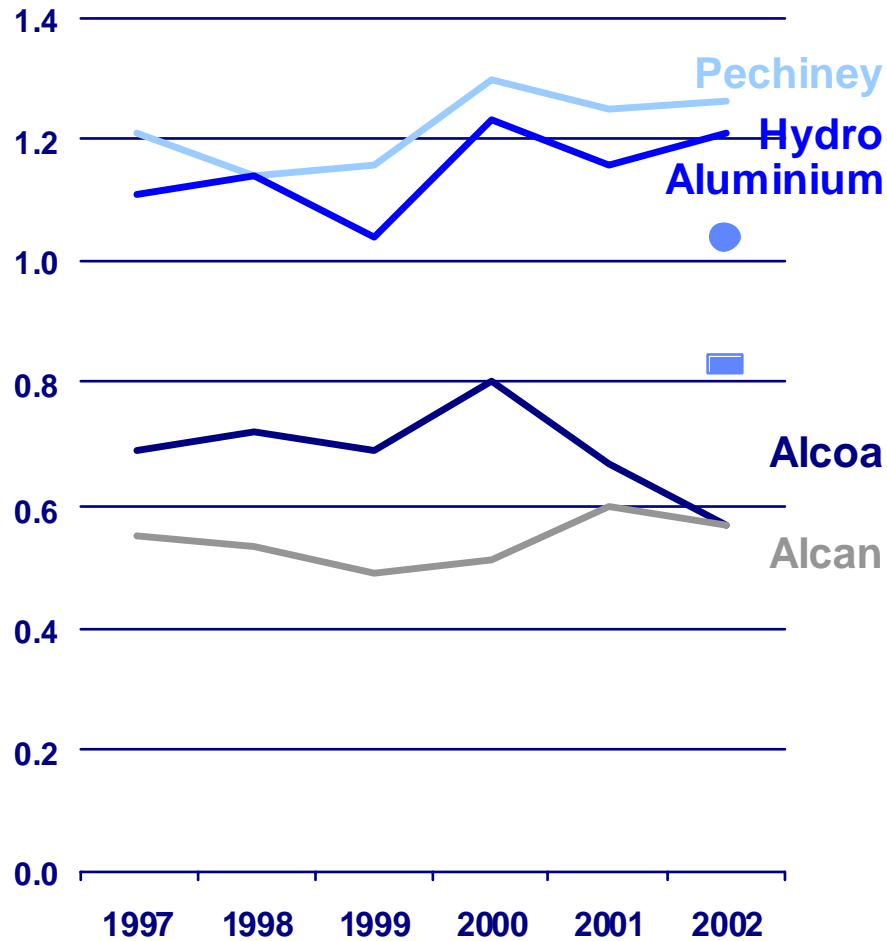
** Flat rolled products only



A different portfolio composition and business model: Higher capital turnover

Revenues / Gross Investments

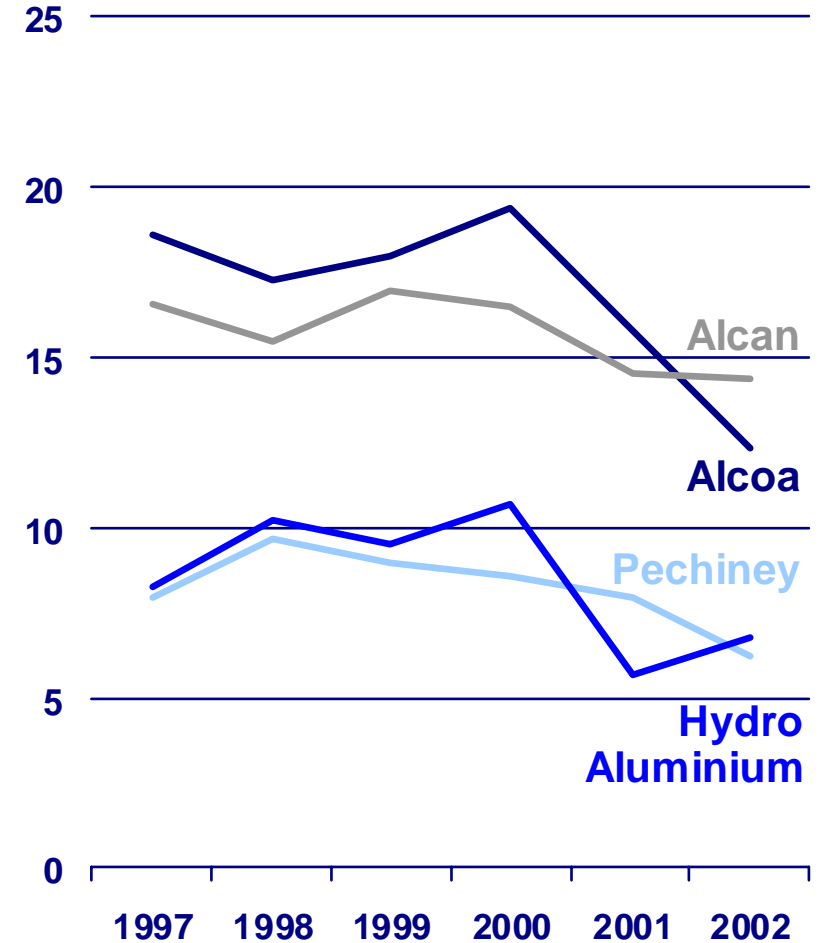
Factor



- Excluding remelt/3rd party
- Including 100% equity alumina and bauxite

EBITDA / Revenues

Percent



Source: Company reports. Proxy figures where needed to get comparative figures. 41569_1 - 03.2003 - * 19 - Hydro Media



A higher capital turnover based on strategic choices and business strengths

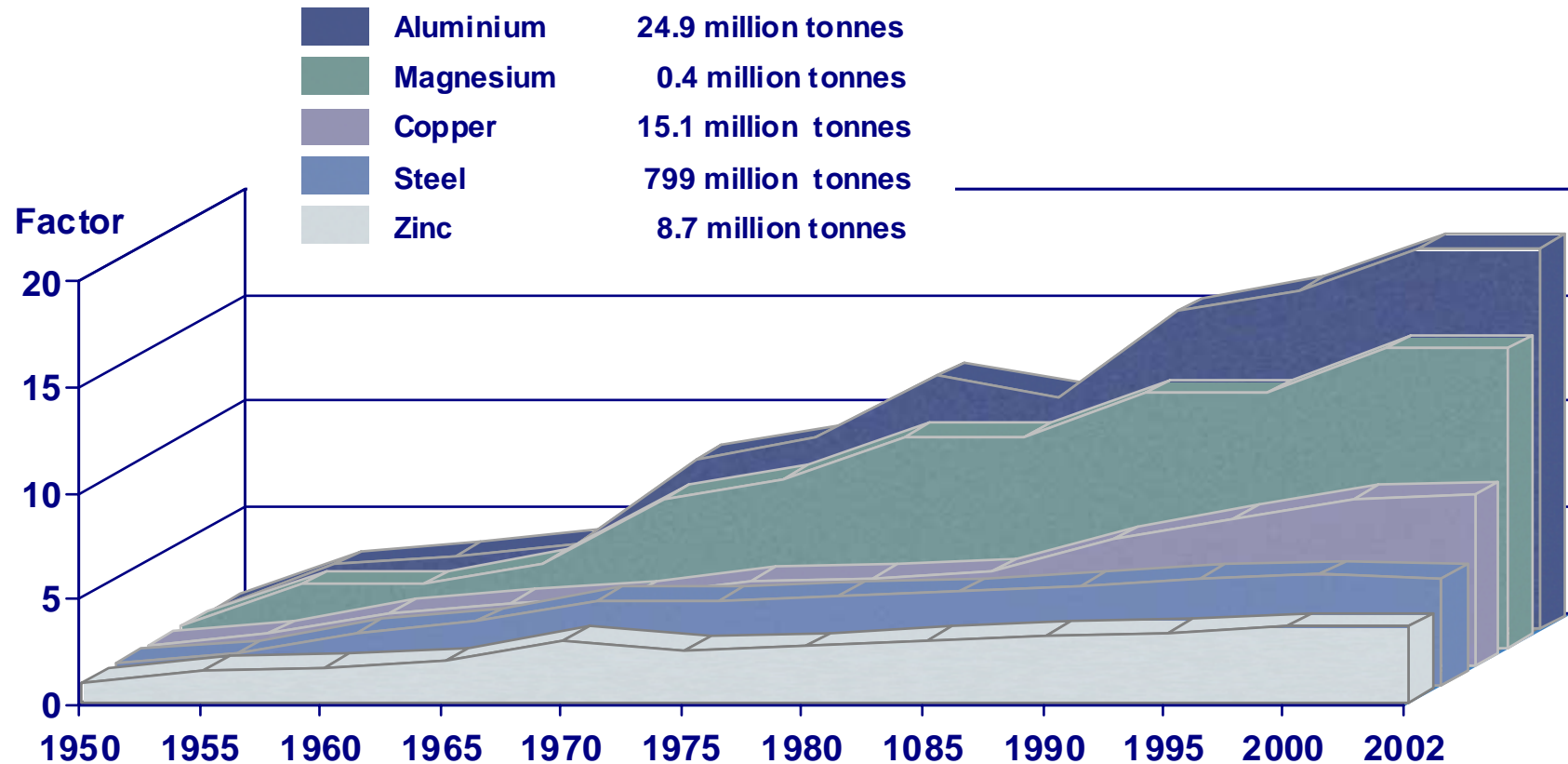
- **Short in alumina**
 - Long term supply contracts
 - Low cost equity production in Alunorte

- **Leadership in Metal Products**
 - Continue to have an active remelt/recycling strategy
 - Source and sell major volumes to third parties on margin basis

- **Superior business model in Extrusions**
 - Continue to have a larger share in extrusion than competitors
 - Extrusion business less capital intensive



Historically aluminium and magnesium growth has outperformed other materials



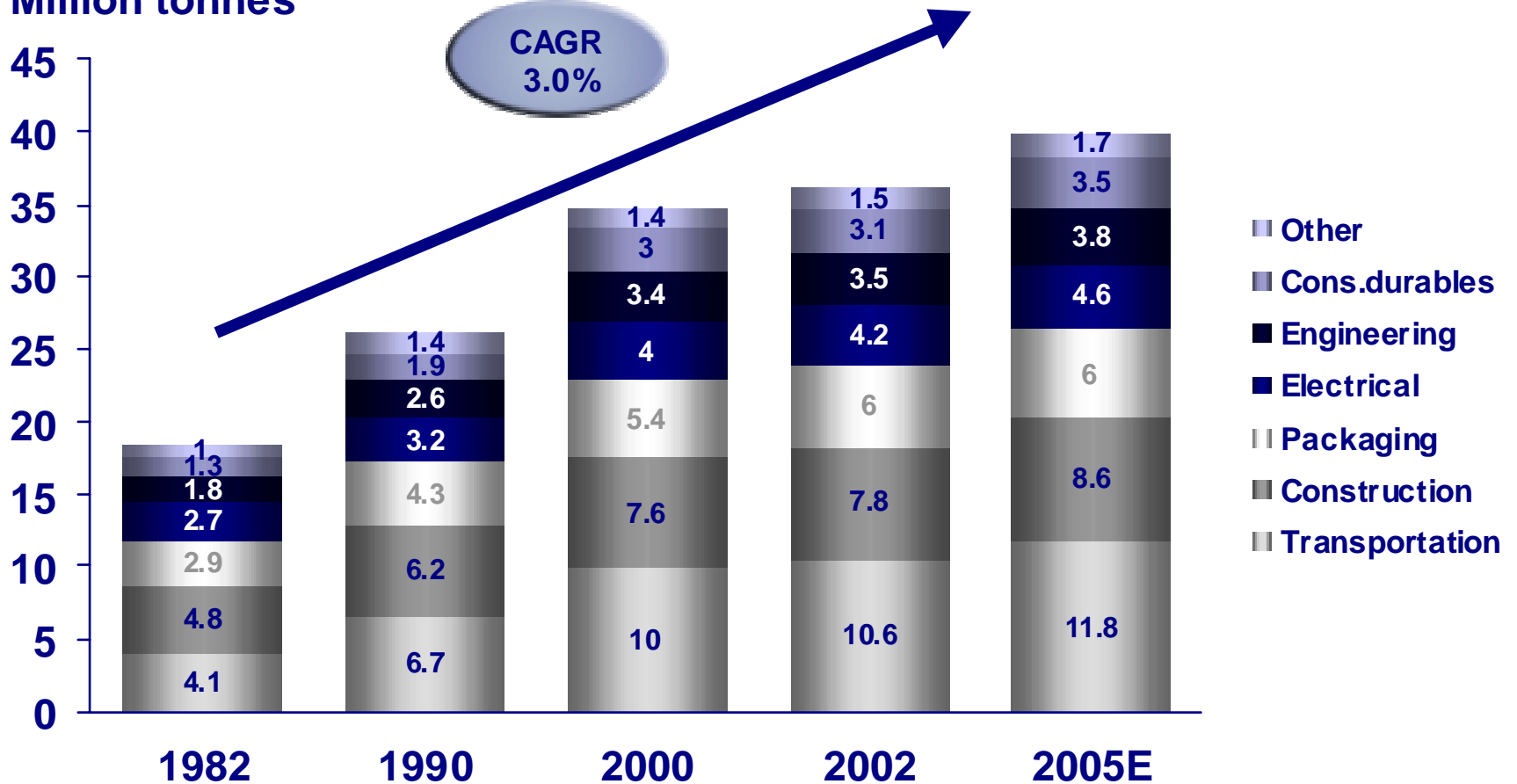
Source: CRU, World Metal Statistics, International Iron and Steel Institute, International Magnesium Association



All segments growing steadily

Aluminium demand development

Million tonnes



Source: James F King; Brook Hunt



Key elements in Hydro Aluminium's strategy

1. Improve global cost position upstream



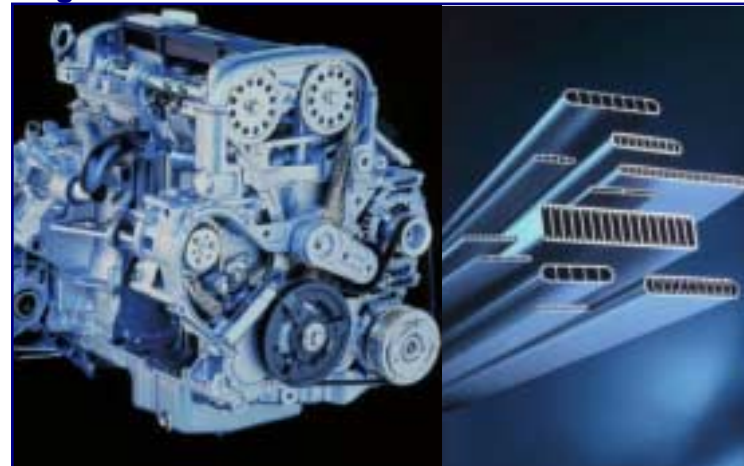
2. Strengthen leadership in European mid- and downstream



3. Performance focus and selective growth outside Europe mid- and downstream



4. Performance focus and selective growth in global automotive





Key elements in Hydro Aluminium's strategy

1. Improve global cost position upstream

- Secure low cost alumina, optimise portfolio
- Restructure primary, focus low cost brownfield to improve cost/ton

2. Strengthen leadership in European mid- and downstream

- European leadership in Metal Products – assets in place
- Enhance Extrusion's leading position
 - More fabrication. Quality/customer focus
- Expand leadership in Rolled Products' key segments
 - Cost improvement. Asset utilization

1. Performance focus and selective growth outside Europe mid- and downstream

- Priority # 1: Leverage European know-how to significantly improve performance in North America
- South America - selectively grow extrusion business
- Asia - gradually expand current operations

4. Performance focus and selective growth in global automotive

- Priority # 1: Improve performance
- Pursue growth in Precision Tubing
- Focus involvement in Structures
- Casting – performance improvements



Summary

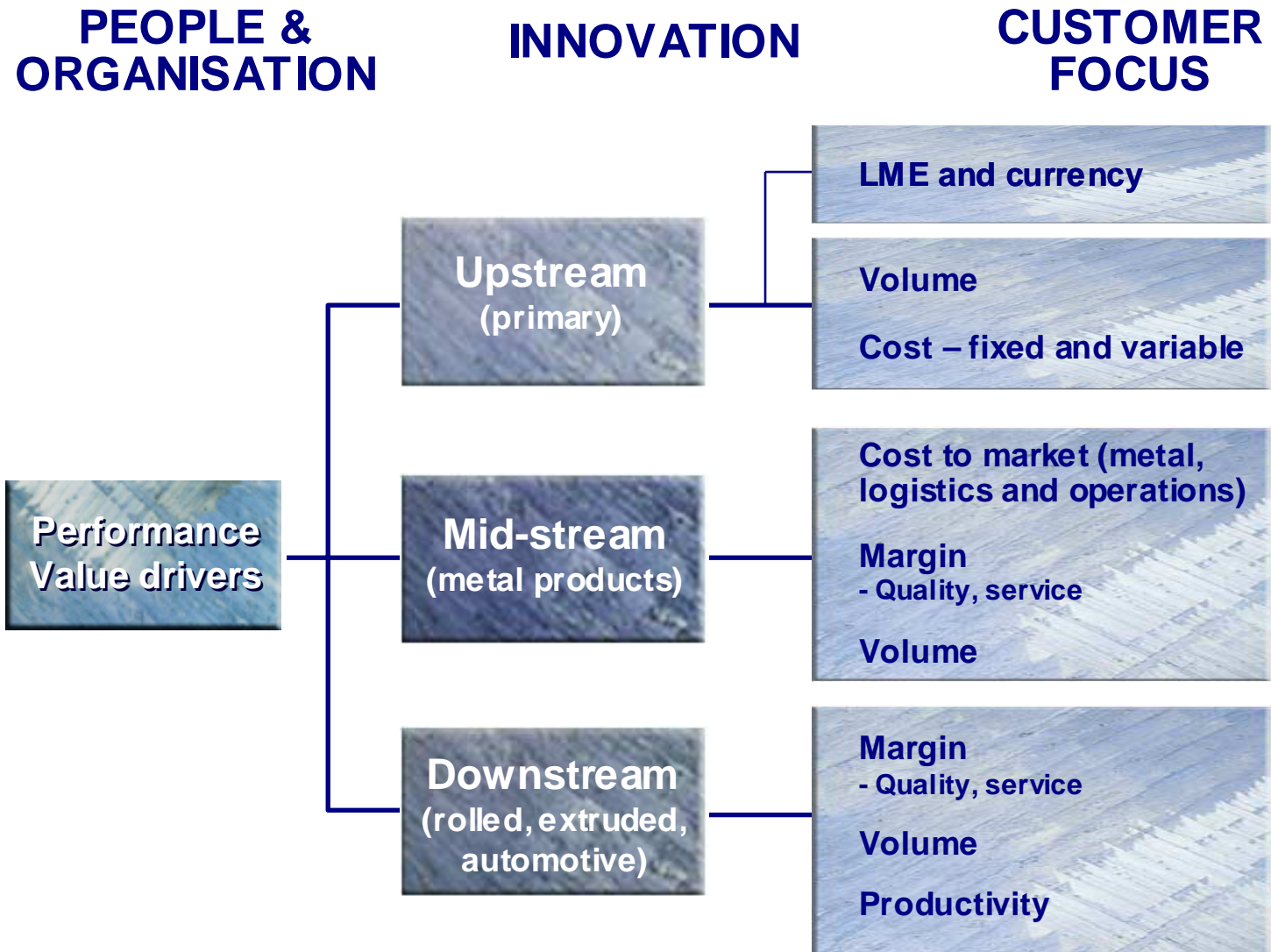
- **Short term – fragile market outlook**
- **Long term – attractive industry**
- **Bottom line focus, self help measures**
- **Differentiation – customer responsiveness, organisation, portfolio composition**
- **Clear strategic direction – capital discipline**

Financial performance



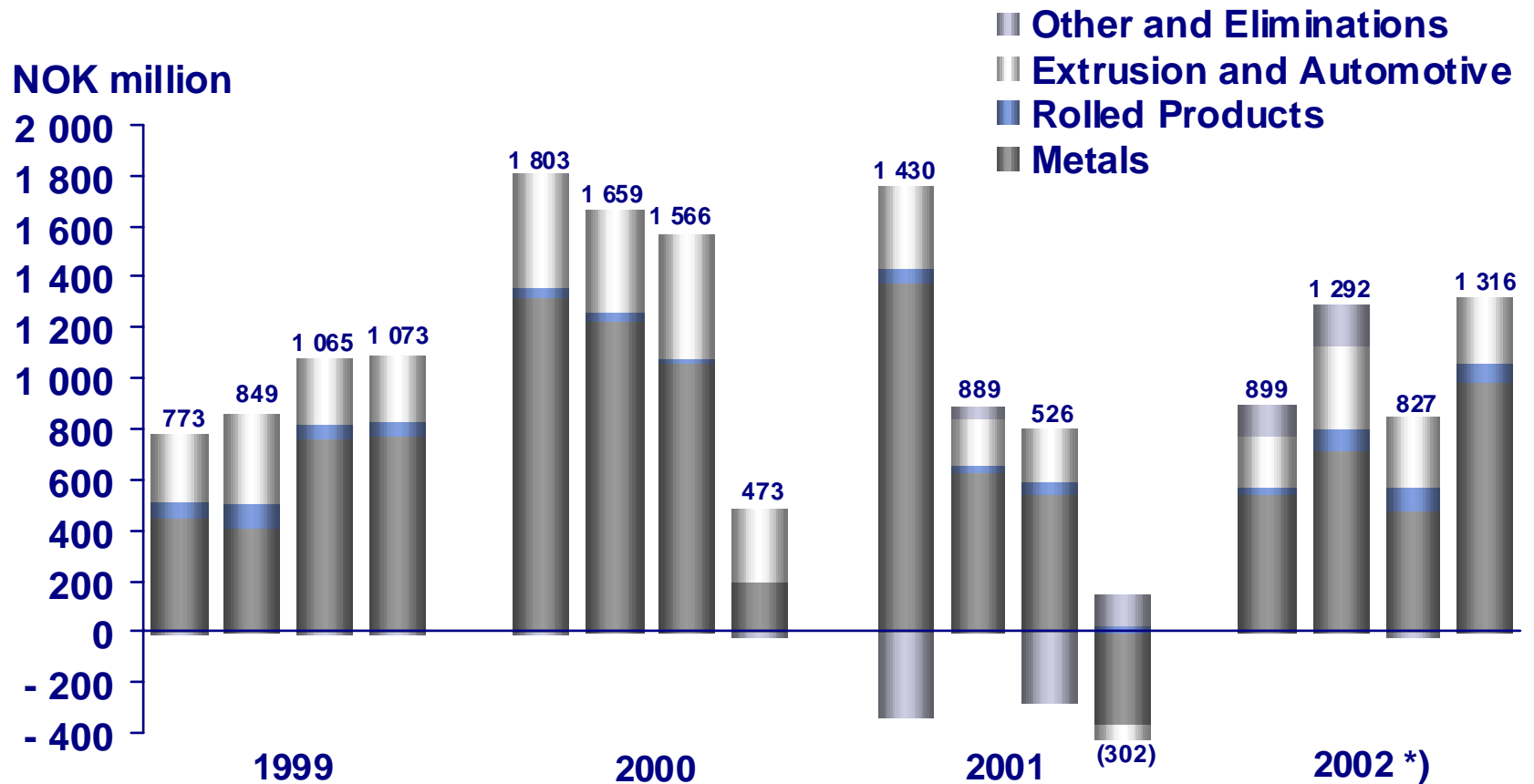


Value drivers along the value chain





EBITDA recent years by quarter



Accumulated	3 760	5 501	2 543	4 334
CROGI	8.3	10.8	5.7	7.1

* VAW included from 15.03.02



Variance analysis 2002

Hydro Aluminium excluding new business

NOK million	2002	2001	Change
EBITDA	4 334	2 543	1 791
New business (VAW, Technal)	(2 485)		(2 485)
Restructuring & rationalisation	90	760	(670)
Infrequent items *)	1 024	424	600
2001 losses on aluminium options	-	545	(545)
Adjusted EBITDA, ongoing operations	2 963	4 272	(1 309)

