

2008 – in brief



## ARE WE PART OF THE SOLUTION

to many of the challenges facing modern society today? Our roots are in renewable energy, and it's in our nature to make the most out of the resources we have. We make aluminium and aluminium products in ways that save resources while meeting important needs in transport, buildings and homes, packaging, and other aspects of everyday life. This allows us to say, "Yes, we are." Hear the stories from our colleagues in the pages that follow.



**GENERATE MORE 'GREEN ENERGY'**  
Renewable energy is our preferred choice.  
Over two-thirds of the power used in our  
primary aluminium production today  
is from renewable sources.

**MAKE THE FUTURE RECYCLED**  
As one of the world's largest remelters  
of aluminium, Hydro is proud to push  
this expertise further by developing our  
state-of-the-art remelting facilities and  
increasing our post-use recycling.



**ENERGY  
BANK**

Infinite ideas in aluminium



HYDRO

**PRODUCE MORE,  
EMIT LESS**  
Our vision is zero  
emission production.  
While this may not  
be possible today,  
our next-generation  
technologies are  
already moving us  
toward this goal.

**PUT PRODUCTS  
ON AN ENERGY DIET**  
Lighter aluminium products  
and packaging reduce transport  
costs and emissions. We work  
closely with our customers to  
use aluminium to save energy  
and reduce emissions.

**MAKE SOLAR SHINE**  
The world will need more  
solar solutions if we are  
to reduce our reliance on  
fossil fuels. Our involve-  
ment in rigid and flexible  
solar energy products,  
and the ability to inte-  
grate them into buildings,  
brightens the picture.



**FUTURE  
PROOF**

Infinite ideas in aluminium



**DIET  
CAR**

Infinite ideas in aluminium



HYDRO

# 2008 – KEY FIGURES

Amounts in NOK million unless other unit indicated

	2008	2007
Revenue	88,643	94,316
Underlying EBIT: <sup>a</sup>		
Aluminium Metal	3,575	8,265
Aluminium Products	988	1,352
Energy	1,736	1,184
Corporate and Eliminations	(290)	(647)
Total	6,009	10,153
Net income <sup>1)</sup>	(3,267)	9,158
Underlying return on average capital employed (RoACE), percent	6.8%	16.2%
Investments <sup>b</sup>	9,012	5,206
Total assets	95,157	92,046
Share price year-end, NOK	27.80	77.60
Dividend per share, NOK <sup>c</sup>	-	5.00
Number of employees, year-end <sup>d</sup>	22,634	24,692
Recordable injuries, per million hours worked <sup>e</sup>	3.8	4.1
Greenhouse gas emissions, million tonnes CO <sub>2</sub> equivalents <sup>f</sup>	4.1	4.2

<sup>1)</sup> Excluding discontinued operations

## <sup>a</sup> UNDERLYING EBIT

Hydro's results for 2008 were significantly impacted as the global financial crisis led to a dramatic fall in world demand for primary aluminium and aluminium products toward the end of 2008.

## <sup>b</sup> INVESTMENTS

The major growth investments in 2008 were the development of the Qatalum primary aluminium plant in Qatar, the third expansion of the alumina plant Alunorte in Brazil which was completed in the third quarter, and the Aluminium Products acquisitions of Expral and Alumafel in Spain.

## <sup>c</sup> DIVIDEND

Due to demanding markets and low forward visibility in both the aluminium and financial markets, Hydro's Board of Directors proposes to forgo a dividend payment for 2008.

## <sup>d</sup> NUMBER OF EMPLOYEES

The reduction in number of employees is primarily a result of the divestment of Hydro Polymers and Hydro Production Partner. Almost 500 employees were added through acquisitions in Extrusion and Building Systems.

## <sup>e</sup> SAFETY

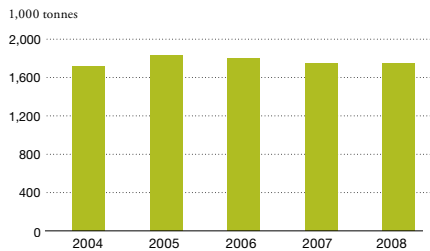
We achieved a 7 percent reduction in the total number of personal injuries per million hours worked. Our target was 20 percent. We had three fatal accidents related to our business in 2008.

## <sup>f</sup> GREENHOUSE GAS EMISSIONS

We have reduced our greenhouse gas emissions by 49 percent since 1990. The reduction comes as a result of systematic operational improvements, the introduction of new technology at our metal plants, and in recent years closure of plants and process lines.

# 2008 – HIGHLIGHTS

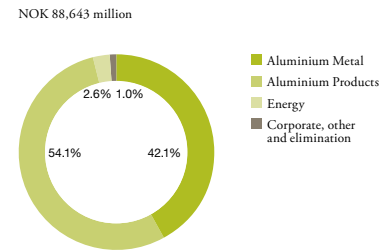
Primary aluminium production



Total recordable injuries



External revenues per segment in 2008



## > CORRECTIVE MEASURES IN RESPONSE TO MARKET SITUATION

Hydro has made wide-ranging adjustments in response to the severe drop in aluminium markets, and has announced reductions in its primary aluminium production of 23 percent, representing about 400,000 tonnes per year of our higher-cost production capacity. These measures will improve the average cost of our smelter system. Production of remelted metal at Hydro's casthouses has been cut by 45 percent, or around 500,000 tonnes per year. Alumina production at the part-owned Alpart refinery in Jamaica has been reduced by 50 percent. Hydro has also taken out significant capacity in its downstream operations through shift reductions and has implemented cost-cutting measures throughout the company.

## > QATALUM ON TARGET

The new 585,000-tonne Qatalum smelter in Qatar, which we are building with our partner Qatar Petroleum, was about 60 percent complete by the end of 2008, on schedule and within its budget frame for start-up around the end of 2009. Once on stream, Qatalum will be one of the most cost-efficient smelters in the world, positioned within the first decile on the industry cost curve. The total estimated cost of the Qatalum project is USD 5.6 billion, of which Hydro's share is USD 2.8 billion. All site preparation work, building foundations, and related work were complete and the main ongoing activity consists of the construction of buildings, storage silos and harbor facilities. By the end of 2008, there were about 16,300 people working at the site.





# Up to the challenge

Record sales and historic high prices for aluminium gave way to a free fall in demand and an aluminium price at the lowest point in decades. We experienced how quickly and how deeply everything can change – and how vital it is to act upon what is happening, not what you hope will happen.


No one can come through unscathed without a steady hand