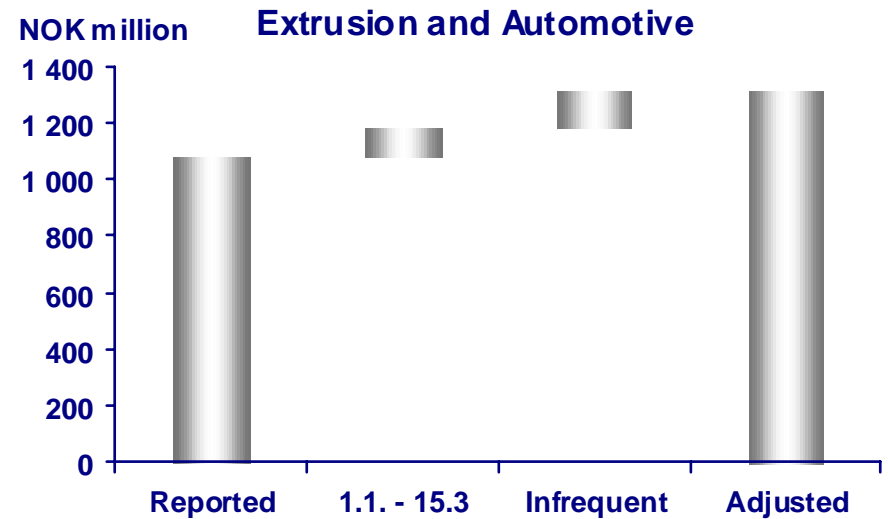
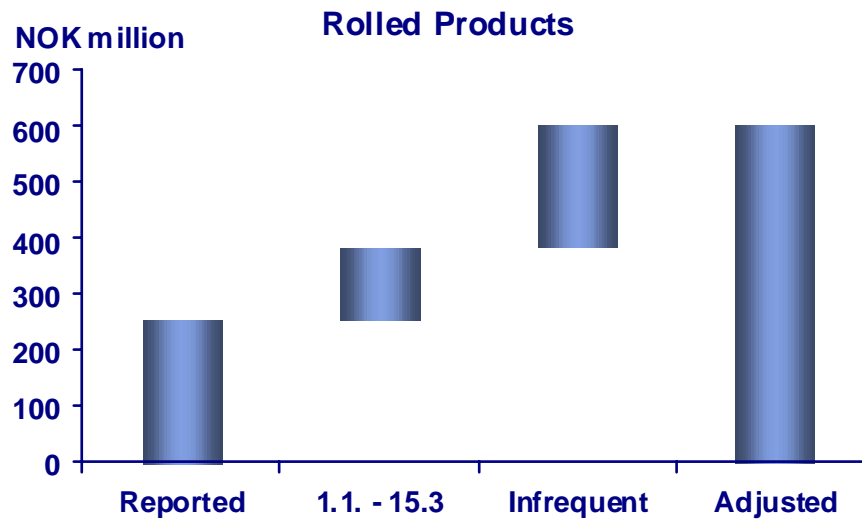
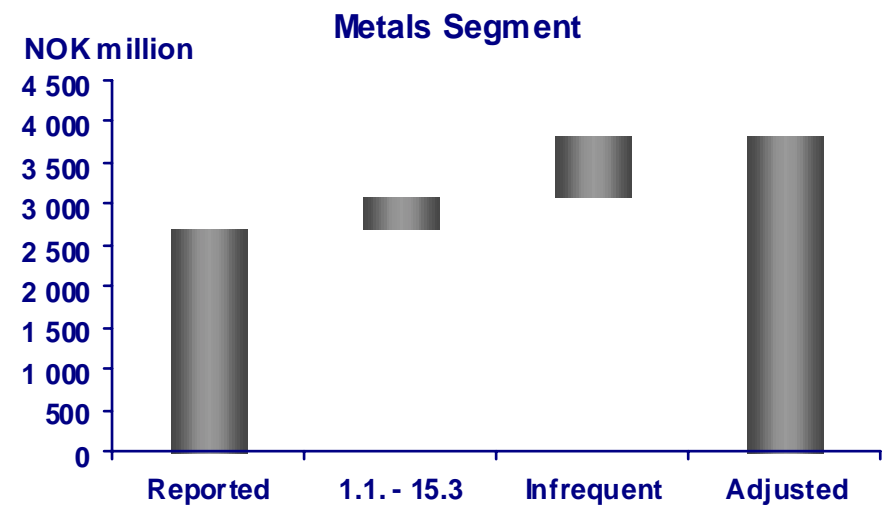
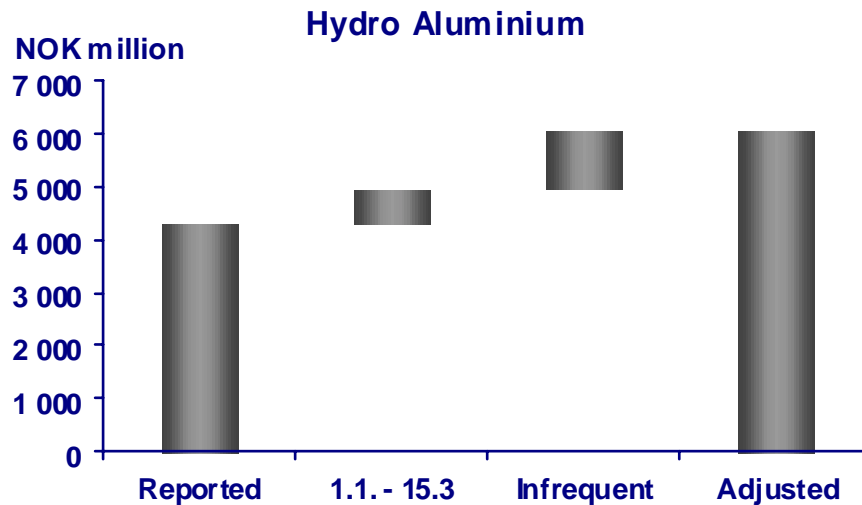
	NOK million
Margin	(2 320)
Volume	250
Fixed costs	320
Trading and hedging	450
Unrealized LME effects	110
Other	(119)
Total change in adjusted EBITDA	(1 309)

- 2002: Alunorte accounting loss on currency (NOK 460 million), integration (NOK 156 million), inventory valuation (NOK 170 million)

2001: Alunorte accounting loss on currency (NOK 159 million), write down Porsgrunn (NOK 261 million)



Adjusted EBITDA 2002 *)

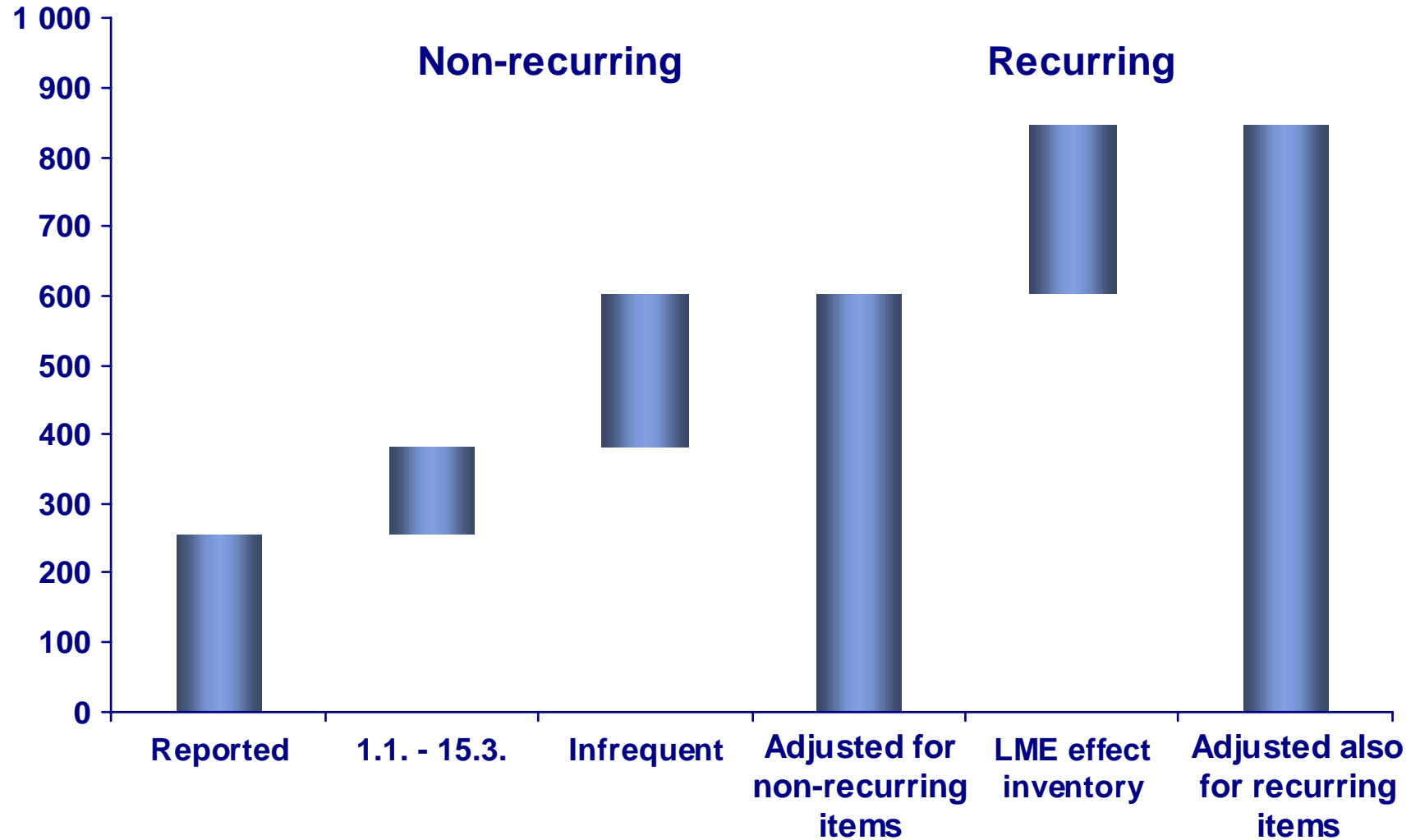


* Adjusted for restructuring, infrequent items and VAW full year. 01.01 – 15.03 calculated based on average for rest of the year (divided by 9.5 months, multiplied with 2.5 months)



Rolled Products adjusted EBITDA 2002

NOK million

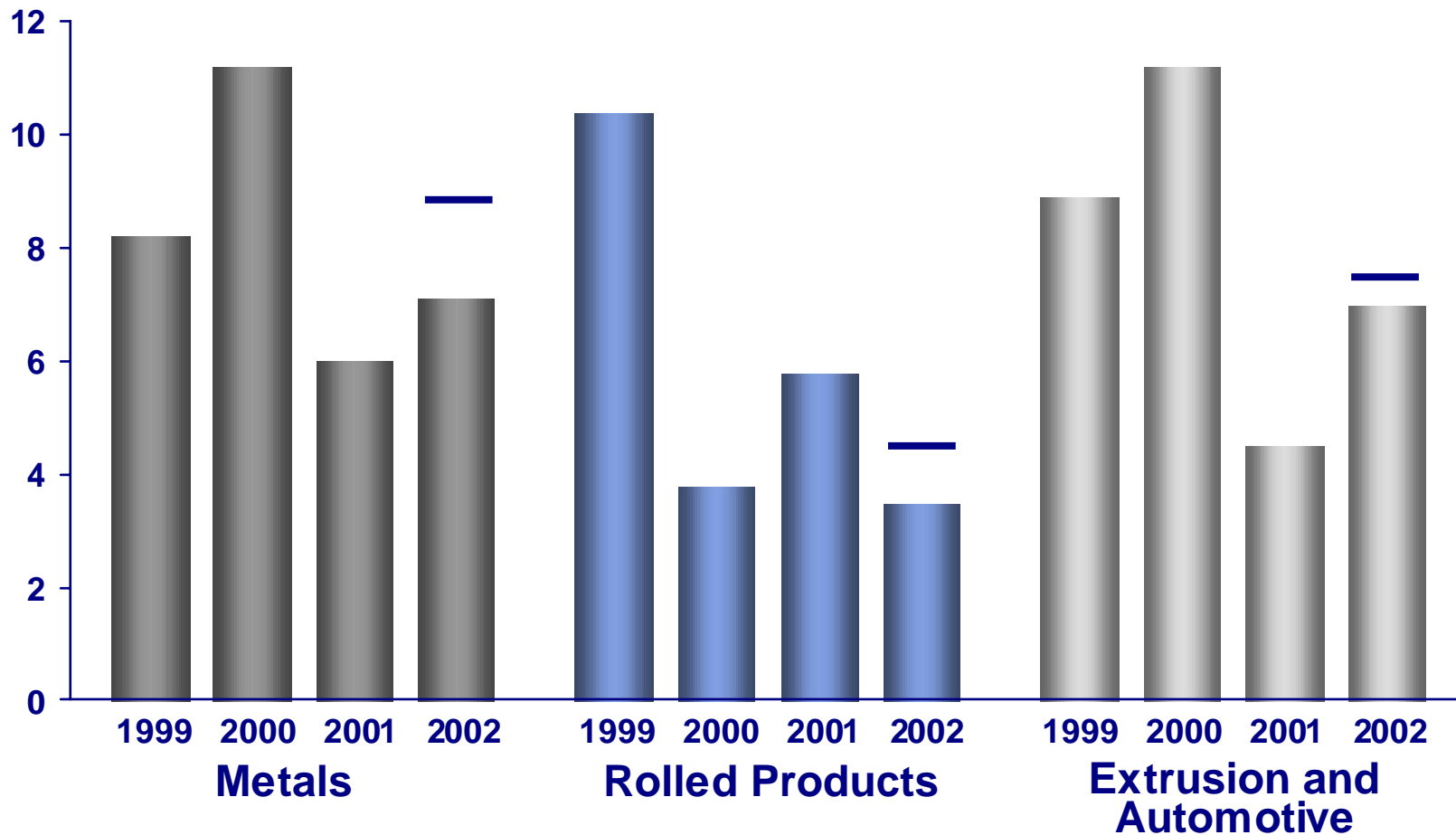




CROGI 1998 – 2002

Actual prices

Percent



— Excluding infrequent items and annualised VAW



Impact of 20-50% owned ventures in Hydro Aluminium's account

General Rule: "One line" consolidation *)

- Excluded from operating income but included in EBITDA

Non-consolidated investees

- AluNorf 50.0%
- AOS 50.0%
- Søral 49.9%
- Meridian 49.0%
- Alunorte 34.0%
- Hamburg smelter 33.3%

Strongly impacted by

- Unrealized currency loss of NOK 460 million in 2002 on USD loan in Brazilian company, Alunorte (NOK 159 million in 2001)

Exceptions: Pro-rata consolidation

- Hydro Aluminium's share of revenues, expenses, assets and liabilities recorded to respective lines
- US GAAP only allows in special cases

Joint Ventures

- Alouette 20.0%
- Tomago 12.4%

* Hydro Aluminium's share of net income is included on line "Equity in net income of non-consolidated investees" and its share in net assets is under "Other assets".



Risk management

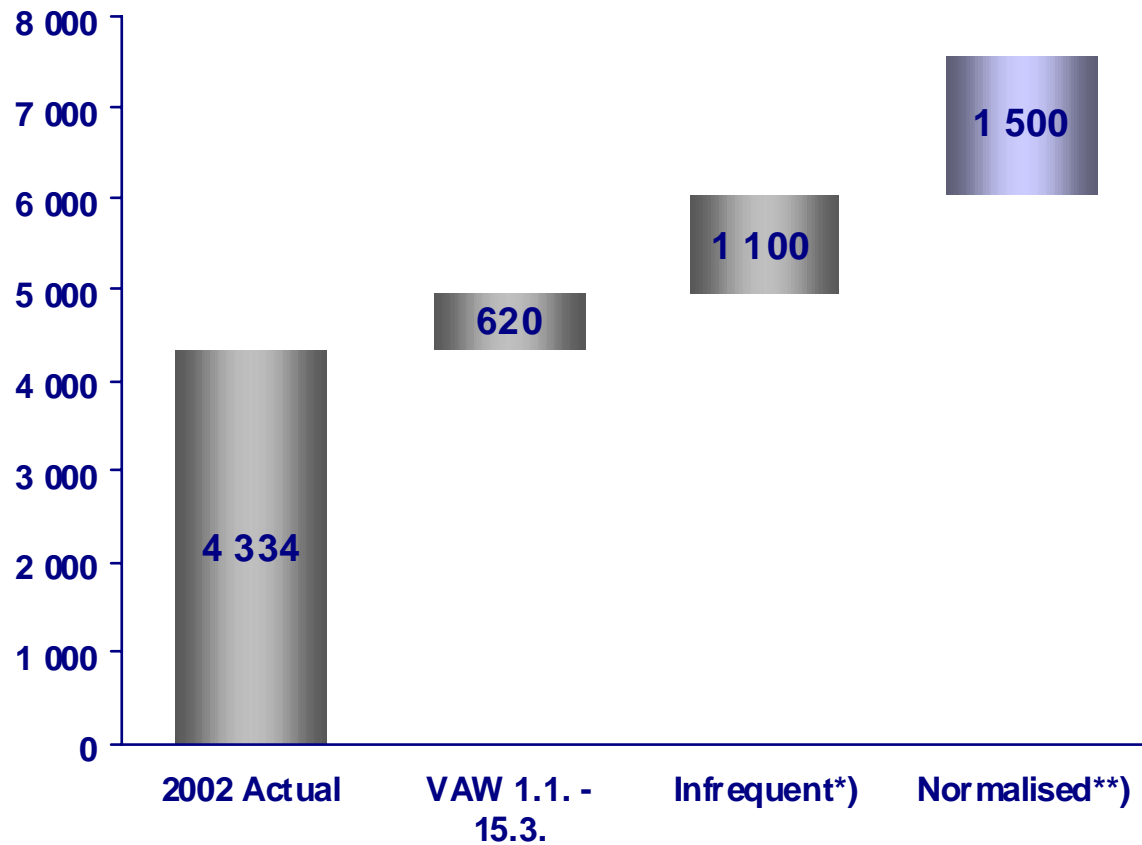
- **Primary Metals revenues fully exposed to LME price volatility**
- **Primary Metals costs fully exposed to currency risks**
 - **Mitigation of LME and currency risks related to Sunndal 4 project**
- **Mid-and downstream exposure to LME and currency on metal supply hedged back-to-back**



Closing the gap to 2004

EBITDA

NOK million



● In addition

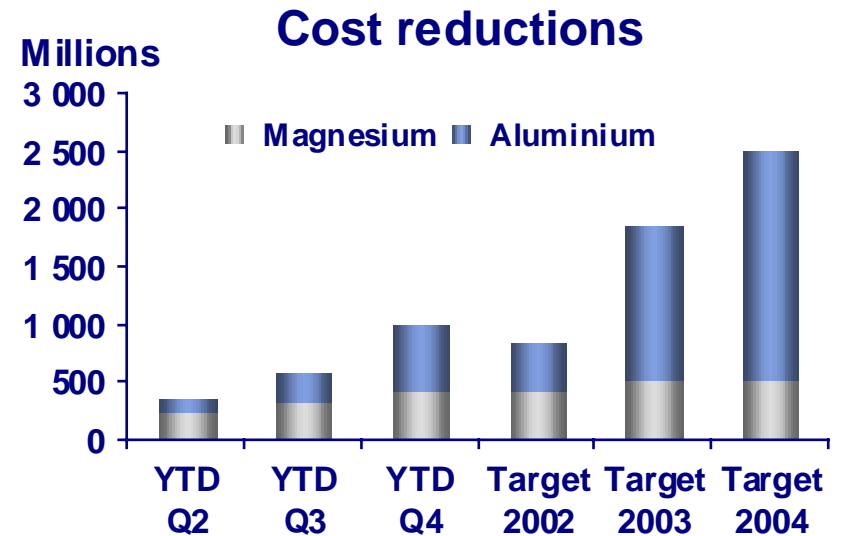
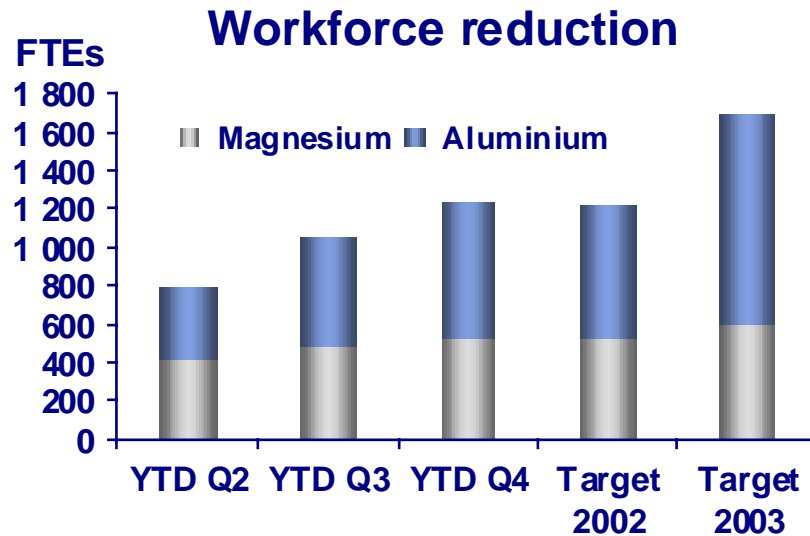
- Cost improvement programs
- Income from new capacity

* S,G&A-demanning cost, VAW-integration cost, Alunorte currency accounting loss, inventory adjustments

** LME 1 500 USD/tonne and 8 NOK/USD



Improvement program on track



Restructuring and rationalization costs (NOK million)				
	Realized		Remaining	Total
	2001	2002	Estimate	
Magnesium	700	-10	24	714
Aluminium	-	300 *)	370	670

Workforce and cost reductions relative to 2001.

* Of which NOK 89 million charged to VAW opening balance.



Examples value capturing 2002

- **Successful best practice sharing - improved operational performance**
 - EUR 5.7 million realized
- **Consolidation of procurement activities - spare parts and supplies**
 - EUR 10.5 million achieved
- **Safety improvements in Rolled Products**
 - EUR 0.7 million achieved
- **Reorganisation and consolidation of support functions in North America**
 - EUR 1.3 million realized



Capturing full value of larger scale

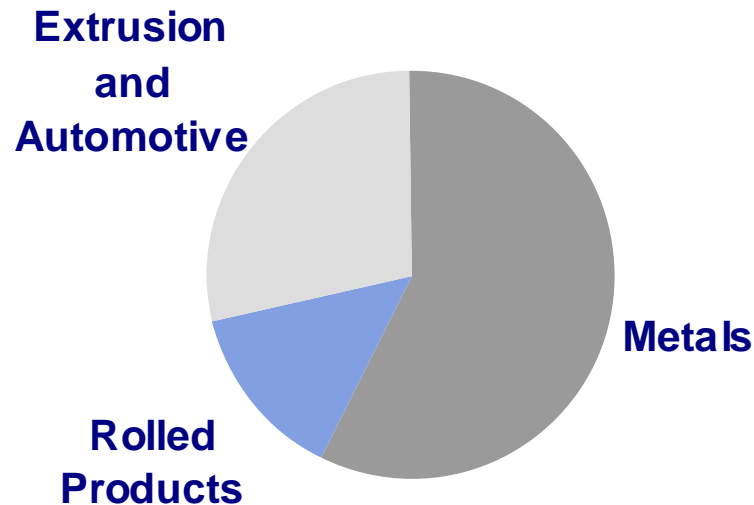
- **Optimising production systems, including plant closures**
 - Porsgrunn Magnesium (N) *) 500 employees
 - Moultrie (US) 121 employees
 - Bromyard (UK) 30 employees
 - Ellay Enfield (US) 11 employees
- **Streamlining Sales, General and Administration processes**
 - So far - 700 employees (12 offices closed)
 - Additional - 500 employees in 2003
 - Integration of technology organization - 45 employees

* Primary magnesium production



Upstream expansion to improve unit costs

Planned CAPEX 2003



Total NOK 6 billion

- **2003 & 2004: NOK 6 billion**
 - Increasing scale of primary production (Sunndal, Slovalco, Alunorte, Alouette)
- **CAPEX 2005 forward:**
 - Will depend on market and performance
 - NOK 2 - 3 billion needed to serve current capacity
- **Active portfolio management**



Performance going forward

- **Improvement programs on schedule with further increased ambitions**
- **Delivery on new capacity investment programs**
- **Organisation committed to value creation**



Sensitivities Hydro Aluminium

NOK million

Price sensitivity	Pre tax	Post tax	Change
LME price sensitivity	830	580	\$100 increase
USD sensitivity *)			
USD sensitivity	1 650	1 160	1 NOK increase
EUR sensitivity			
EUR sensitivity	420	300	1 NOK increase

All sensitivities are calculated using the normalized price assumptions as basis.

* USD sensitivity estimates assuming USD/NOK changes, all other currencies fixed against NOK

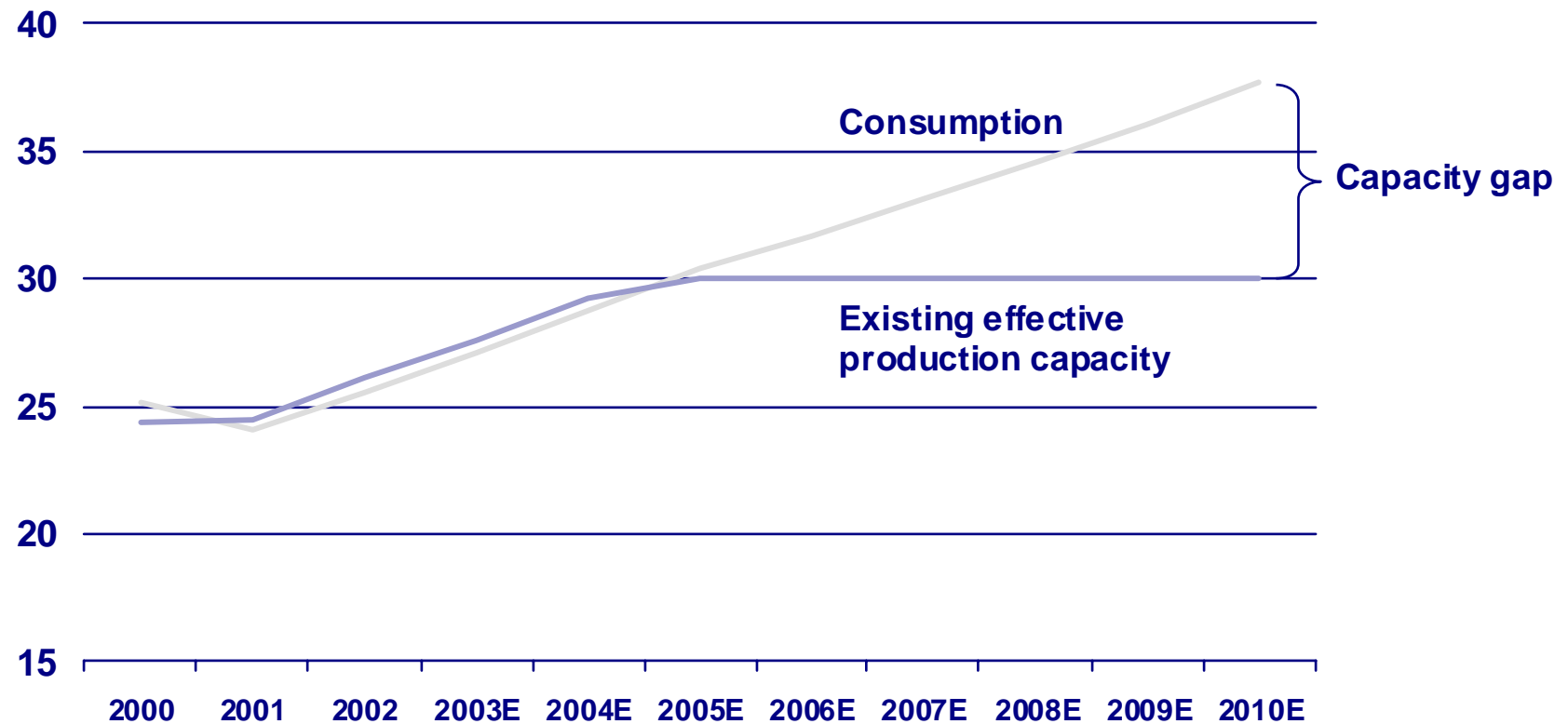
Primary metal Demand and supply outlook Performance and strategy





Global Primary metal balance 2000 – 2010

Million tonnes



Average global demand growth rate: 4% (2000-2005); 4.4% (2006-2010)

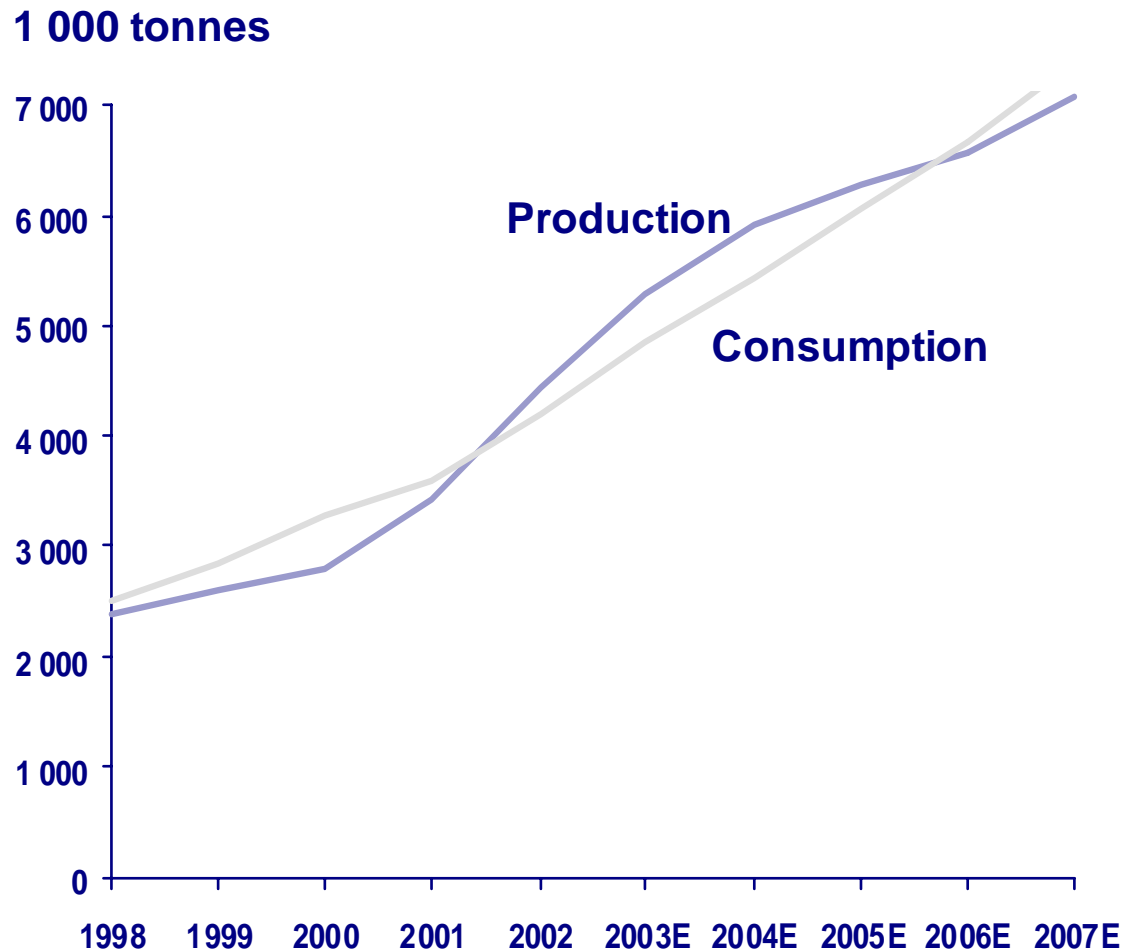
Average Western demand growth rate: 1.7% (2000-2005)*; 2.5% (2006-2010)

* Implies 4% annual growth 2002 – 2005

Sources: Brook Hunt. Hydro Aluminium estimates



China – primary metal balance



Supply growth drivers:

- High growth in domestic consumption
- Import duties protecting domestic suppliers (primary and downstream)
- Low labour cost
- Support to local industries provided by regional authorities

Main challenges:

- Alumina deficit
- Energy deficit in some provinces – high prices
- Distance to market
- Small plants/Søderberg – environmental issues
- Financing

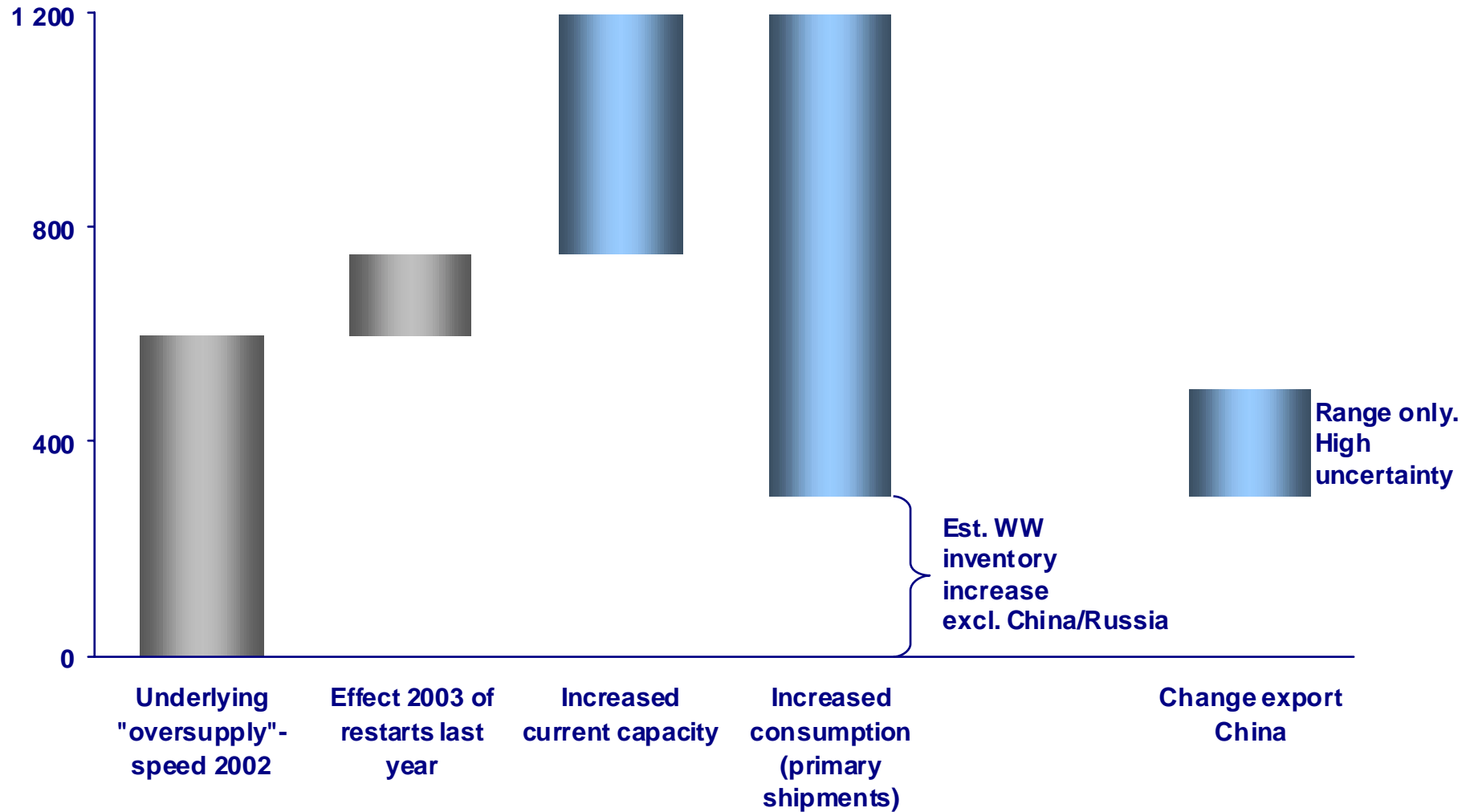
Decision made by central government to close down inefficient and polluting Søderberg capacity due to environmental legislation. This measure is expected to take away around 1 million tonnes between 2003-2007 (200 000 tonnes per year in 2003 and 2004, 300 000 tonnes per year in 2005 and 2006).

Source: CRU. Hydro Aluminium



Estimated change in supply to Western World 2002 – 2003

1 000 tonnes



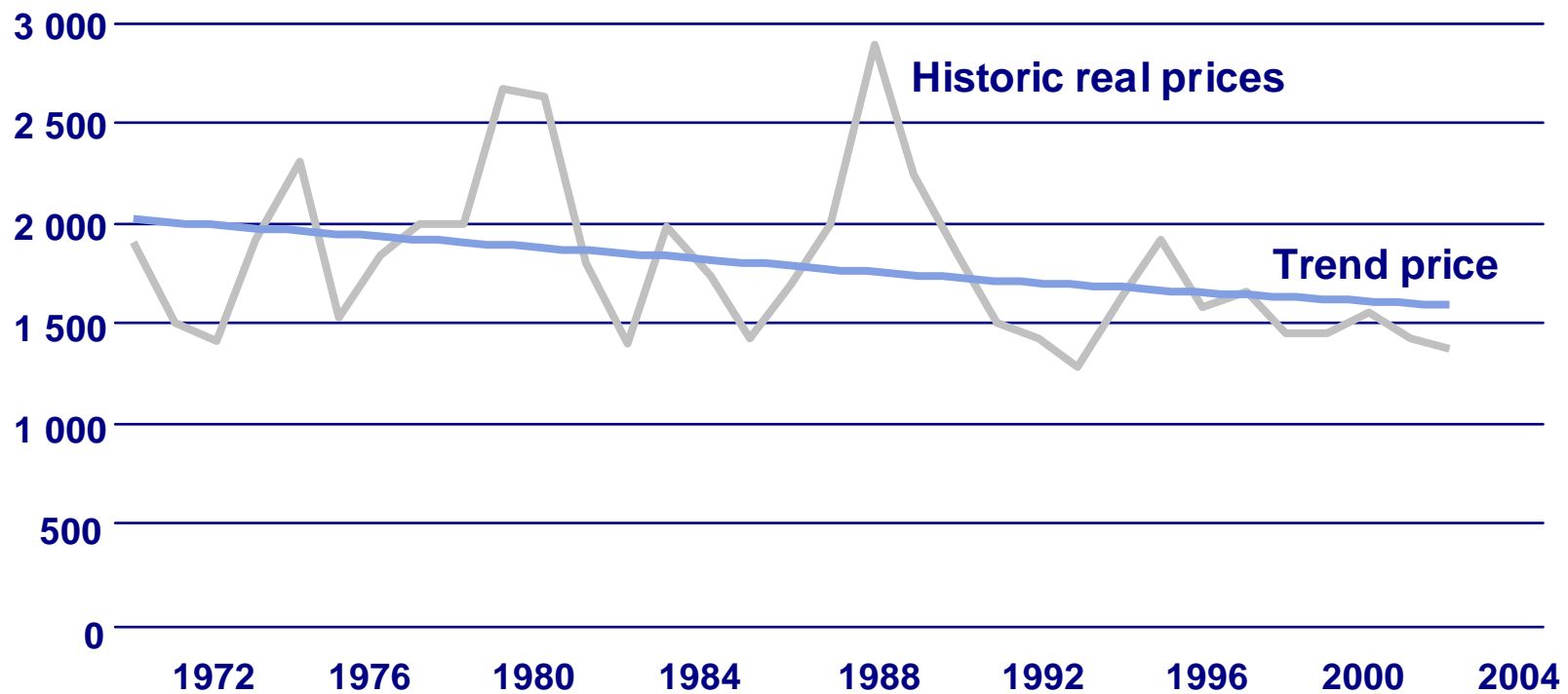


Volatile price – long term falling trend

Aluminium real term price trend

Prices 1970 – 2002 deflated by US PPI
Real price decline -0.8% per year

LME 3 months
2001 USD/tonne





Market outlook

- **Short-term – fragile**
 - **Economic situation**
 - **Temporary short-term “oversupply”**
 - E.g. China exports, brownfield projects
 - **Prices expected to remain under pressure**
 - Idle capacity in the US expected to stay idle

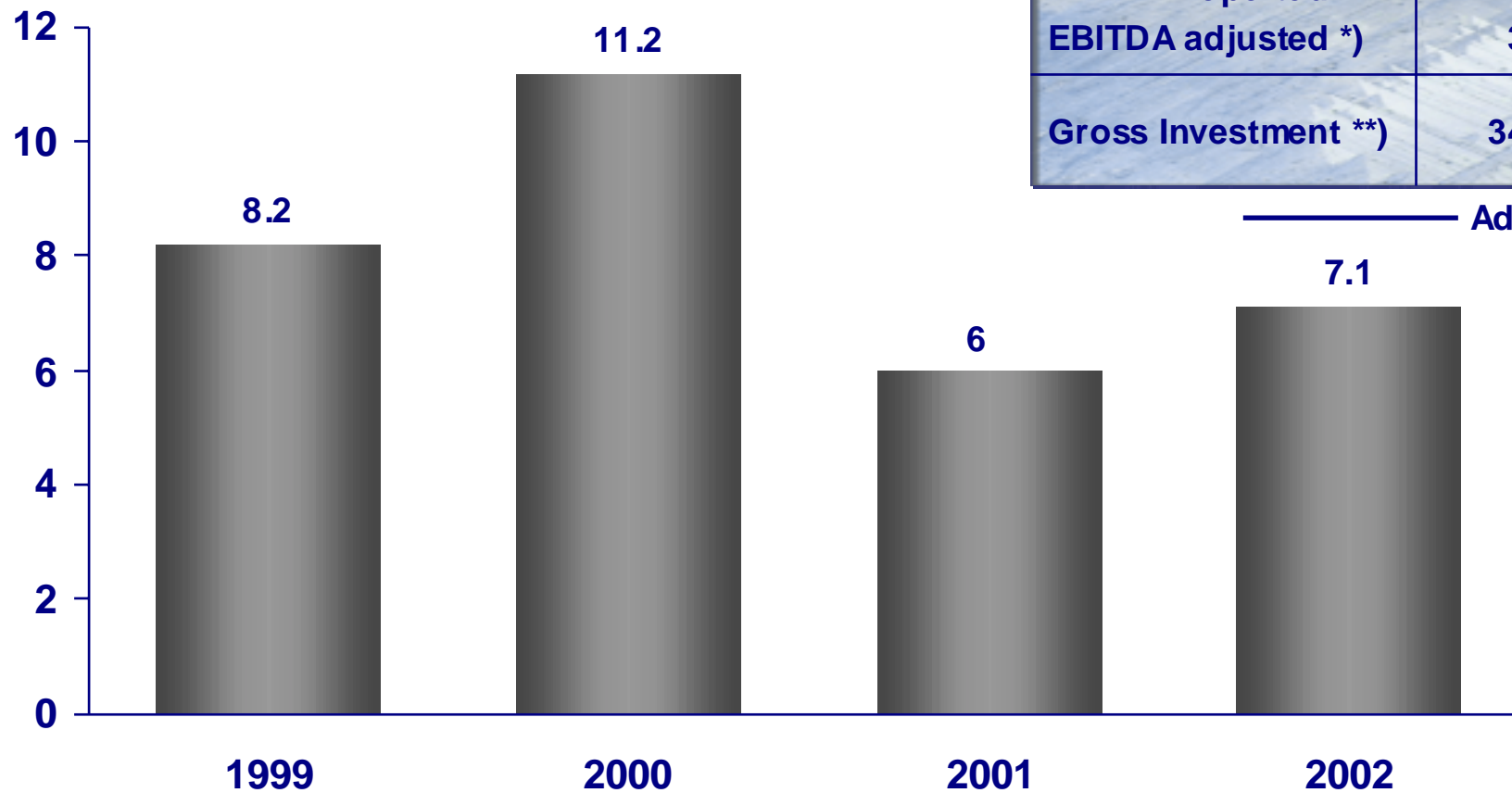
- **Long-term – improved attractiveness**
 - **Solid growth in consumption**
 - **Potential supply constraints**
 - **Industry restructuring expected to improve**
 - Aluminium competitiveness
 - Potential for higher earnings



Metals Segment: CROGI

CROGI 1998 – 2002: Actual prices

Percent



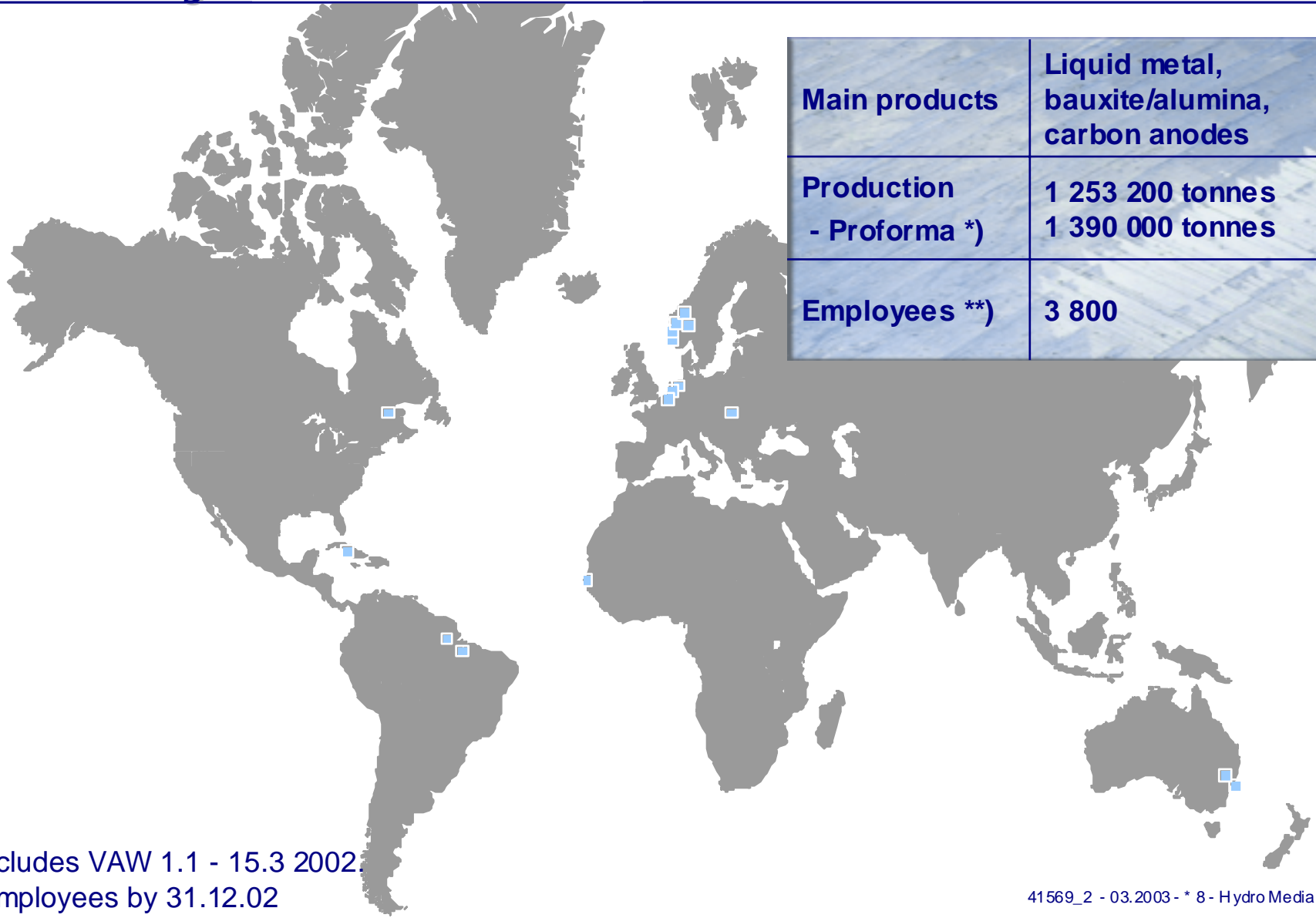
NOK million	
Sales	39 650
EBITDA reported	2 703
EBITDA adjusted *)	3 857
Gross Investment **)	34 900

* Adjusted for VAW 1.1 – 15.3 (average last 9.5 months multiplied with 2.5 months) and infrequent items.

** Gross Investment by 31.12.2002



Primary Metal



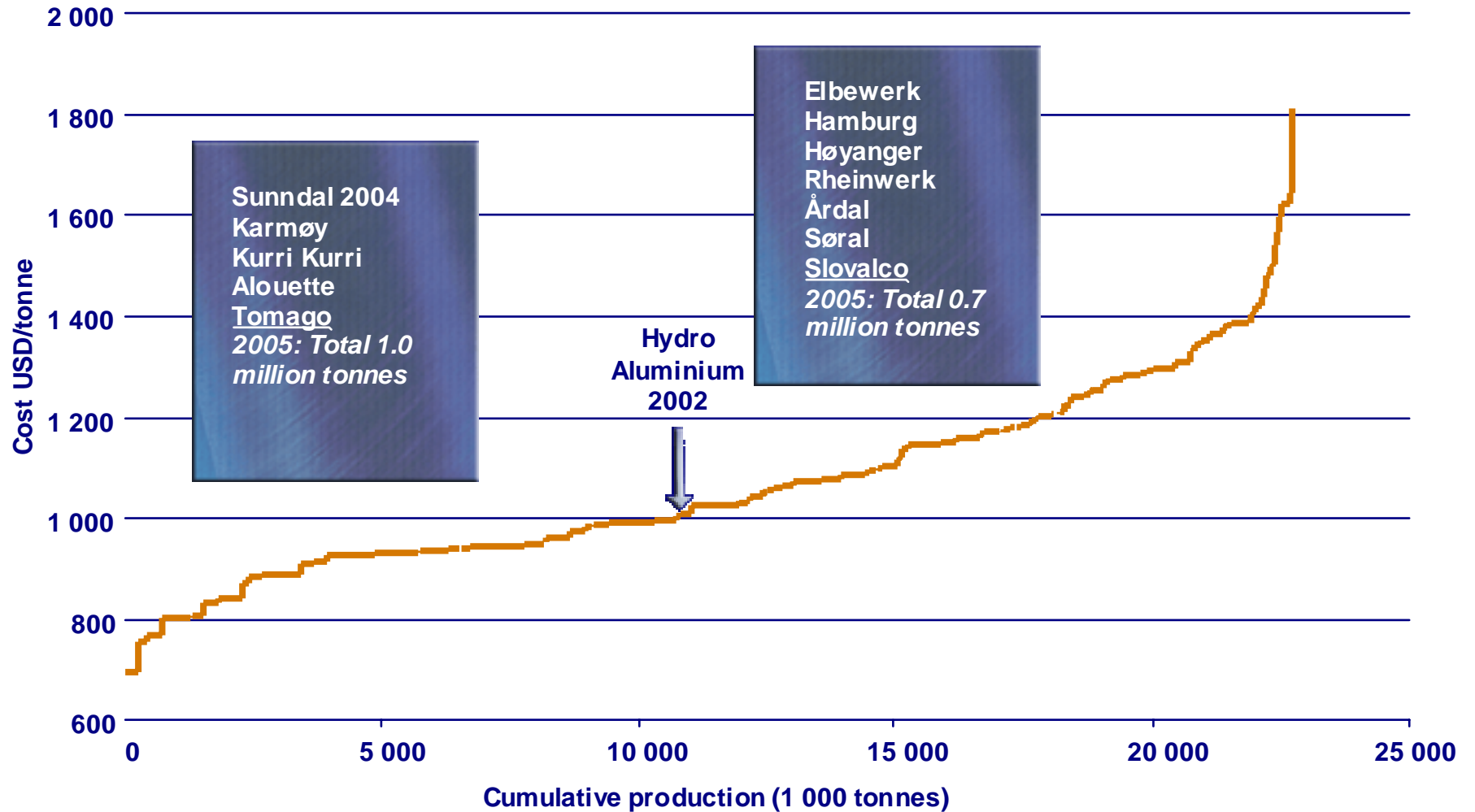
Main products	Liquid metal, bauxite/alumina, carbon anodes
Production - Proforma *)	1 253 200 tonnes 1 390 000 tonnes
Employees **)	3 800

* Includes VAW 1.1 - 15.3 2002.

** Employees by 31.12.02



Smelter cost curve 2001

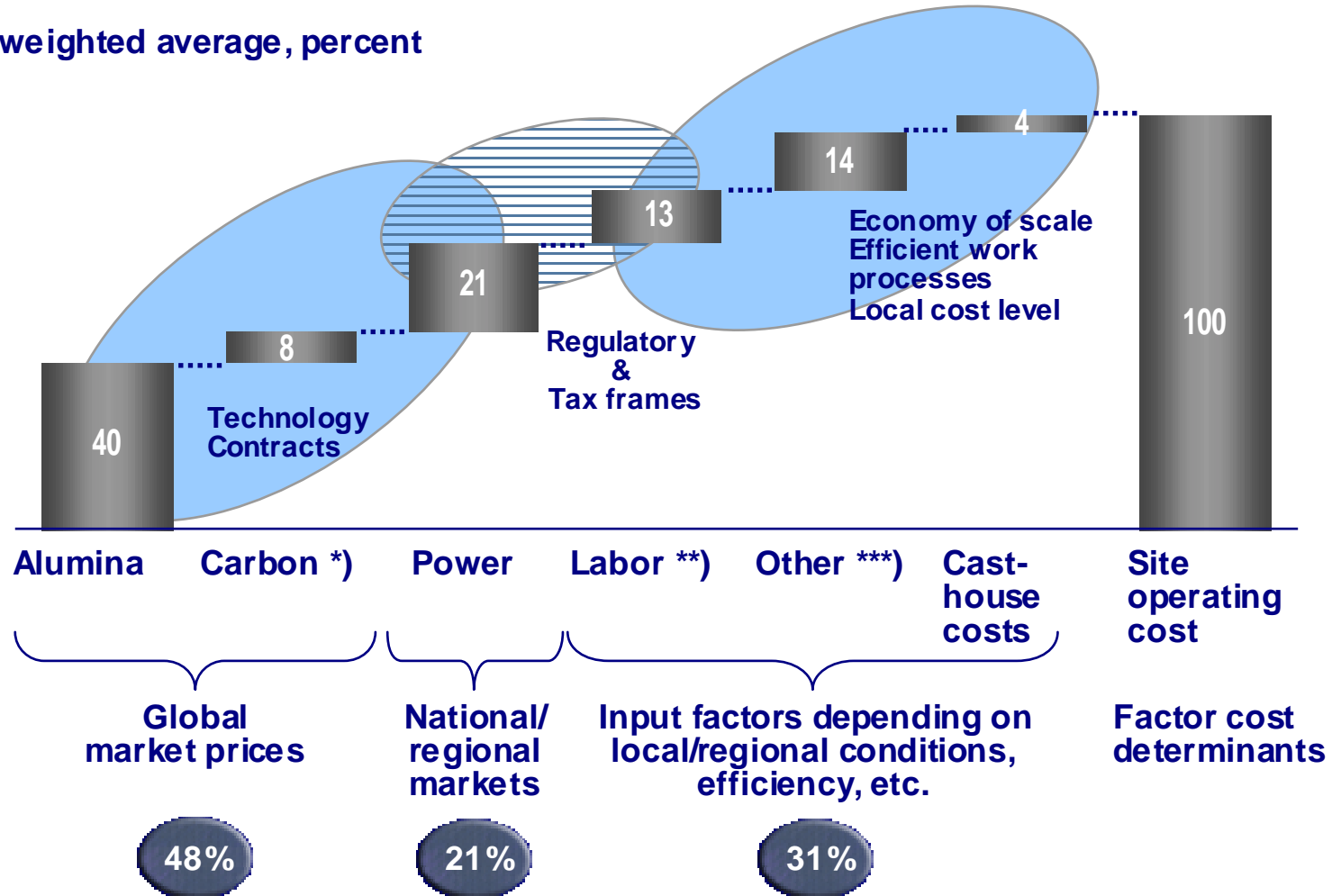


Operating cost includes liquid metal cost, casthouse cost, casting losses, site overhead cost, freight cost, interest on work in progress, margin cost and head office cost. VAW included in Hydro Aluminium's figures
Source: CRU. Hydro Aluminium estimates 2002



Breakdown of Primary Metal average site operating cost position

HAL weighted average, percent

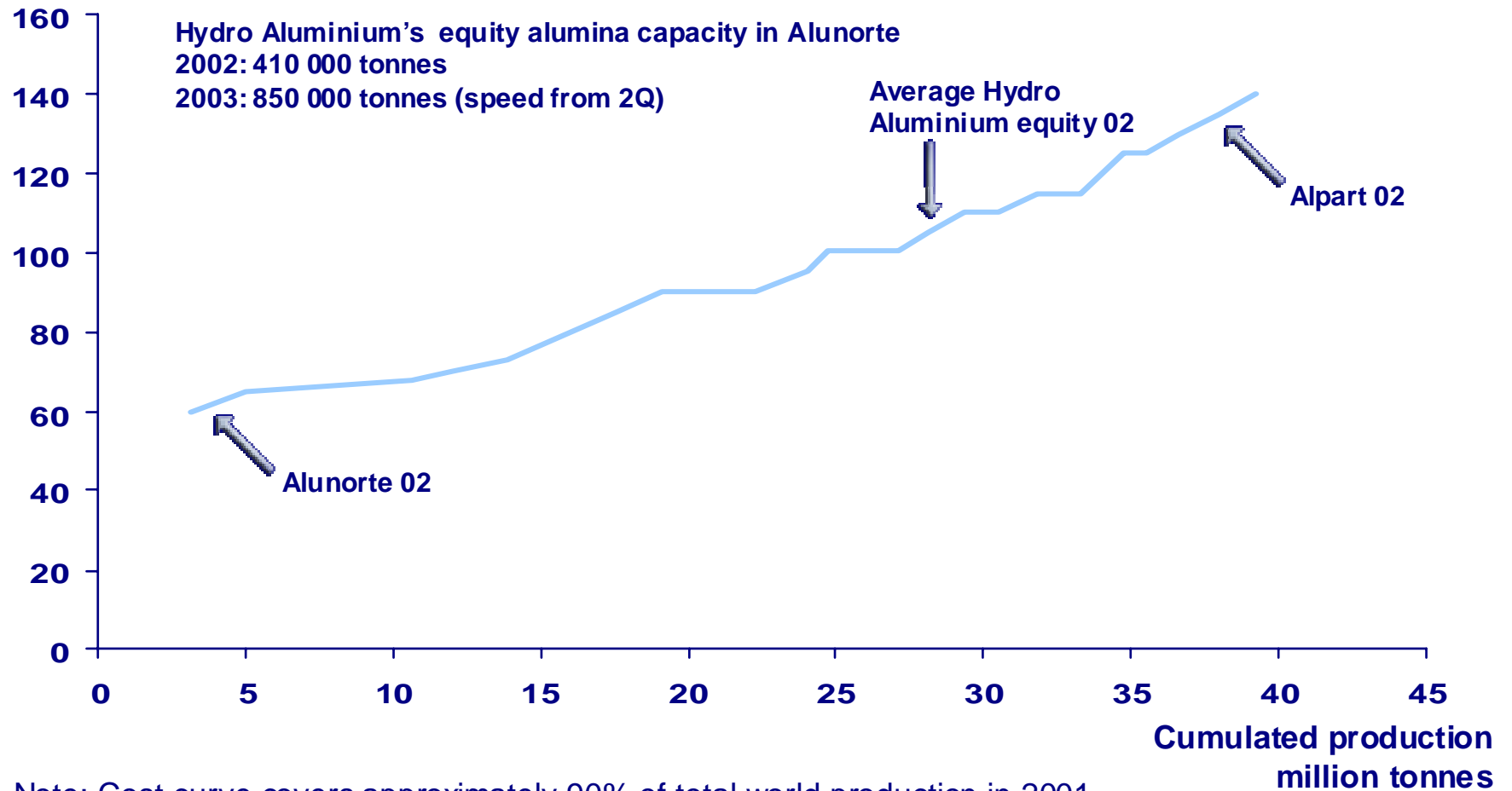


* Raw materials and bake furnace fuel costs
** Includes carbon plant, potroom and maintenance labor costs
*** Relining cost, capital replacement cost, administrative cost
Source: CRU



Alumina cost curve 2002

Conversion cost *)
USD/tonne



Note: Cost curve covers approximately 90% of total world production in 2001.

* Conversion cost excluding cost of bauxite.

Source: Hydro Aluminium estimates



Alunorte 2002

- **Production: 1.64 million tonnes**
- **Lowest conversion cost worldwide: 62 USD/tonne**
- **Optimal alumina quality for our smelters**
- **Strong safety performance**
- **High environmental and Corporate Social Responsibility standards**





Alunorte expansion 2003

Highest asset productivity globally

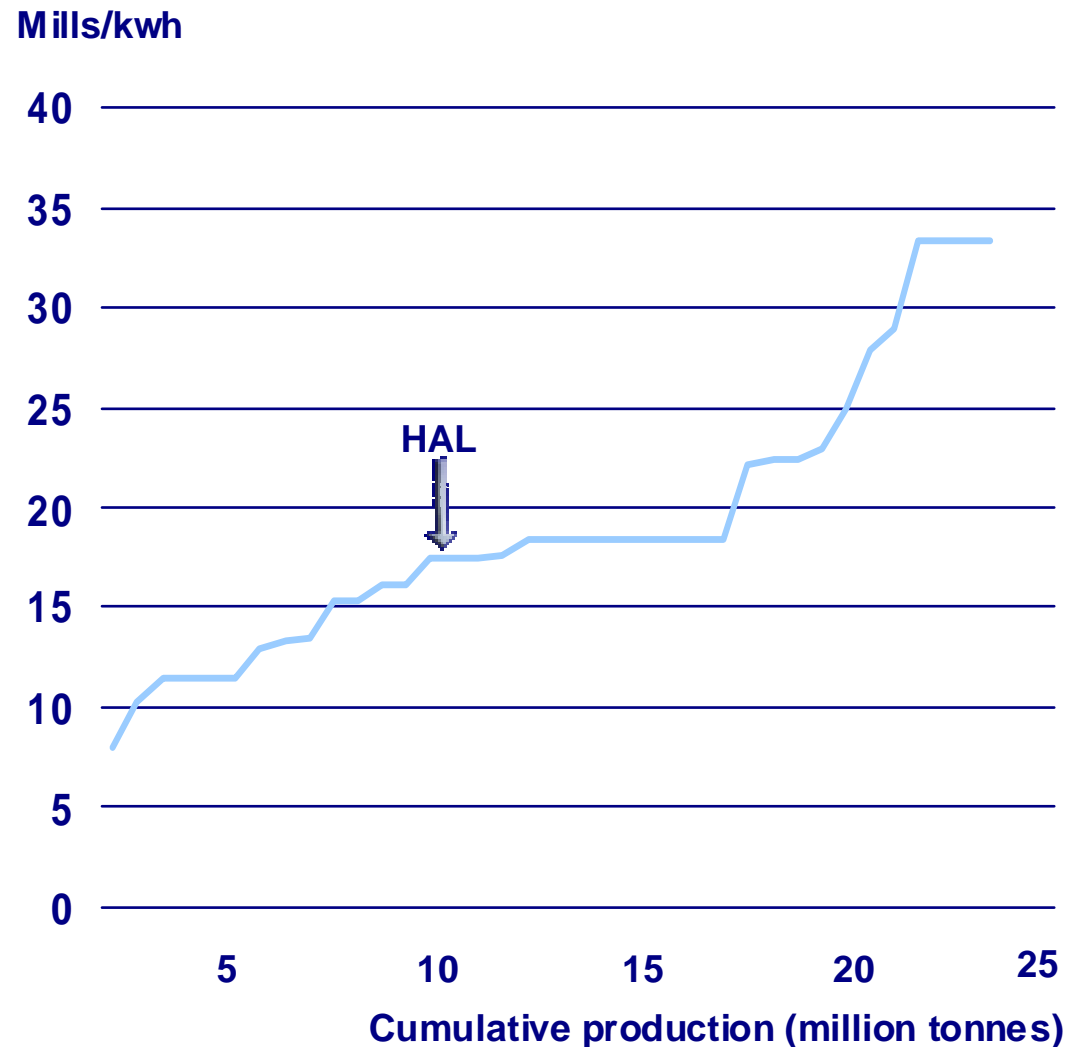
- **Expansion by 800 000 tonnes, to 2.5 million tonnes/year**
 - On schedule (time, cost)
 - Full production from May 2003
- **Hydro Aluminium's total equity increased to 34% (from 25.3%)**
- **Hydro Aluminium's investment: USD 130 million**
 - **Alunorte: USD 310 /tonne**
 - Typical brownfield: USD 400 – 600 /tonne
 - Typical greenfield : USD 800 – 1 000 /tonne





Energy cost curve 2002

- **Marginal spot exposure in Norway**
 - Long term contracts
 - Mostly based on Hydro's captive production
- **Exposure in Germany some years ahead**
 - Market liberalisation
 - Eco-taxes. Emission trading
- **No spot exposure in Canada and Australia**
 - Long term contracts

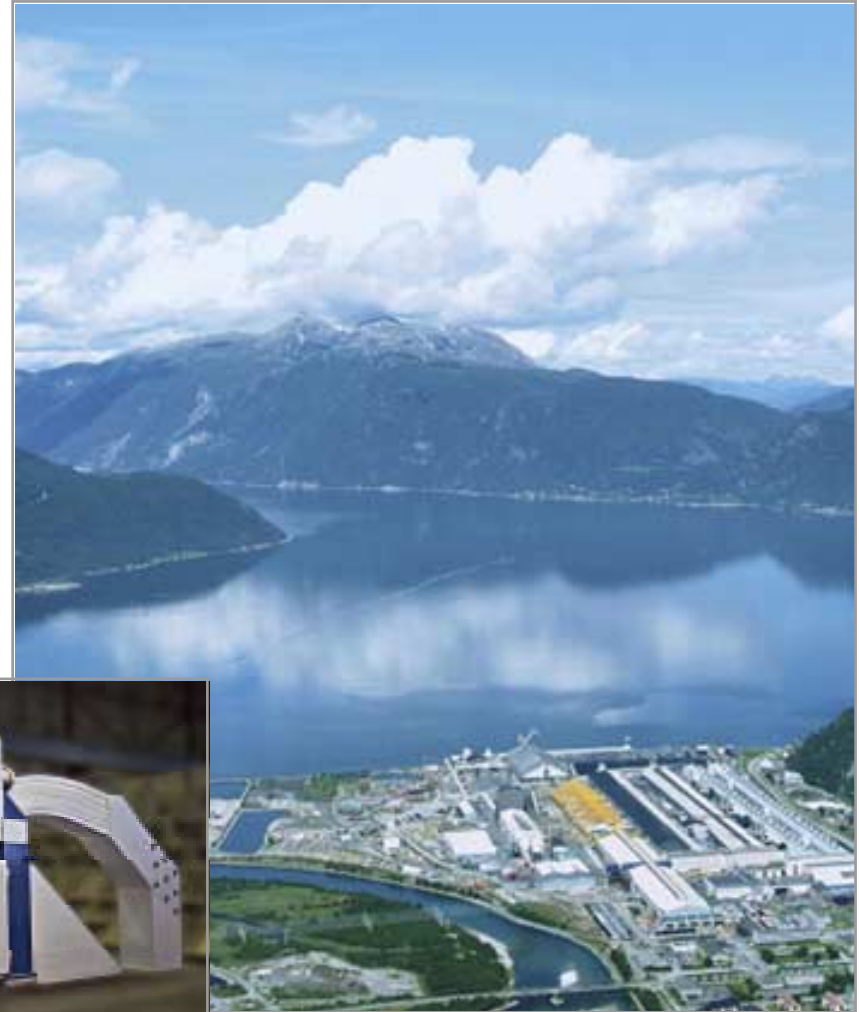


Sources: CRU. Hydro Aluminium estimates 2002



Sunndal expansion (1)

- **Total investment:**
 - **USD 750 million**
(ex Carbon plant)
- **Production increase:**
 - **From 156 000 to 329 000 tpy**
 - Incl. closing 66 000 tonnes Söderberg
- **Hydro HA 250 kA technology**
- **Environmental benchmark**
 - **Low emissions:**
0.15 kgF/t Al
 - **Energy efficiency:**
13.0 kWh/kg Al



Sunndal expansion (2)

- **Competitive investment:**
 - **USD 3 100 per tonne Aluminium**
 - **Stepwise construction/ start-up**
 - **16 months from construction to first metal**
 - **Productivity increase: 236 > 570 tonnes/man-year**
- **Forward sale 496 000 tonnes 2003 – 2007 evenly spread, at USD 1 500 per tonne and NOK 9.3 per US dollar**





Priorities Primary Metal

- **Delivery (operational):**
 - Cost reductions
 - Best practice sharing
 - Low capital intensive capacity increases

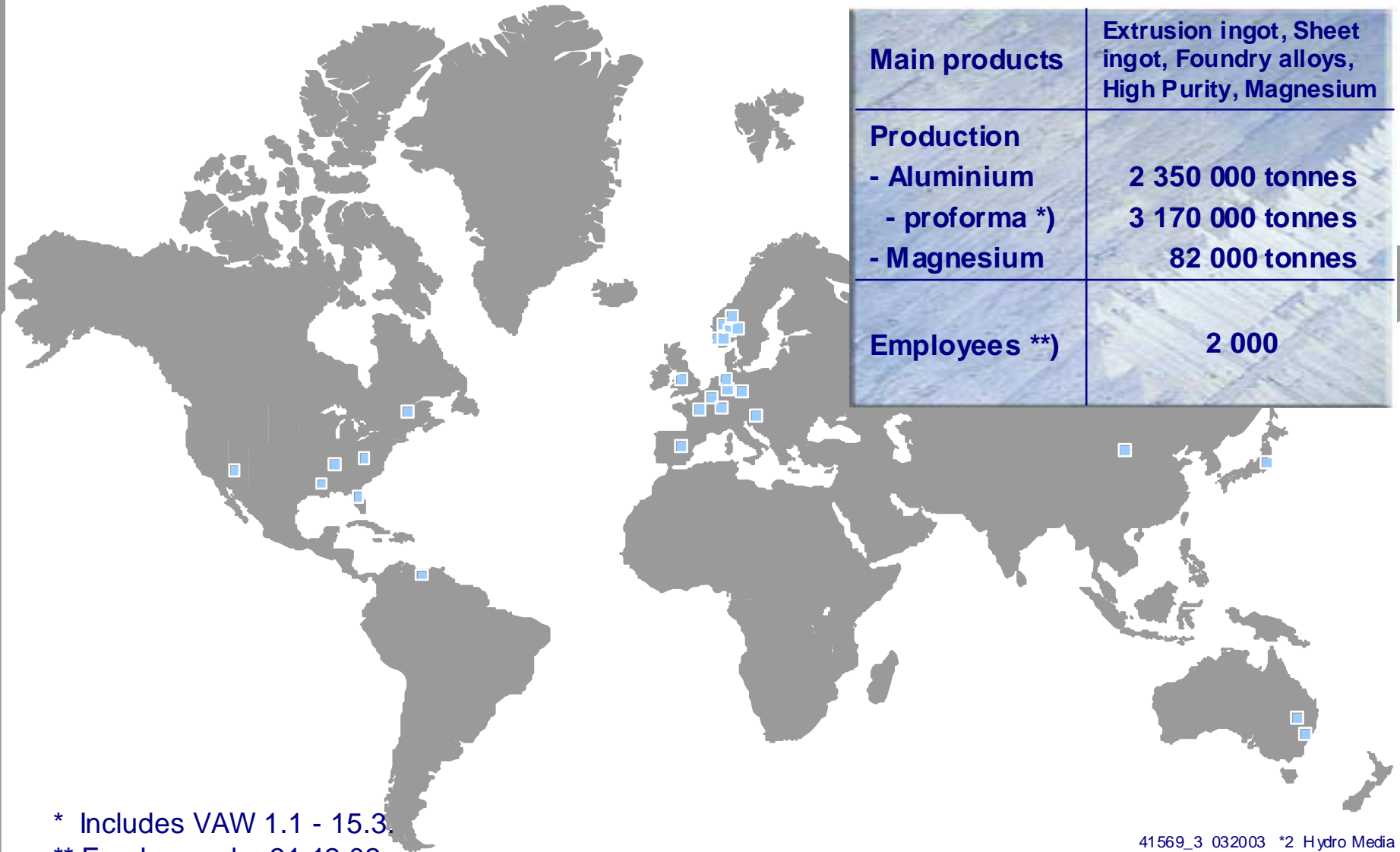
- **Direction:**
 - Improve relative cost position in production
 - Portfolio improvements
 - No greenfield projects

Metal Products





Metal Products – 2002



* Includes VAW 1.1 - 15.3

** Employees by 31.12.02



Metal Products

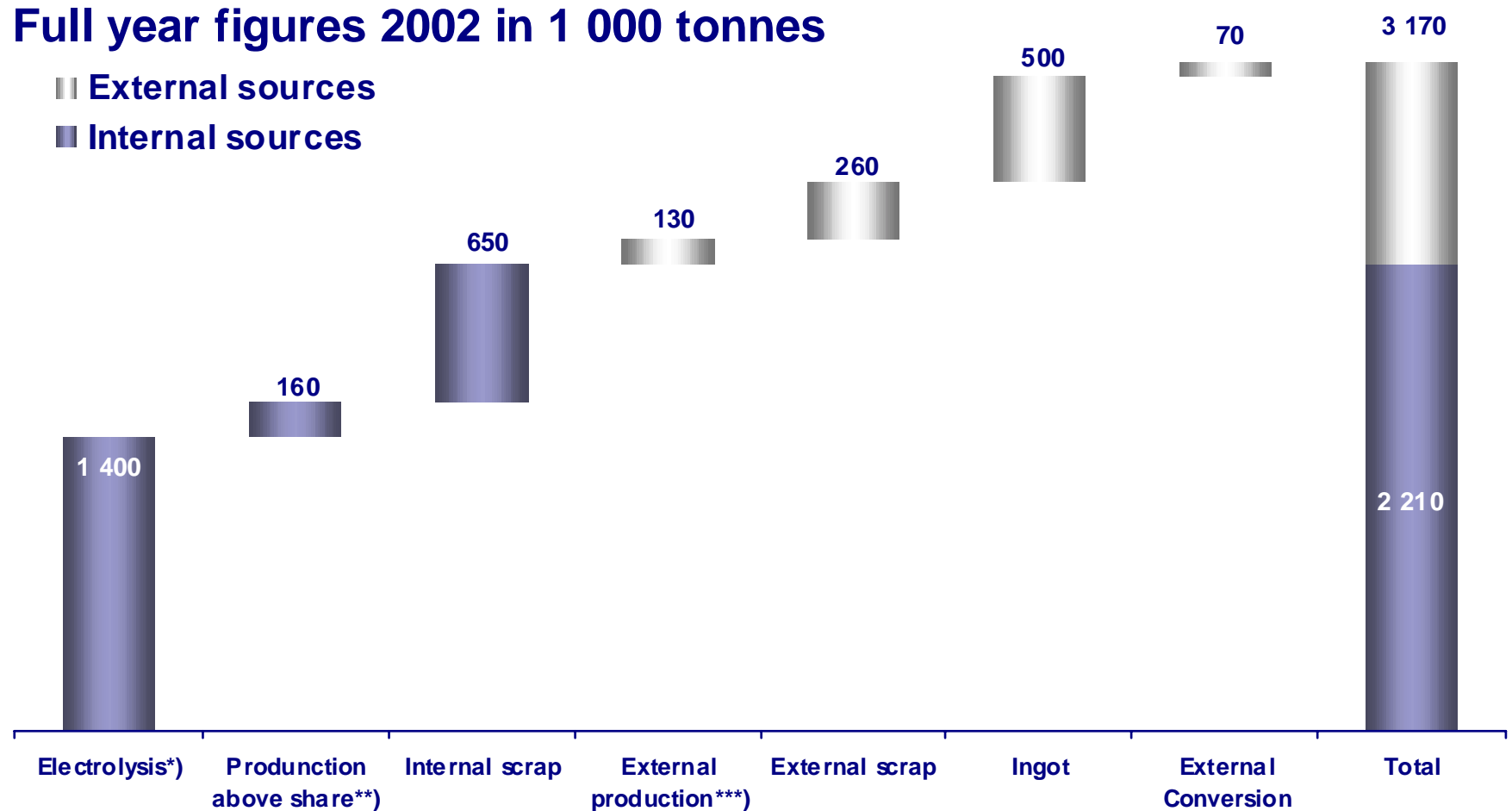


 **Scope of Metal Products**



Metal Products physical volumes

Full year figures 2002 in 1 000 tonnes



* At fully owned plants and minority equity stakes

** Slovalco and Hamburg

*** Non-equity strategic agreements (Talum, Goldendale, Aluar, Sayansk and others)



Metal Products differentiation – Business model

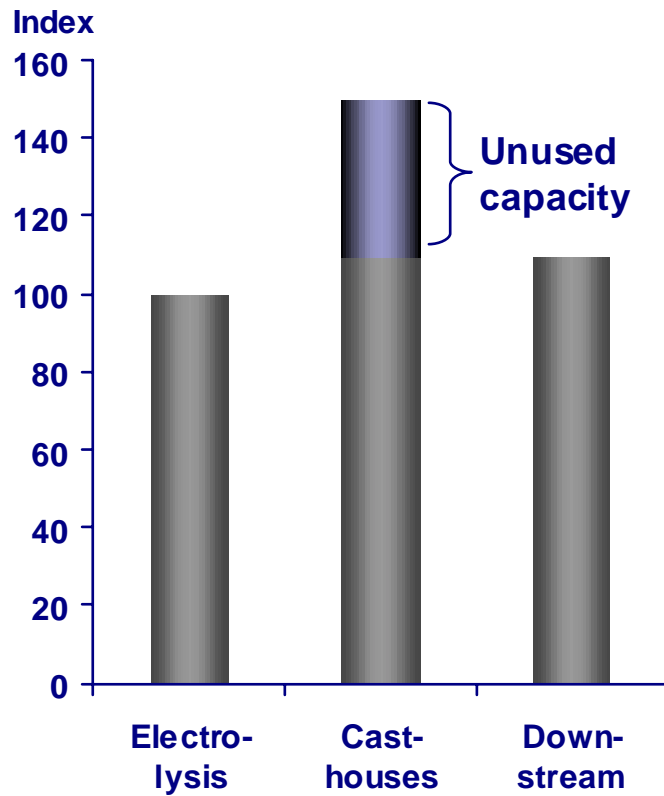
Separate casthouse sector creates values through:

- **Better asset utilization than traditional aluminium plants**
- **Metal Supplier Concept:**
Remelters and third party products supplement smelter-based casthouses giving full product coverage through a multi-sourcing system taking care of customer scrap
- **Optimise and spread best practice across a larger casthouse system**
 - **Operational improvements**
 - **Lower cost**
- **Create tailored value-added solutions for the metal products market**

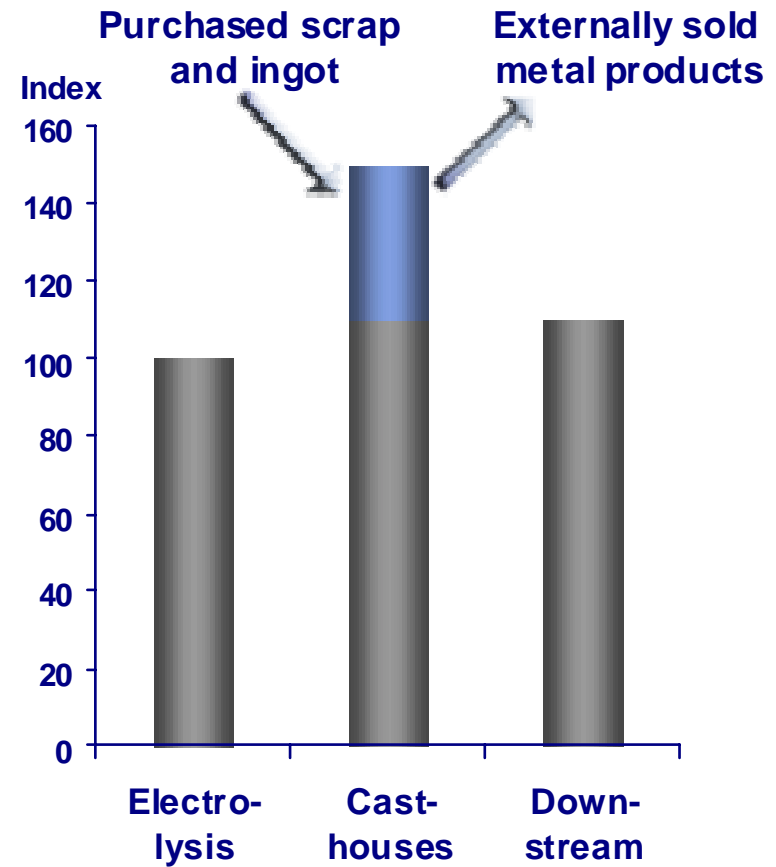


Better overall asset utilization

Asset utilization in traditional aluminium company



Target asset utilization in Hydro Aluminium



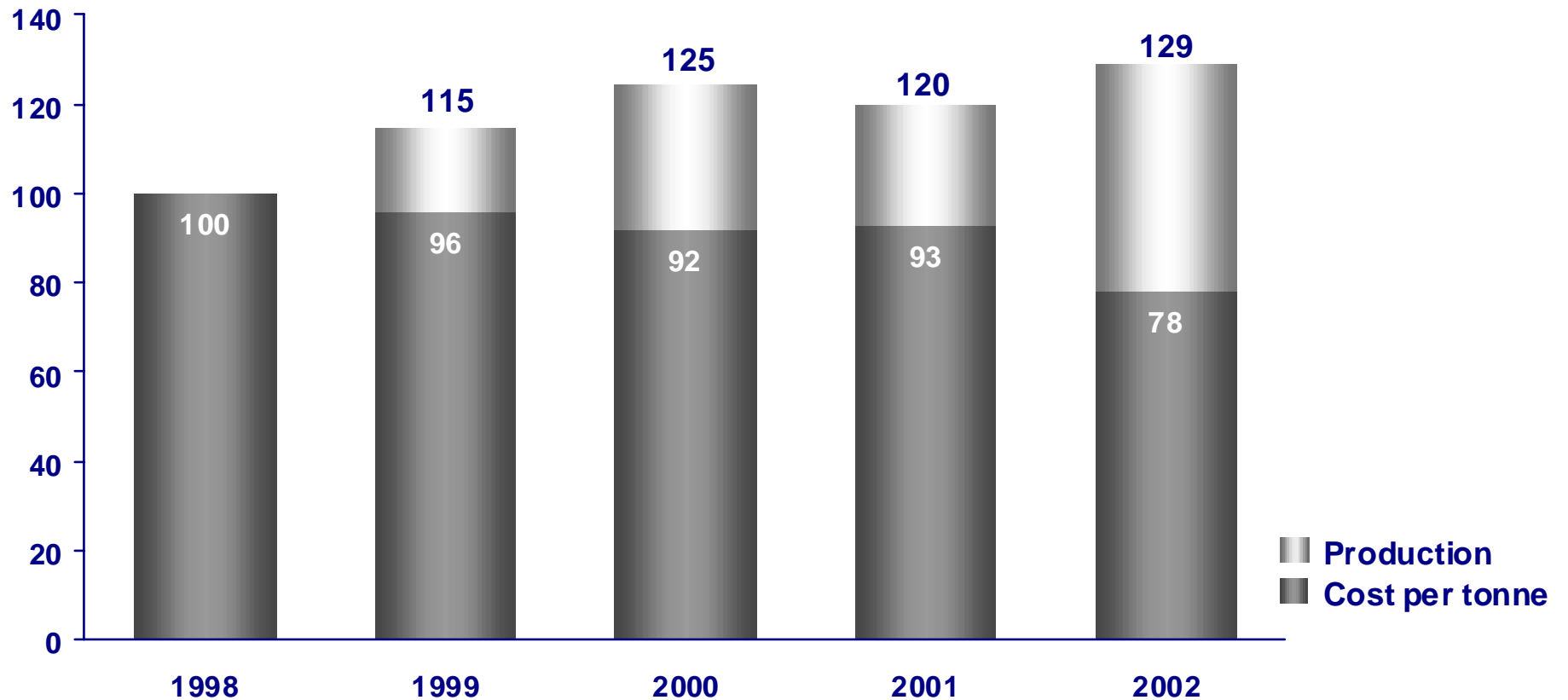


Optimising casthouses

Increased volume and lower cost in operations

Karmøy ~196 000 tonnes per year

Index
100 = Cost and Production
volume in 1998





Remelting capacity close to customers

1.5 million tonnes total remelting and recycling capacity in 2002 *)



Small units close to customer in global network
Scale effect: Largest system in Europe
Lower metal cost (utilize more scrap)

* Not including capacity at smelters.
Full year capacity including VAW from 1.1.02



Metal Supplier Concept example: Long term agreement with RusAl

Hydro Aluminium contributions

- Melt treatment & casting technology
- Operational know-how

Hydro Aluminium benefit

- All extrusion ingot output marketed by Hydro (80 000 tonnes)

Schedule

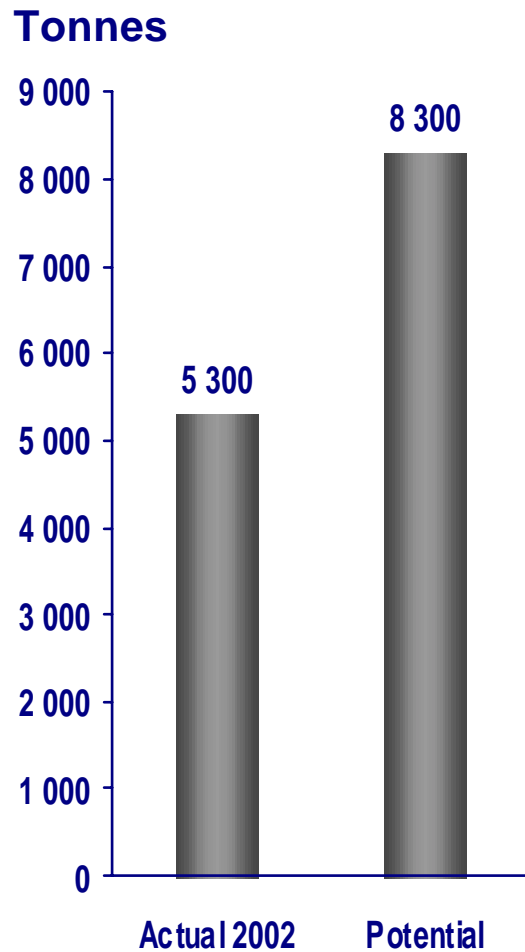
- Production start up 4Q 2003
- Phase 2 2004/2005
- Additional potential (80 000 tonnes)



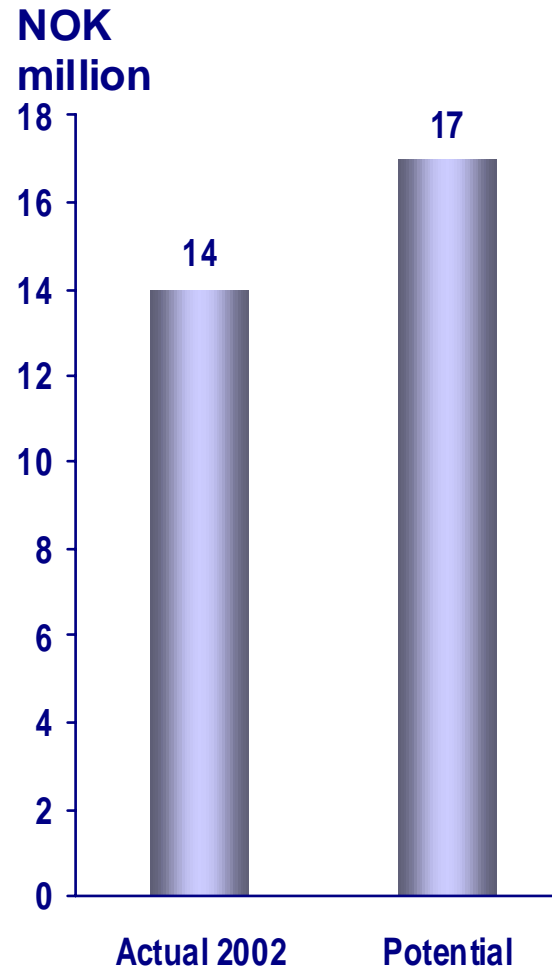


Optimising casthouse system after VAW acquisition

Production swap



EBITDA impact



- Litho quality sheet ingot in former VAW reallocated to Årdal
- Better suited for Årdal than previous product portfolio, reducing need for maintenance



Creating tailored value added solutions

Sales for Primary Foundry Alloys (PFA)

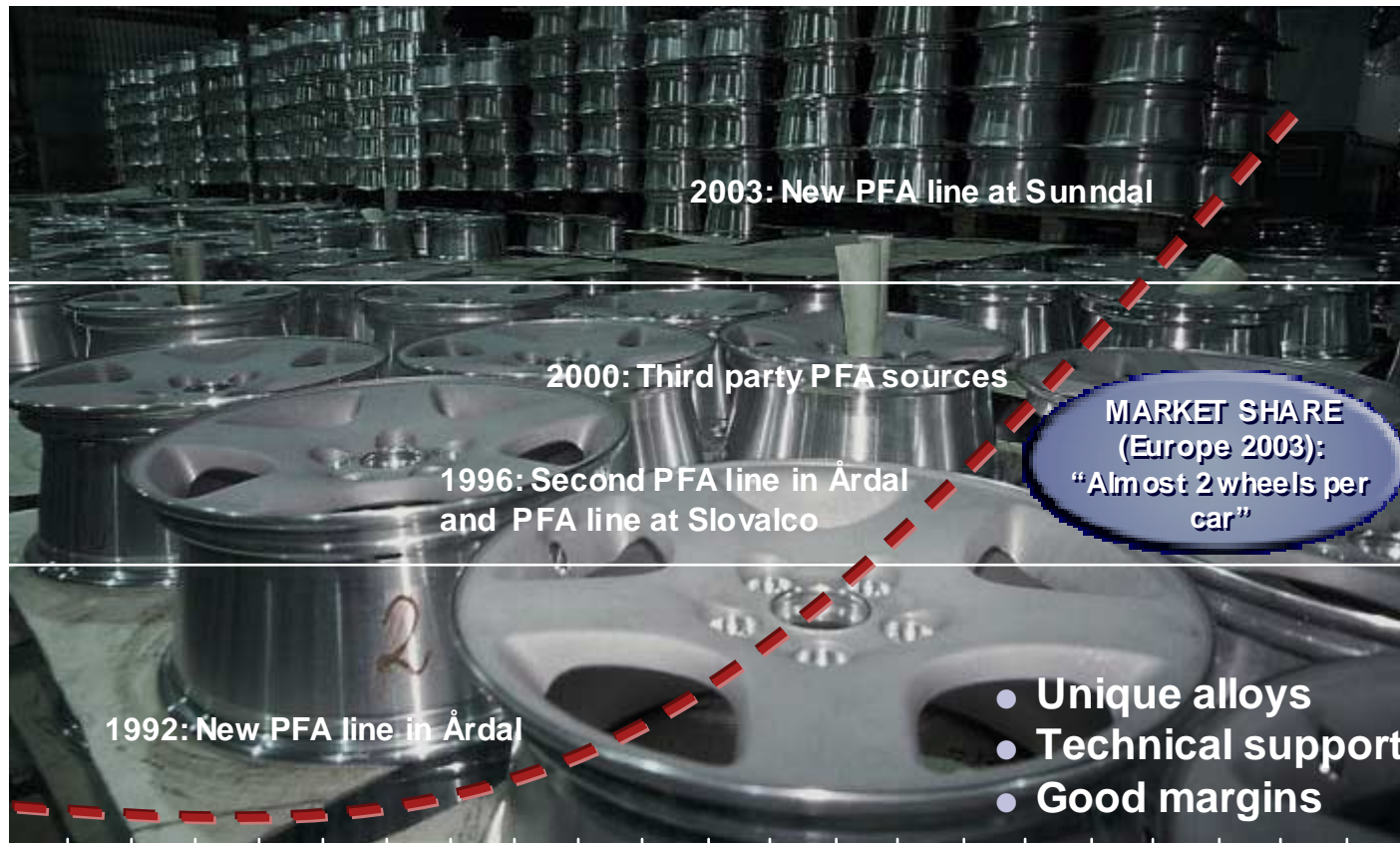
1 000 tonnes

300

200

100

0



85

90

95

00



The value of Hydro Billet Plus

"Hydro Billets Plus with its service concept is a valuable tool to assist Profilgruppen in optimising the production system and to better understand the commercial risk in the market. Assistance to understand our LME exposure, establish routines to minimize this exposure and to better utilize opportunities when buying billets has been of great value to us."

Nils Arthur
Managing Director
Profilgruppen





Priorities Metal Products

- **Delivery (Operational):**
 - **Cost reductions and best practice sharing**
 - **Maximize throughput in Extrusion ingot, Foundry alloys and Sheet ingot**
 - **Expand and maintain leadership in remelting/recycling**
 - **Keep investments at a minimum**

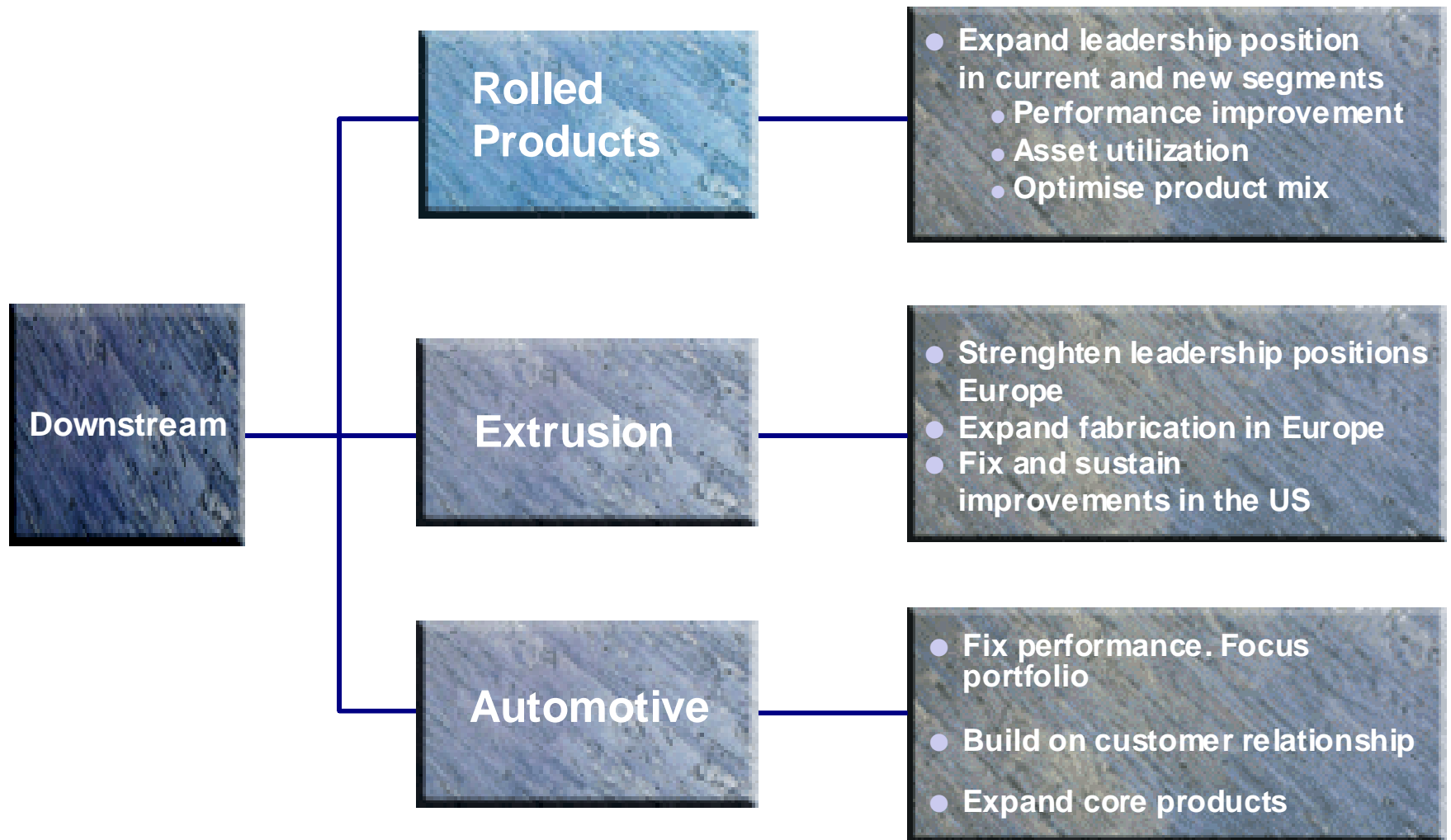
- **Strategic:**
 - **Short-term improve and utilize European assets fully**
 - **Strengthen leading positions in Foundry alloys**
 - **Develop Asian markets and establish aluminium foothold in China**

Downstream





Stronger downstream platform to serve customers





Rolled Products 2002



Main products	Foil and strip for packaging, offset printing, transportation, building
Production - proforma *)	728 000 tonnes 900 000 tonnes
Employees **)	4 300

* Includes VAW 1.1 - 15.3.

** Employees by 31.12.02

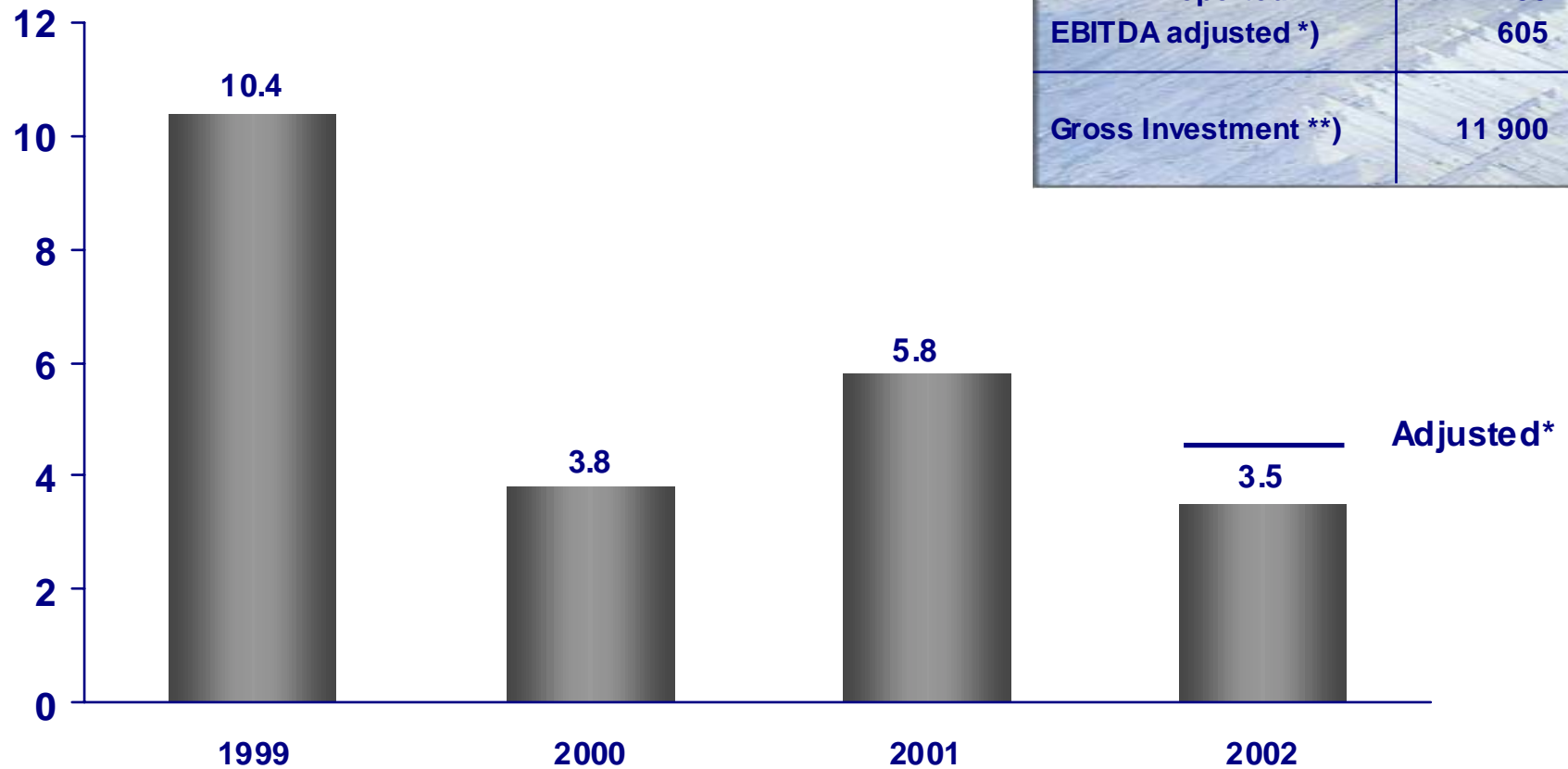
Plus plant in Malaysia with
30 000 tpy capacity



Rolled products: CROGI

CROGI 1998 – 2002: Actual prices

Percent



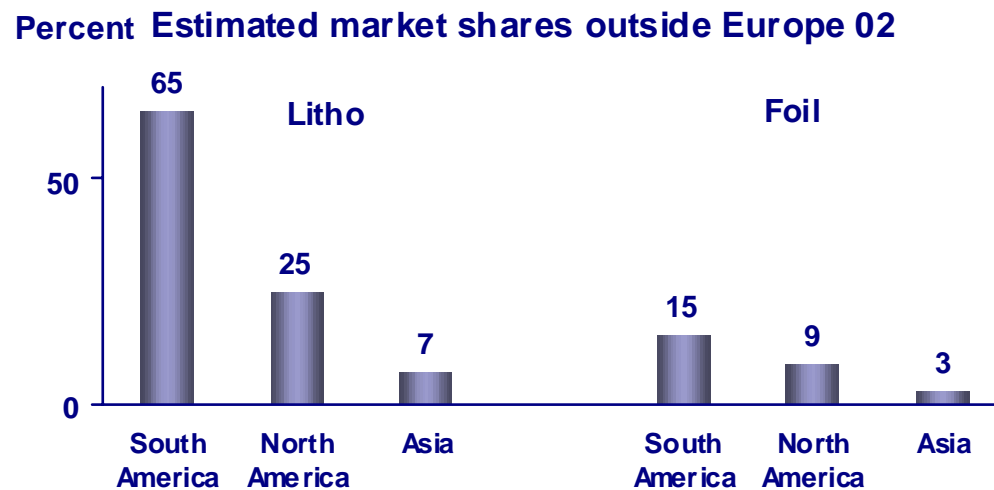
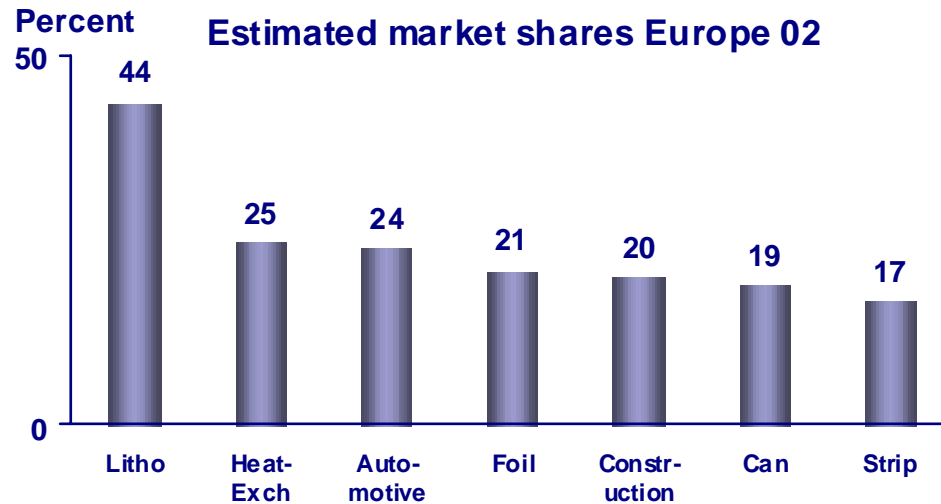
	NOK million
Sales	14 790
EBITDA reported	258
EBITDA adjusted *)	605
Gross Investment **)	11 900

* Adjusted for VAW 1.1 – 15.3 (average last 9.5 months multiplied with 2.5 months) and infrequent items

** Gross investment by 31.12.02



Market situation – Rolled Products` position



- Total market*: 3.3 mill. tonnes
- Expected growth 00 – 06: 2% annually
- Global market outlook
 - Moderate volume growth
 - Litho market showing strong demand
 - US business harmed by strong Euro
 - Margins under pressure

*) Europe 2002

Rolled Products differentiation

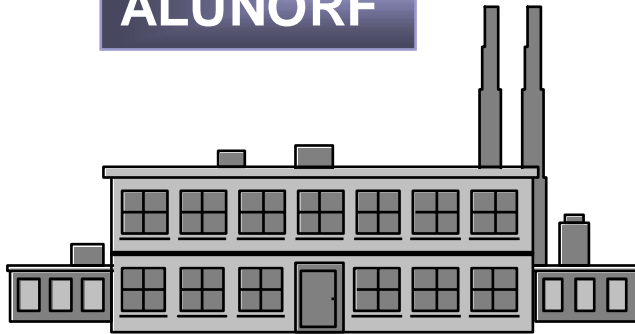
- **80% of rolling mill capacity next to smelters**
(advantage compared to competitors):
 - Norf-Neus-Grevenbroich triangle
 - Karmøy- and Hamburg-millsA grey arrow pointing to the right, indicating a flow or consequence.

Reduces working capital and logistic costs
- **Well-balanced product portfolio**
- **Outstanding reputation and strong market presence in selected areas**
- **Customer focus**
 - Flexible production system with ability to run dedicated lines
 - High utilization rate
- **Strong technology base**
 - World leader in litho, can-end, and automotive chassis applications
 - Foil
- **50% ownership in Alunorf, the world's largest and lowest cost mill**



Strong Production Synergies

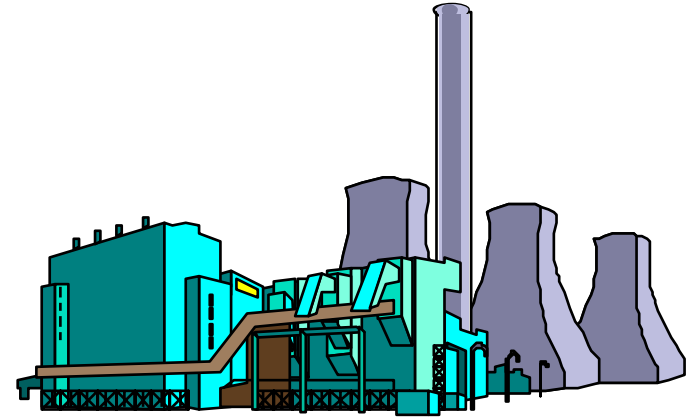
ALUNORF



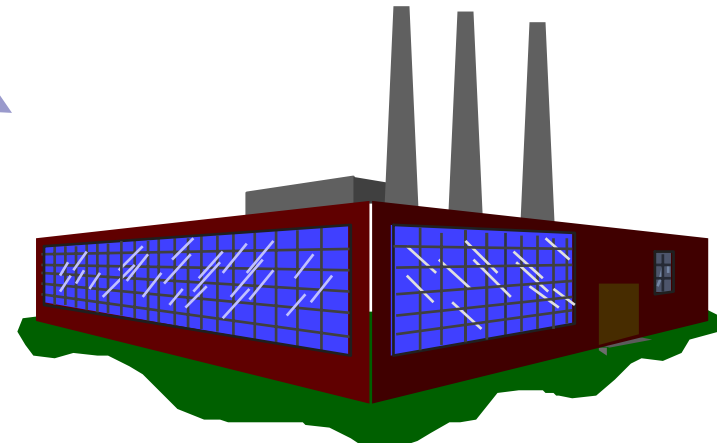
Annual Capacity:
Hot Rolling : 1.4 million tonnes
Cold Rolling: 0.9 million tonnes

2 000 employees

Rheinwerk Smelter



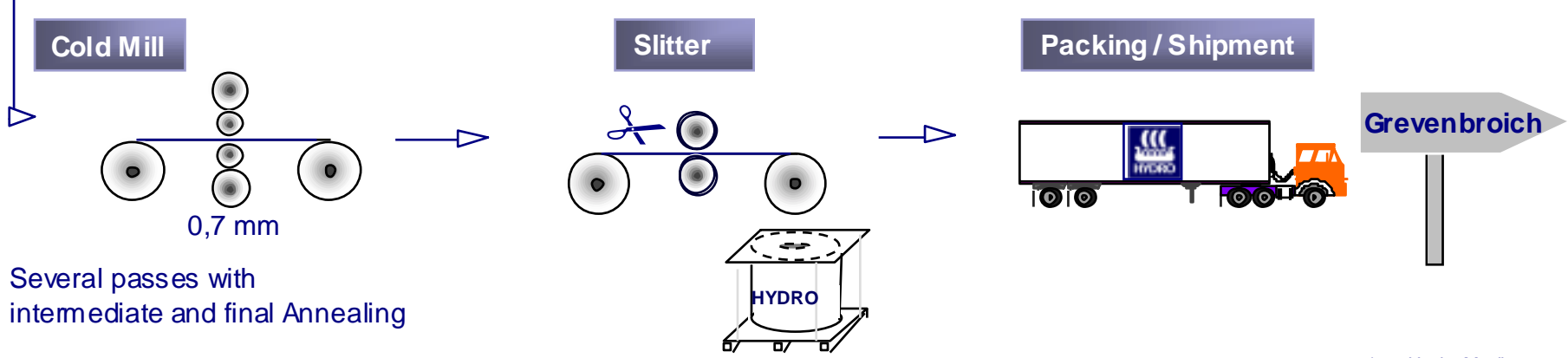
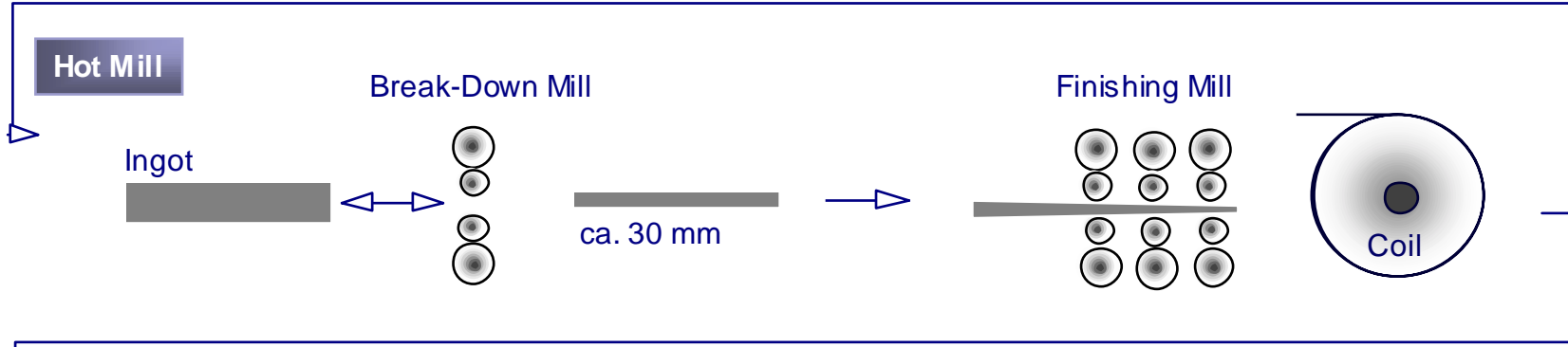
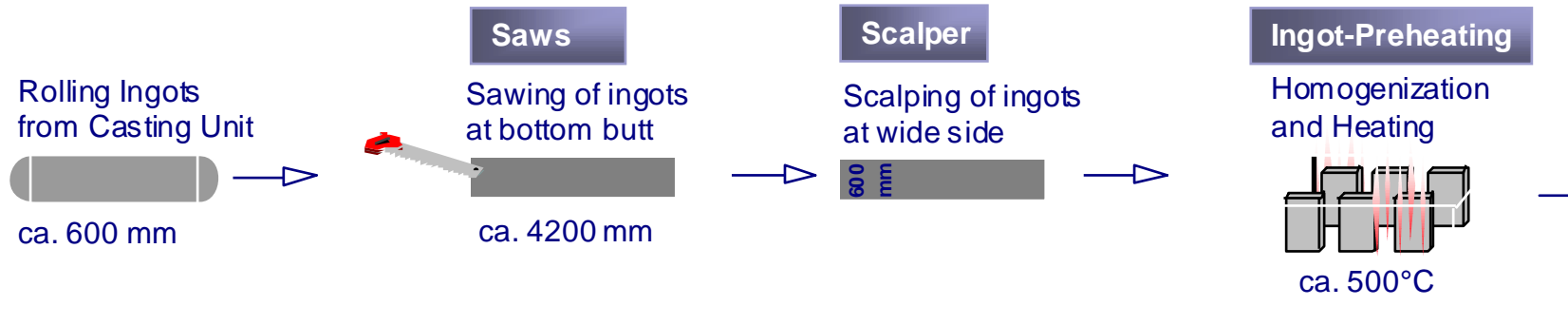
VAW Grevenbroich Plant



1 700 employees



Alunorf: From Rolling Ingots to Re-Roll



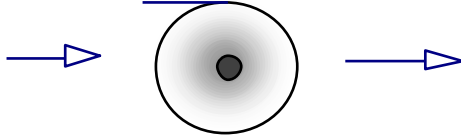


Grevenbroich plant: From Re-Roll to Flat Rolled Products

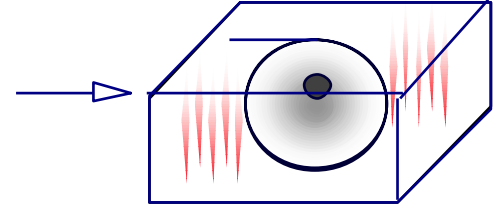
Example: Foil

High-Rack Storage

Pre-Heating



Re-Roll from ALUNORF

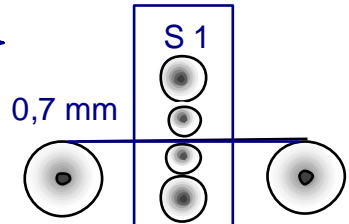


Cold Mill

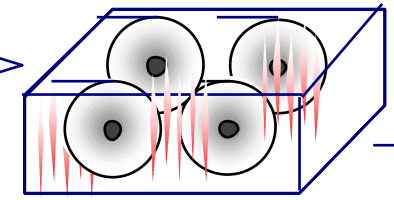
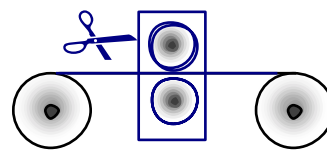
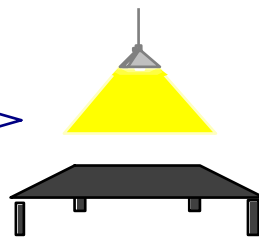
Quality Control

Slitting

Final Annealing

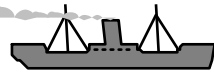
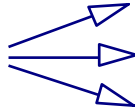
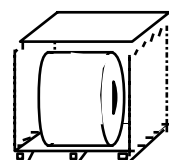


Several passes
gauge ca. 0,006 mm



Packing

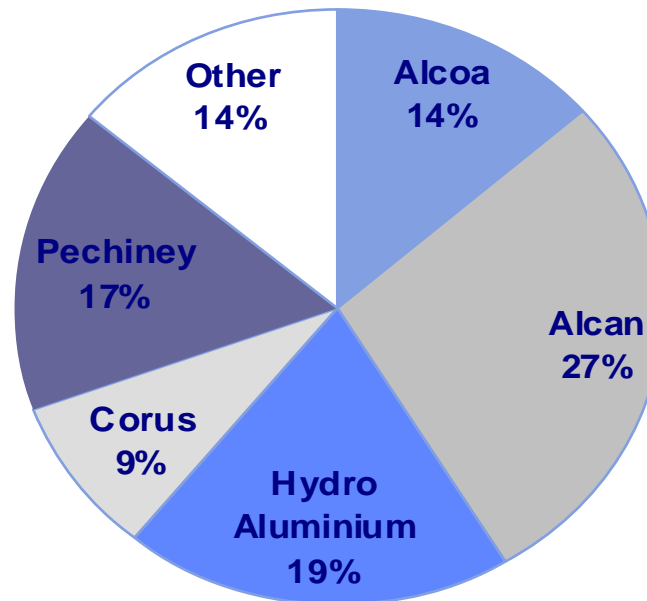
Shipment





Improved industry structure in Europe

Estimated market shares Europe 2001
100% = 3.2 million tonnes per year



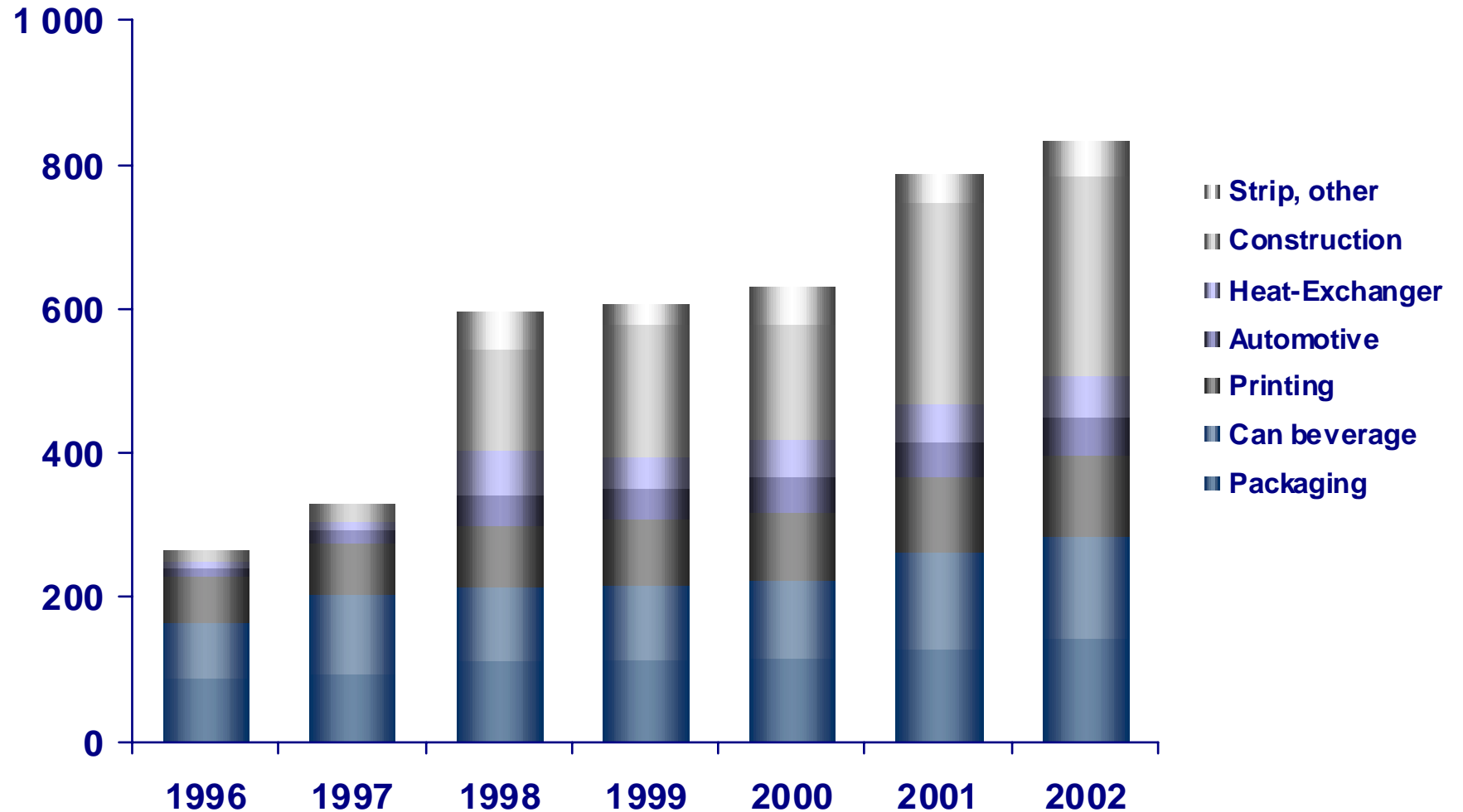
Four largest 2002: 77% market share
Four largest 1998: 58% market share

Source: EAA. Annual Reports



Strong volume growth Rolled Products

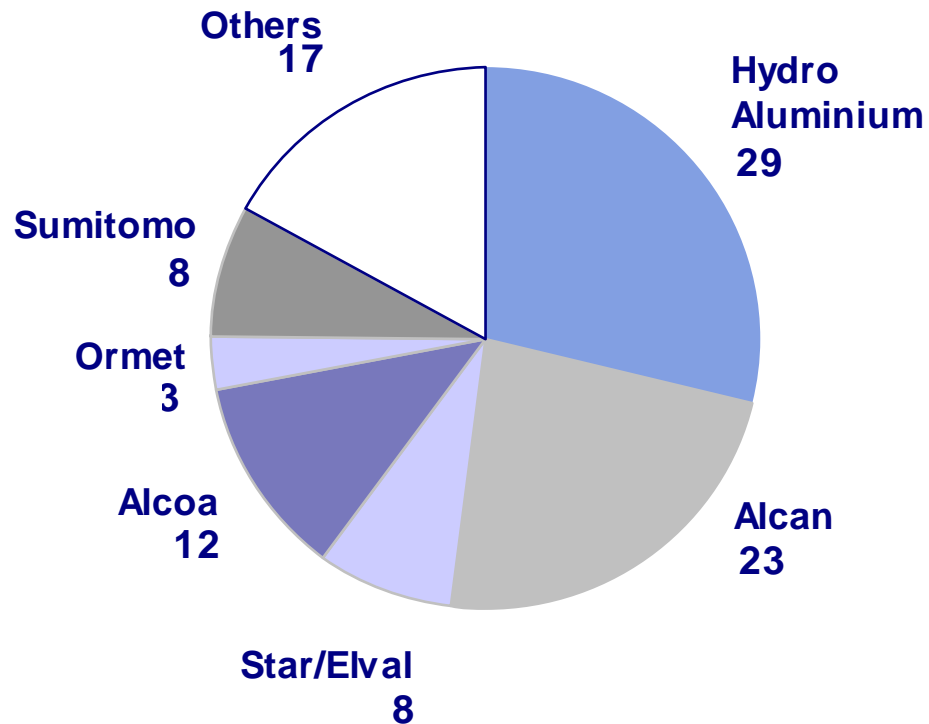
Volume
1 000 tonnes





Case: Lithographic strip – global leader

Global Market Shares 2002



- **Total world market:
Approx. 400 000 tonnes**
- **No. 1 position has been
maintained over the past
2 decades**
 - **High quality**
 - **Customer service**
 - **Dedicated lines**



Case: Tetra Pak – a success story

- **Hydro Aluminium has maintained a truly global long-term relationship with Tetra Pak since the mid 70's**
 - **Delivering to plants in Europe and Asia**
- **Key success factors:**
 - **Continuous product and service improvements**
 - **Contribution to increased productivity at Tetra Pak**
 - Reduced set-up times through introduction of jumbo reels
 - Enhanced running length per crack through constant high product quality
- **Tetra Pak regularly chooses Hydro Aluminium products as benchmark for other suppliers of liquid packaging foil**

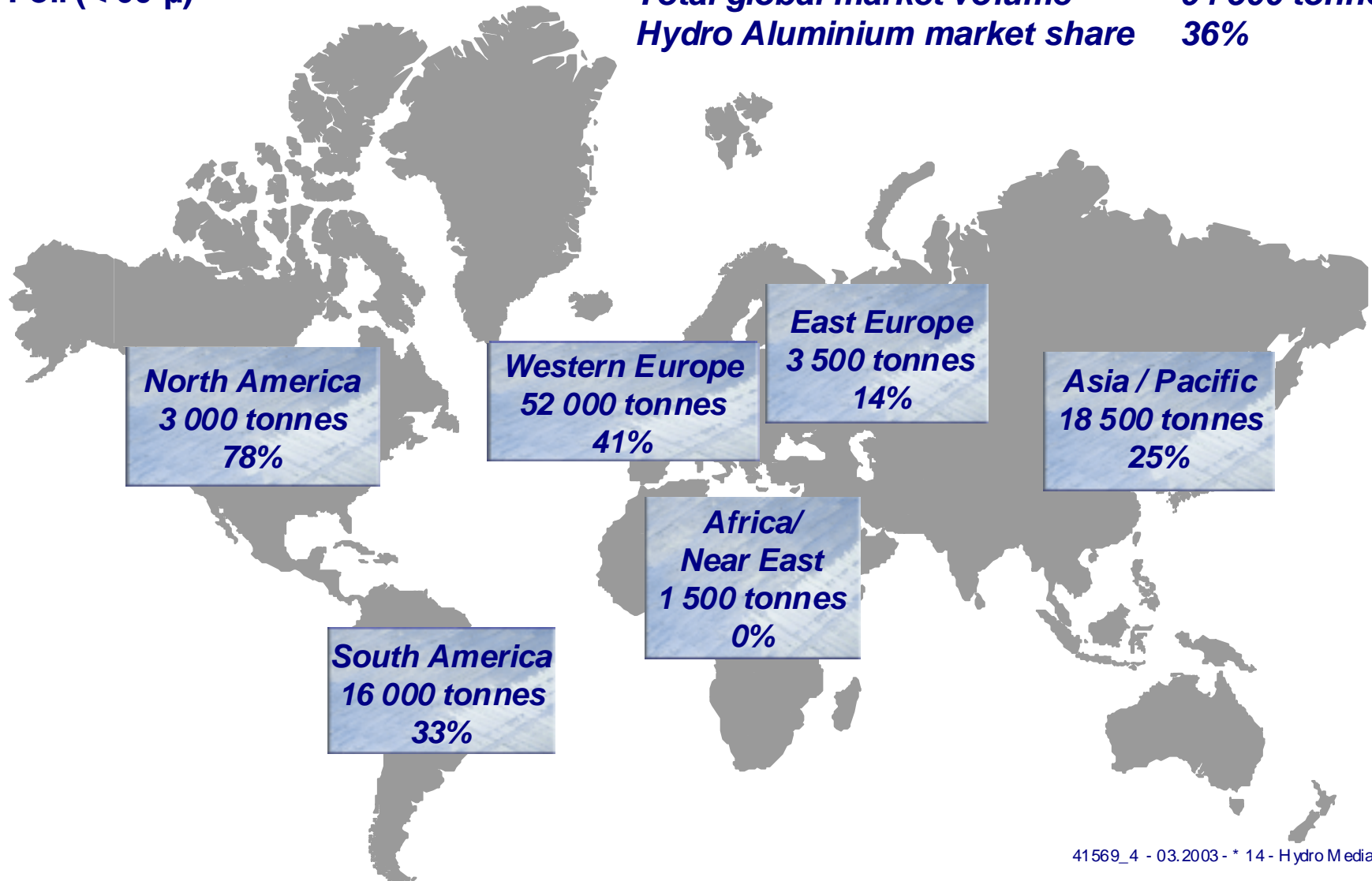




Case: Liquid packaging market 2002

Foil (< 60 µ)

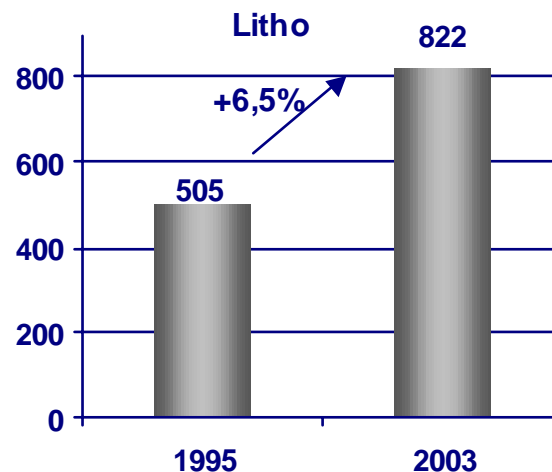
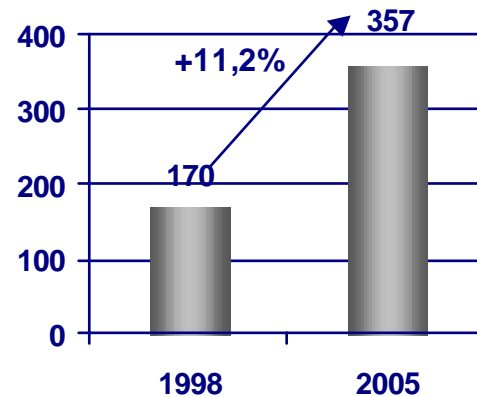
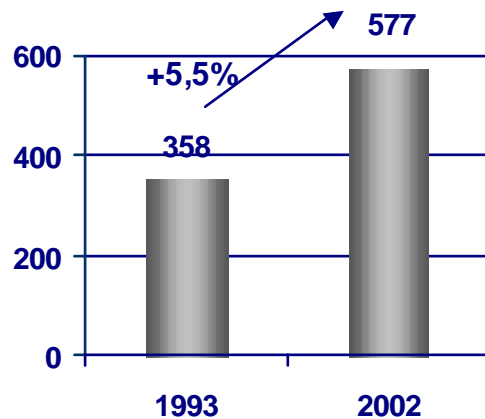
Total global market volume 94 500 tonnes
Hydro Aluminium market share 36%





Improvements in productivity

Tonnes/employee in different plants / production lines*



- Several modernization and revamping programmes
- Significantly increased productivity through state-of-the-art production facilities

* Annual improvements in percent



Priorities Rolled Products

- **Delivery (operational):**
 - **Reduce operating cost (continuous improvement)**
 - **Optimise production system (move products between plants)**
 - **Increase capacity utilization by growing sales**

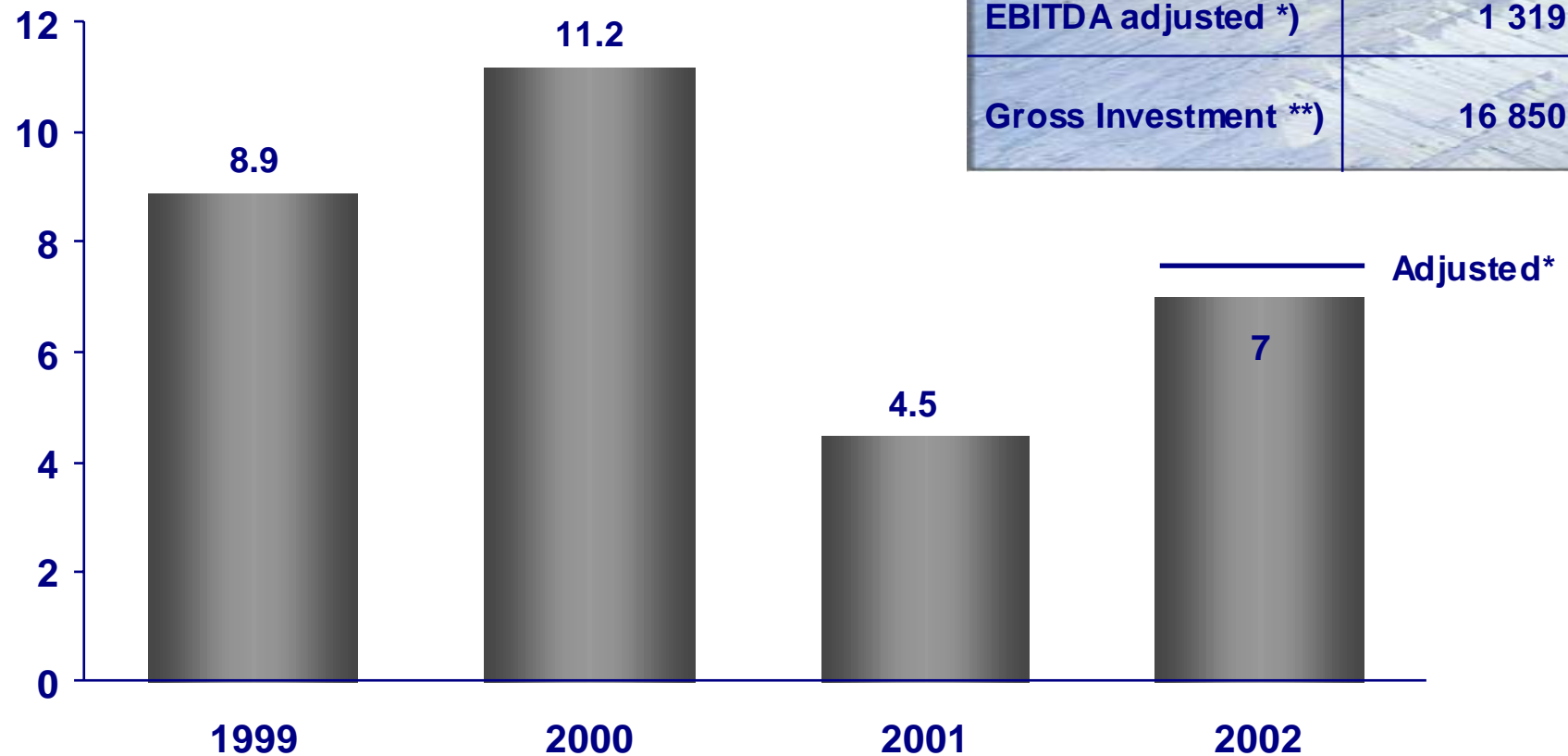
- **Direction:**
 - **Strengthen leading market positions in Europe**
 - **Optimise large asset base**
 - **Continue to build product positions in high growth markets (China and South America)**
 - **Continue to develop opportunities in automotive body sheet**



Extrusion and Automotive segment: CROGI

CROGI 1998 – 2002: Actual prices

Percent



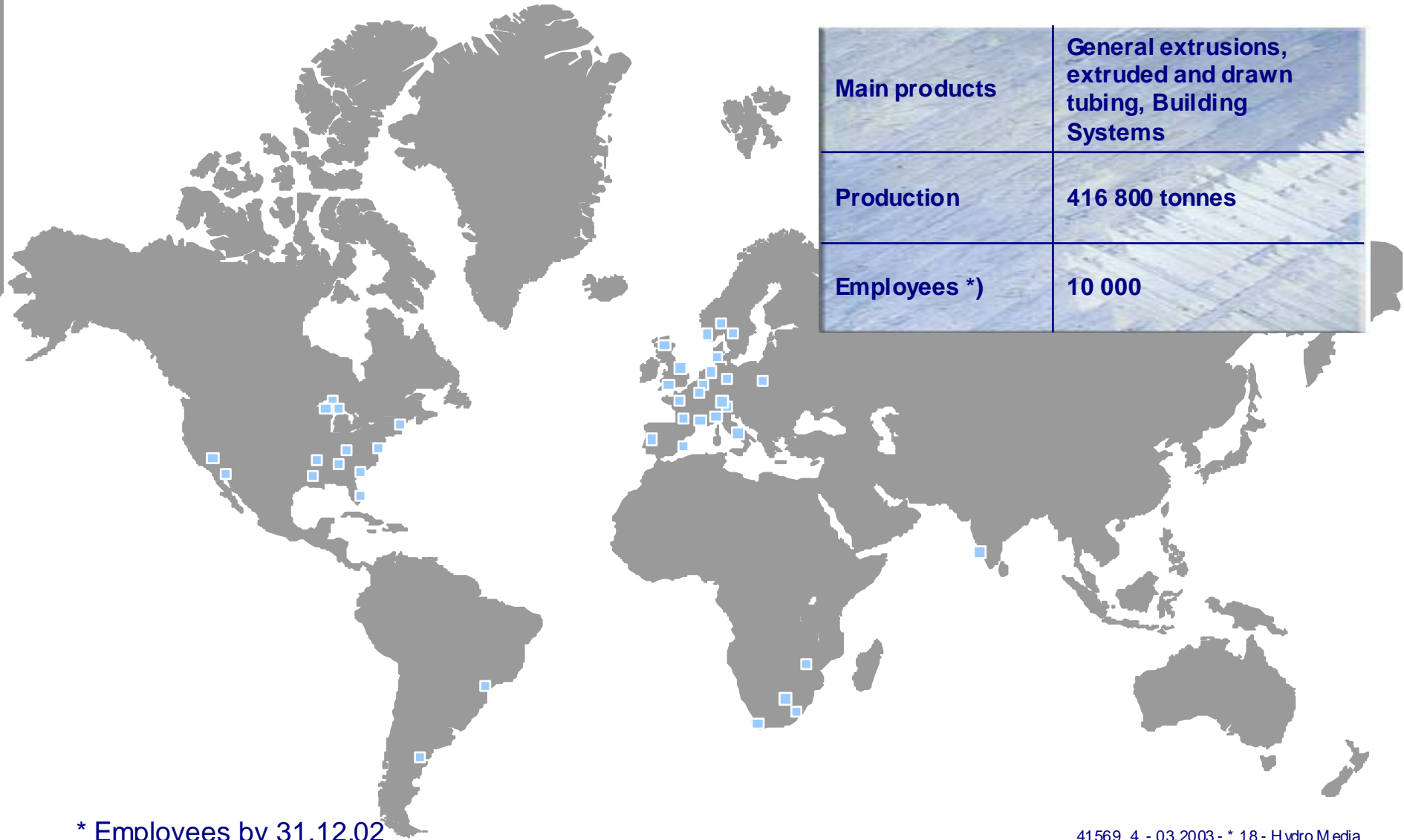
	NOK million
Sales	24 250
EBITDA reported	1 084
EBITDA adjusted *)	1 319
Gross Investment **)	16 850

* Adjusted for VAW 1.1 – 15.3 (average last 9.5 months multiplied with 2.5 months) and infrequent items

** Gross investment by 31.12.2002



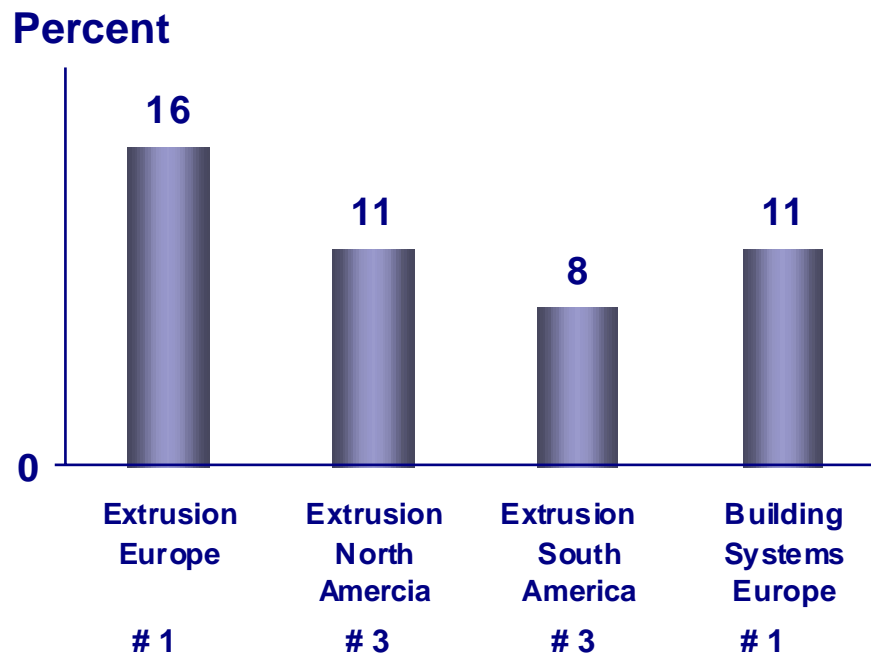
General extrusions and Building Systems 2002





Market situation – Extrusion position

Estimated market shares 2002



● Europe:

- Total market*: 2.2 million tonnes
- Market outlook Europe
 - Expected growth 00 – 06: 2-3%
 - Margins stable
- Hydro Aluminium Europe: Strong in most countries. Focus general extrusions to local markets and building systems

● US:

- Total market*: 1.5 million tonnes
- Market outlook US
 - Volume flat/slow growth
 - Margins stable
 - Transport growth resumes with pick-up in trailer, truck
- Hydro Aluminium US: Strong position in specialty segments – e.g. copier tube, office furniture, heavy truck. Growth opportunities in building and construction, industrial components

* Soft alloys 2002



Extrusions differentiation

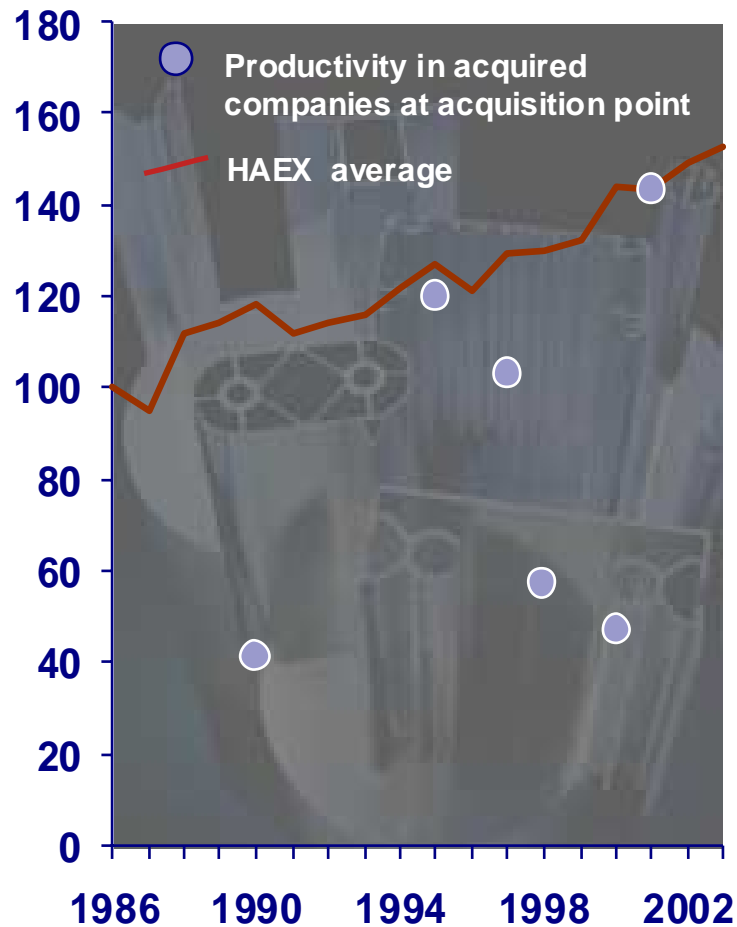
- **Global system – best practice deployment**
- **Customer focus, high recognition in market**
- **Innovation**
 - **Acknowledged development competence for new extrusion applications and new alloys**
- **Performance Excellence**
 - **Business Model**
 - Local accountability
 - Location of plants and sales force
- **Industry benchmark productivity**
 - **Manufacturing excellence concept**
- **Separate business model for Building Systems**



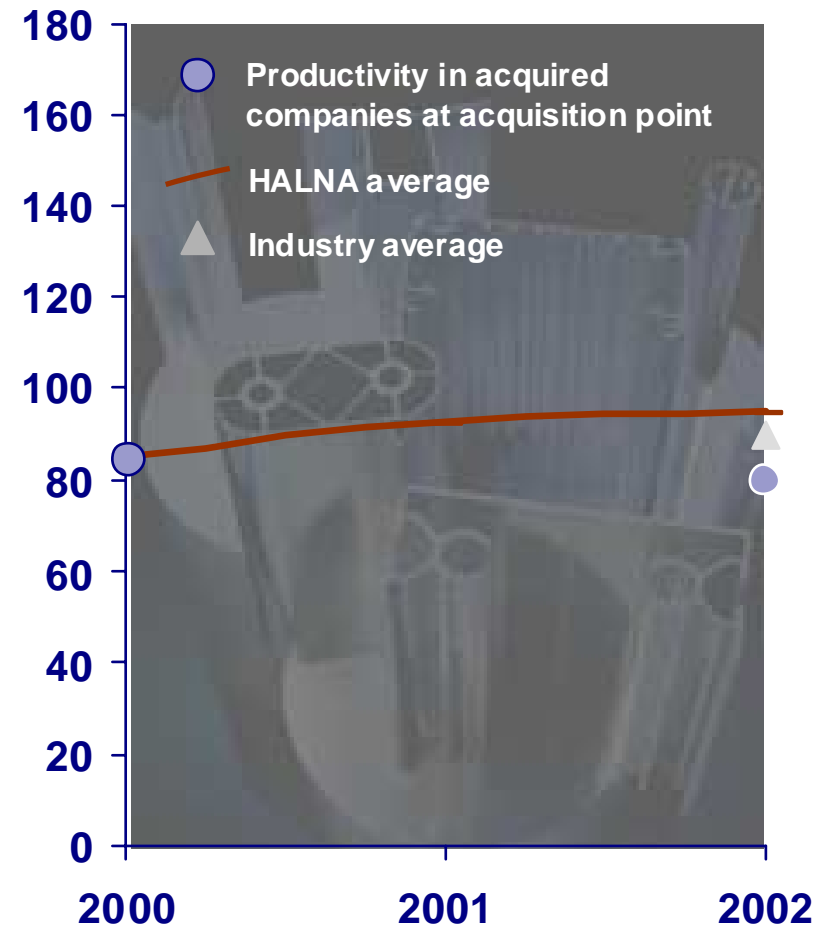


Extrusions: Increased press productivity - main lever to reduce cost pr kg

Extrusion Europe & South America Kg/hour (index, 1986=100)



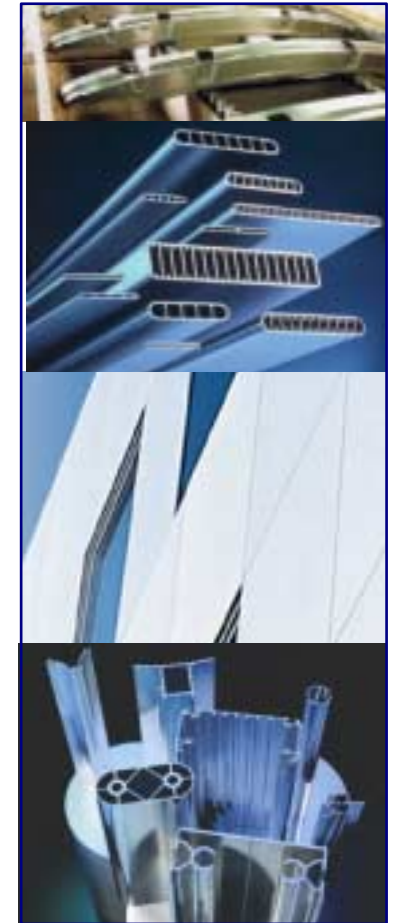
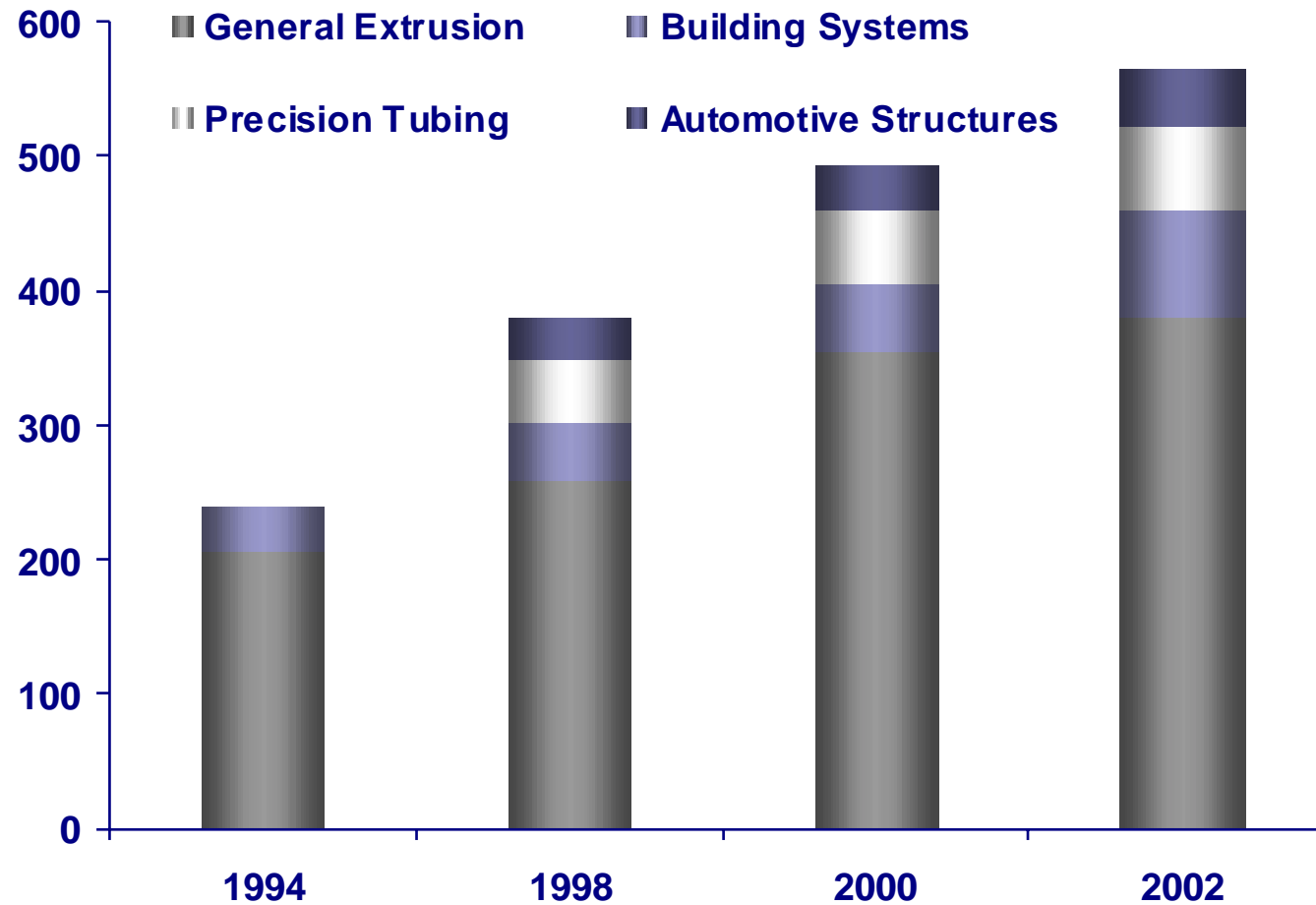
Extrusion North-America Kg/hour (index, European 1986=100)





Strong volume development extrusions *)

1 000 tonnes



*) Hydro Aluminium total: Includes also extrusions used in automotive sector



Building Systems – leading in “brand business”

- **Hydro Building System is a market leader**
 - Strong brands
 - Product innovation leadership
 - High productivity production
 - Good distribution system
 - Strong accountability to results
- **Active position in Building Systems allows Hydro Aluminium to**
 - operate a profitable downstream business
 - strategically shape the largest market segment for extrusions

WICONA

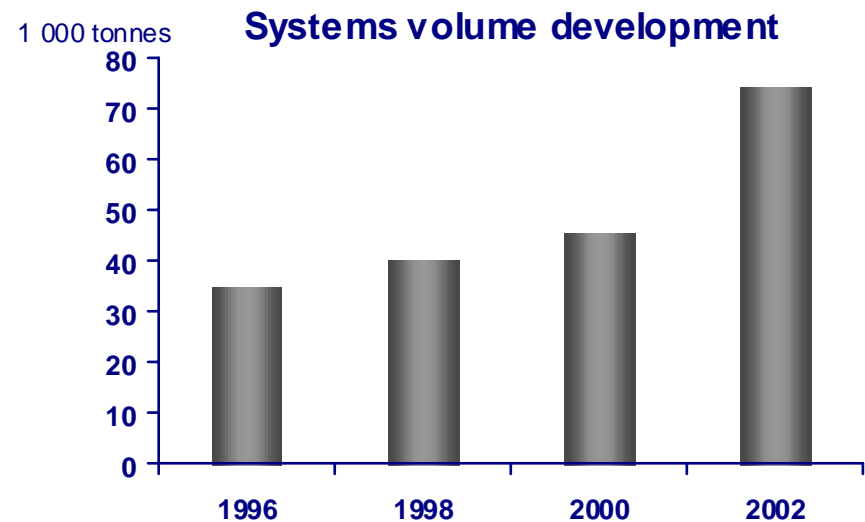
Targets projects and non-residential segments in Northern & Central Europe

DOMAL

More than 20 distribution centers in Italy, sales to Greece, Portugal and Spain

TECHNAL

Market leader in France, presence in Portugal, Spain & the UK





Case: Nord-LB Hannover – a success story

Hydro Aluminium

WICONA

- Sole supplier of aluminium profiles (200 tonnes)
- Technical support through dedicated project service to the metal builder
- Profil constructions
- Object-specific and specially adapted products.
- Project duration: 1,5 years – from mid 2000 until end of 2001





Case: Building Systems customer relationship example - metal builder in Italy

- We develop and distribute complete building systems
- Our customers, metal builders, assemble and then install finished windows and doors
- In addition to selling systems we also provide support to our customers (calculations, marketing, forecasts etc) - we help our customers to develop their business
- In the Italian market of 155 000 tonnes Hydro Aluminium has 22 distribution centers around the country



Example: Metallegno

- One of 15 000 metal builders in Italy
- Family business - started with 4-5 people and have grown to 35 employees over 15 years working with Hydro
- Range of products expanded from residential to industrial and commercial buildings projects



Priorities Extrusion Europe and South America

- **Delivery (operational):**
 - **Customer focus**
 - **Continue improvement programs on key value drivers, productivity, material yield**
 - **Optimise low cost capacity utilization**

- **Direction:**
 - **Strengthen position through selective acquisitions**
 - **Increase added value activities**
 - **Improve sourcing positions in low cost countries**
 - **Leverage competences from Building Systems in other market segments**



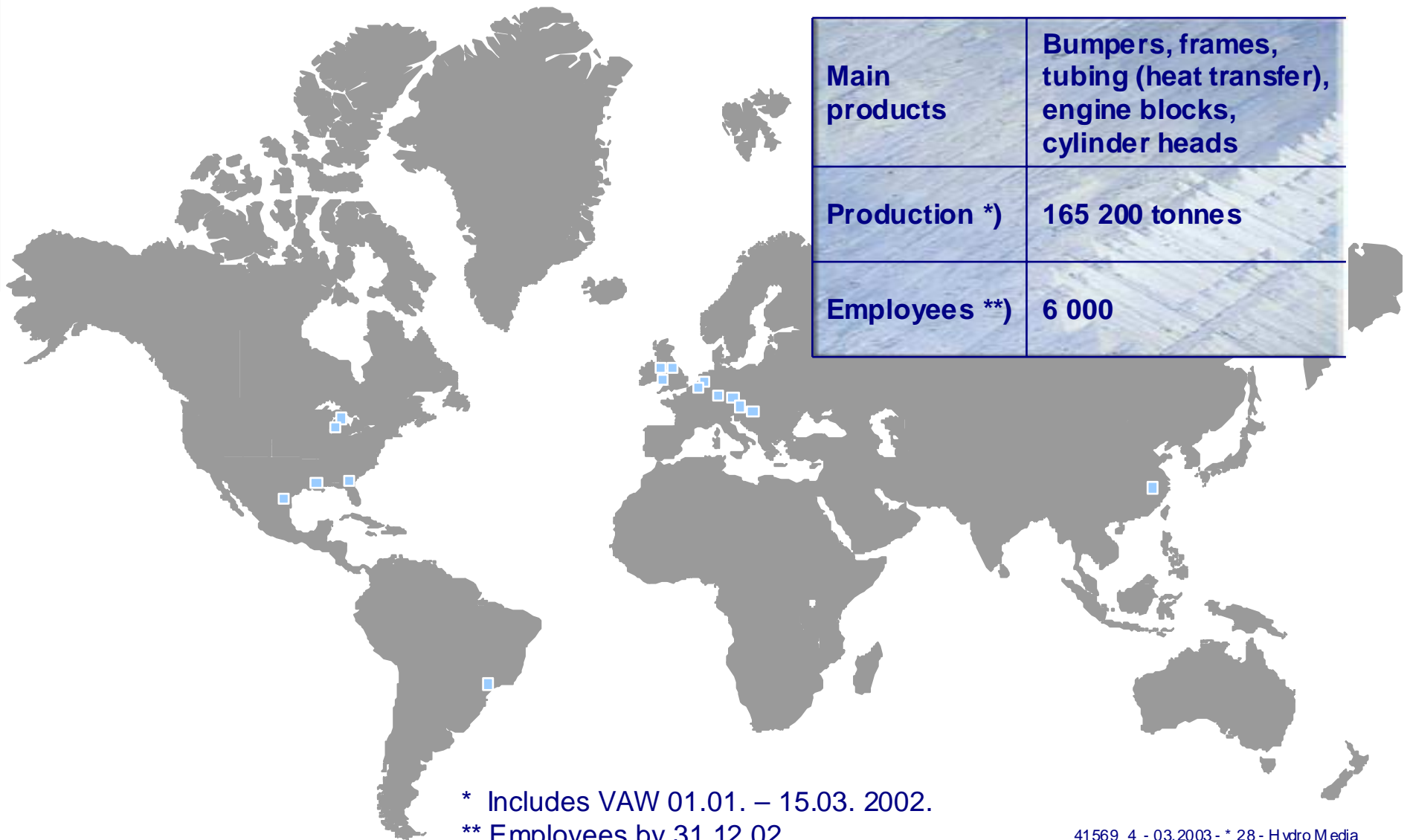
Priorities Extrusion US

- **Delivery (operational):**
 - **Drive productivity toward European levels**
 - **Reduce cost**
 - **Leading service and quality**

- **Direction:**
 - **Performance improvement**
 - **Better asset utilization - grow business volume, with existing and new customers**
 - **Enhance differentiation by developing added value offering**



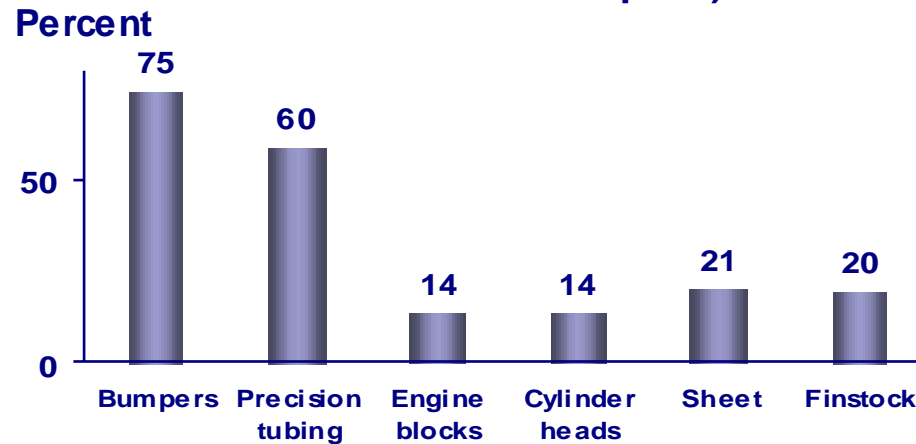
Automotive products 2002



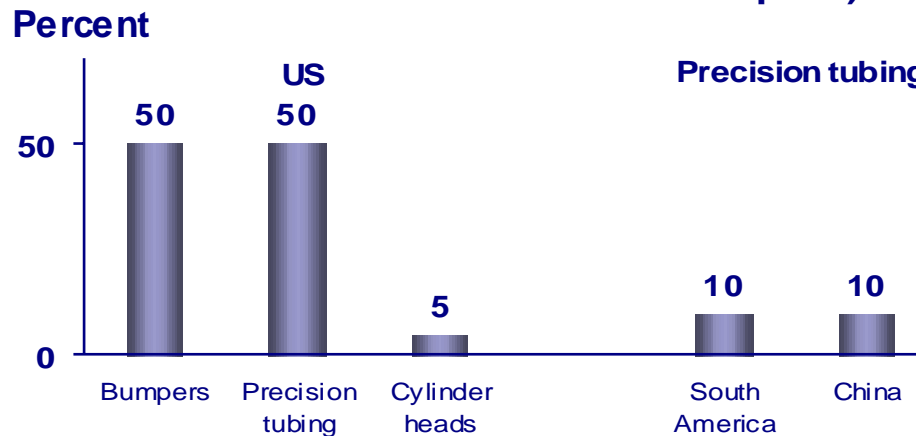


Market positions – Automotive

Market shares Europe **)



Market shares outside Europe **)



- Total market *): 6 million tonnes

- Expected growth 00 – 06: 5%

- Market outlook

- Light weighting trend to continue
- Western markets maturing, growth potential shifting towards emerging markets
- Relentless price pressure from OEMs
- Key levers to earn money
 - Differentiation
 - Lean manufacturing
 - Shift to lower cost countries unless highly automated production
 - Economies of scale

* US, Europe, Japan. 2/3 is castings

** 2002 estimates. Hydro Aluminium's market share of total aluminium use

Market shares for engine blocks and cylinder heads excluding OEMs inhouse production higher 41 569_4 - 03.2003 - * 29 - Hydro Media



Presence in automotive



Products to market

Al alloys
Mg alloys

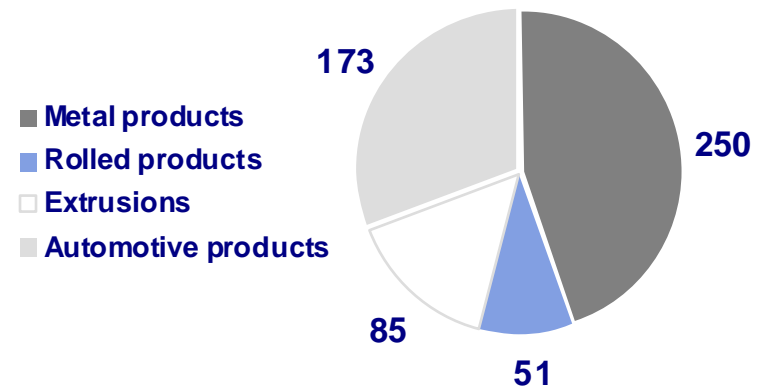
Extruded tubes
Welded tubes
Finstock
Sheet for components

Bumper beams
Crash boxes
Engine castings
Cylinder heads
Mg castings⁽²⁾
Processed tubes

Windshield frame
Engine cradle
Body structures⁽³⁾

- (1) Dependent on number of assembling operations
- (2) 49% of Meridian
- (3) Low volume body structure (Lotus Elise, Rolls Royce, BMW)

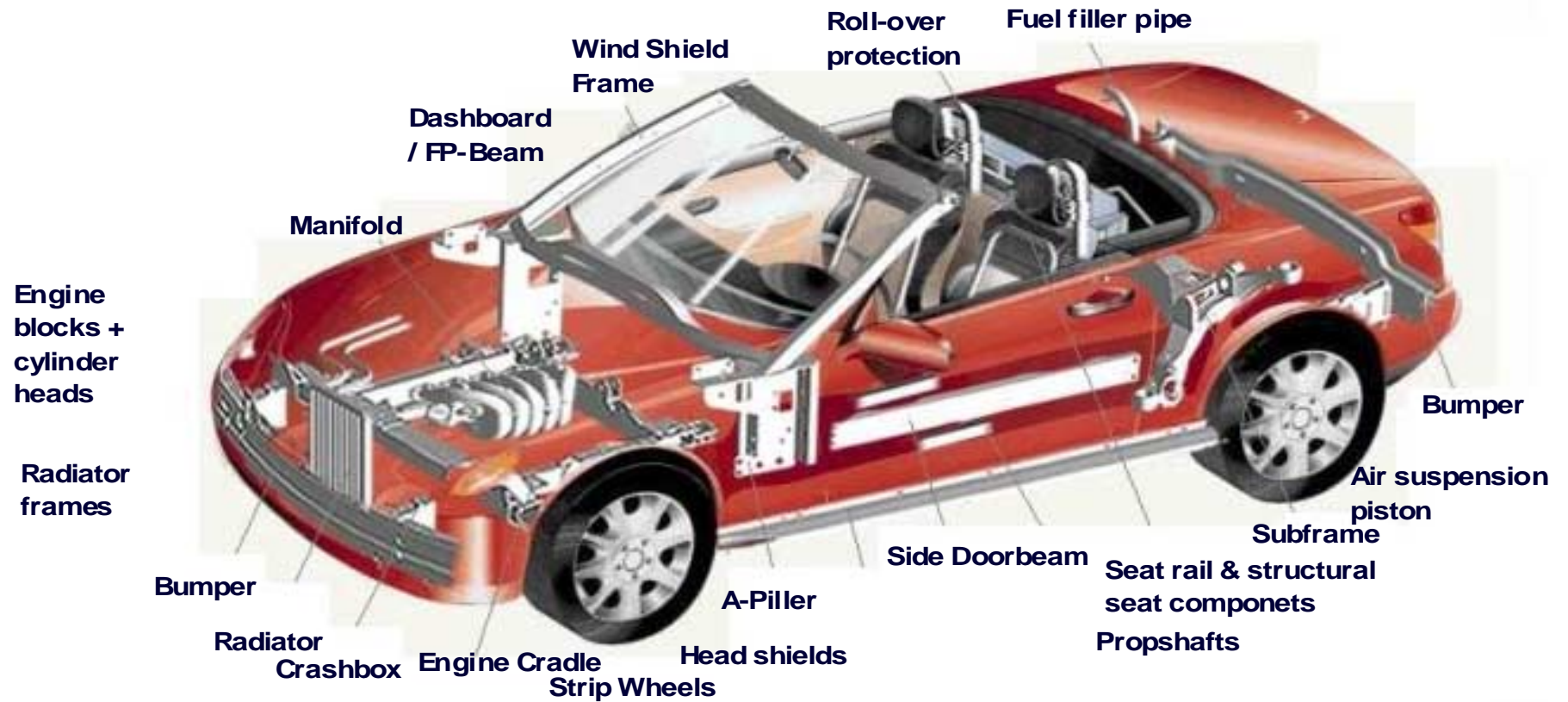
Shipments by business sector (1 000 tonnes; 2002)*



* Includes VAW 1.1. – 15.3



Aluminium components supplied by Hydro Aluminium





Automotive differentiation

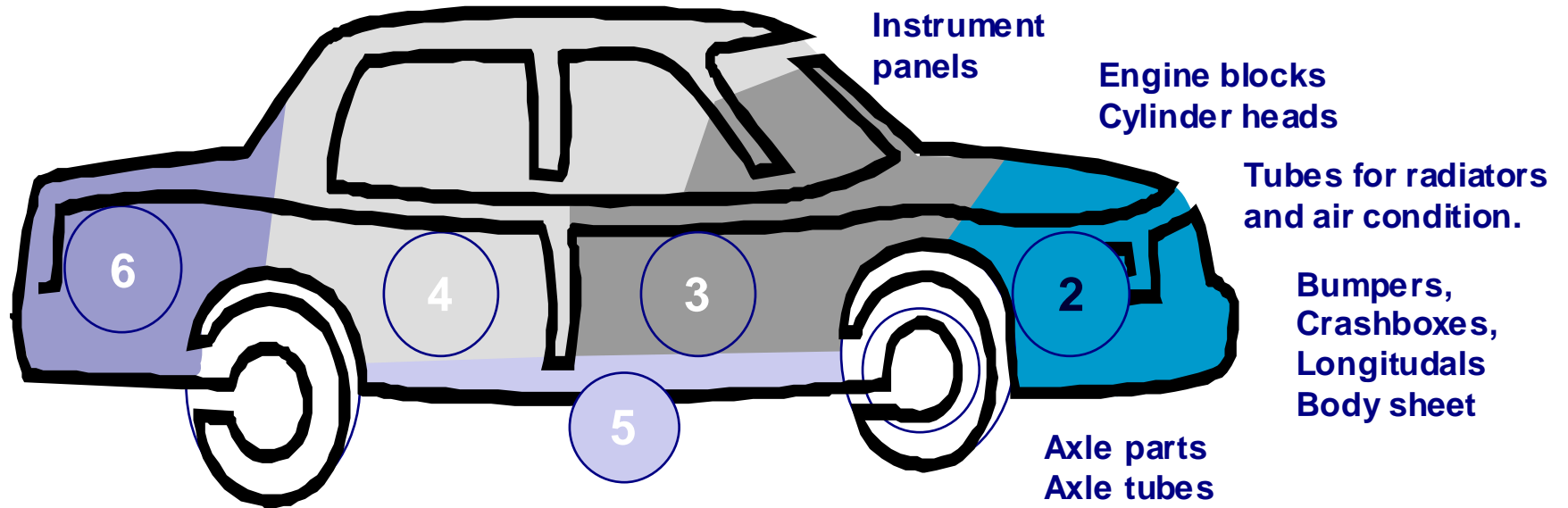
- **Global leading market positions**
 - **Extrusion-based structural components**
 - **Precision tubing**
 - **Magnesium alloys**
 - **Magnesium parts (Meridian 49%)**
- **European leading market positions**
 - **Complex engine blocks and cylinder heads**
 - **Primary foundry alloys**
 - **Automotive sheet for chassis applications**
- **Solution focused product and process development**
 - **Integrated in customers processes**
 - **Highly reputed and appreciated**
- **Leading technology**
 - **Extrusion technology**
 - **Stretch-bending technology**
 - **Drawn tubes technology**
 - **Aluminium and magnesium casting**
 - **New body sheet line under construction**
 - **Rolled Products**

Trends promoting growth for aluminium

- **Safety**
 - Crash-behavior NCAP
 - Pedestrian protection
- **Increasing Individualisation**
 - Niche models SUV / minivans/ Sport cars
- **Comfort**
 - Air condition
- **Driving dynamics, fun driving**
 - Agility
- **Environment/sustainability**
 - Fuel consumption regulations
(140 g/km CO₂ in 2008/2009 declaration of European car industry)
 - 100kg weight reduction saves 0.6 litre /100 km
 - Recycling
- **Vehicle retraction - Wrecking**



Growth in aluminium in cars: Priority of mass reduction areas

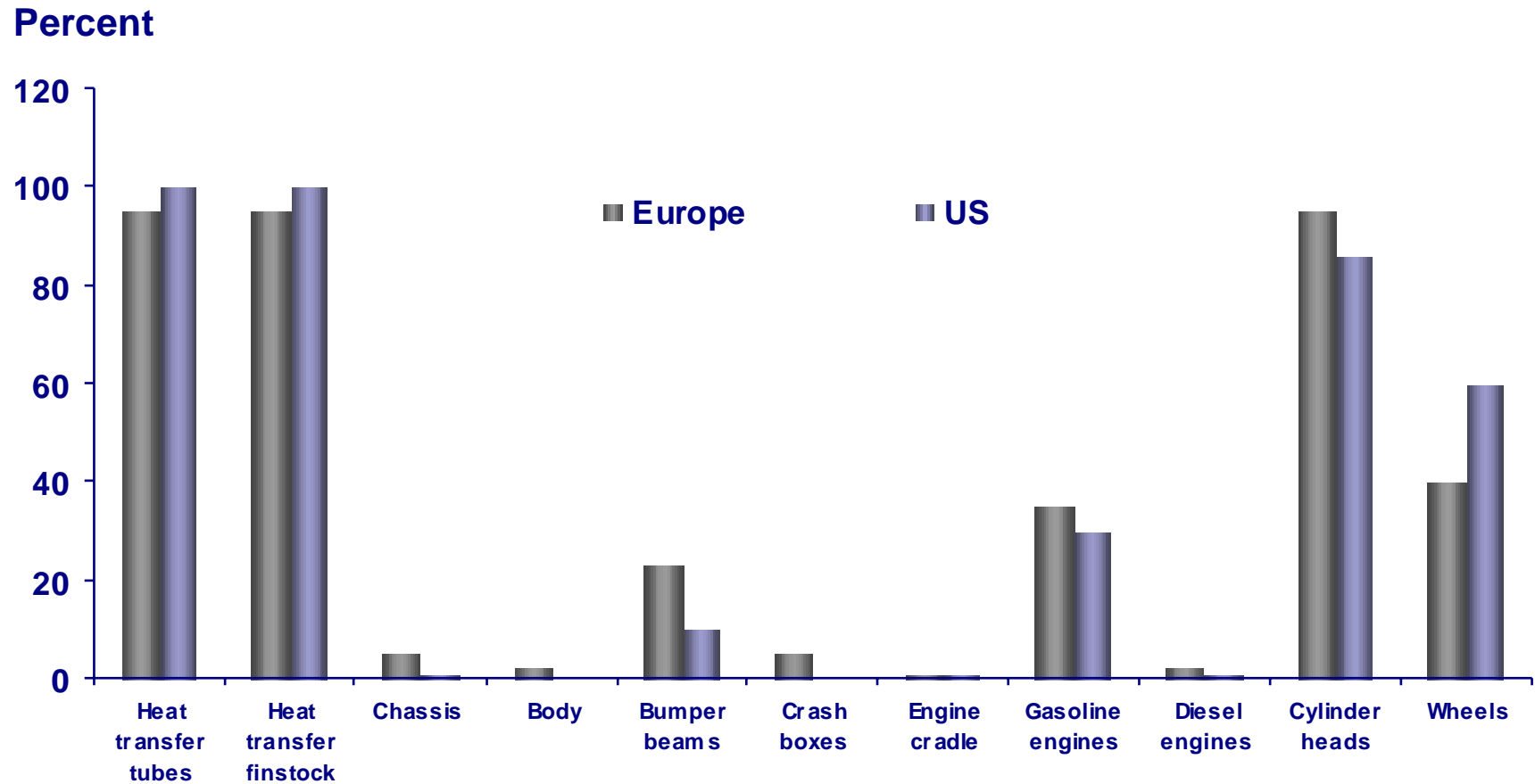


- 1 Unsprung (incl. rotating masses)
- 2 In front of the front axle
- 3 Between front axle and cockpit
- 4 Above the vehicle center of gravity
- 5 Between the cockpit and the rear axle
- 6 Behind the rear axle

Focus products where
customer priorities, our
technology and
competence match



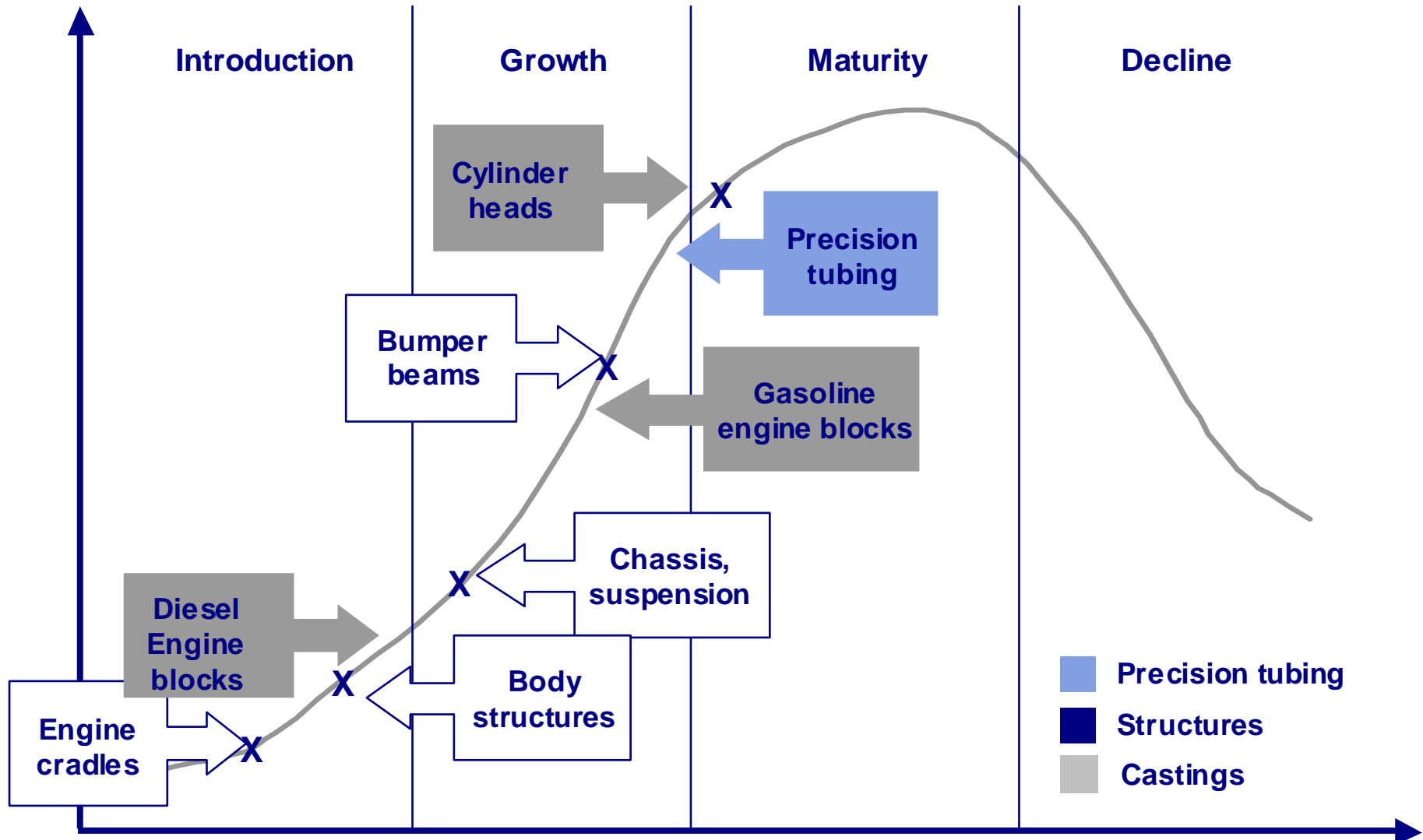
Aluminium penetration rates growing



Source: Hydro Aluminium estimates for 2002



Our automotive product groups - still too heavy on "introduction"





Our most visible BMW product ...

... the Z8 spaceframe



Case: BMW and Hydro Aluminium – a partnership evolving for more than 25 years



- **1975: First bumper beam contract**
- **1995: First supply of cylinder heads to BMW-cars**
- **1996: Rollover protection system**
 - First full system responsibility for Hydro
- **2000: Delivery of 1.3 million bumper beams**
 - All models have Hydro bumpers, excluding X5
 - New “small” BMW cars use Hydro bumpers
- **2000: Hydro Wackersdorf opens at BMW Innovations Park**
 - JIT assembly and delivery centre
- **2002: Development partner and supplier for new Rolls Royce Phantom**
 - More than 300 profiles and sub-assemblies, weighting close to 300 kilos in total





Status and direction

Segment by segment

Precision tubing

- Good profit
- Continue to grow – small niche with strong positions
- China/South America footholds to be utilized

Structures

- Low profit. Still in build up, therefore high cost
- High quality asset base and leading competence
- Fix performance – focus portfolio to niches/ slivers with strong positions

Casting

- Profits close to acceptable
- Execution of major new expansion in Dillingen (G) for diesel engine
- Growth directed to low-cost facilities



Priorities Automotive

- **Delivery (operational):**
 - **Accelerate lean manufacturing roll-out**
 - **Successfully launch new product programs**
 - **Fully utilize existing capacities**

- **Direction:**
 - **Differentiated value added products – leading edge**
 - **More of our business to low cost facilities in China, Mexico and Central Europe**
 - **Focus portfolio**

Summary





Concluding remarks

Purpose of the seminar

- **Delivery**
- **Differentiation**
- **Strategic direction**

Summary

- **Short term – fragile market outlook**
- **Long term – attractive industry**
- **Bottom line focus, self help measures**
- **Differentiation – customer responsiveness, organisation, portfolio composition**
- **Clear strategic direction – capital discipline**



Safe harbour statement

In order to utilize the "Safe Harbour" provisions of the United States Private Securities Litigation Reform Act of 1995, Hydro is providing the following cautionary statement: This presentation contains certain forward-looking statements with respect to the financial condition, results of operations and business of the Company and certain of the plans and objectives of the Company with respect to these items. By the nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. The actual results and developments may differ materially from those expressed or implied in the forward-looking statements due to any number of different factors. These factors include, but are not limited to, changes in costs and prices, changes in economic conditions, and changes in demand for the Company's products. Additional information, including information on factors which may affect Hydro's business, is contained in the Company's 2002 Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission.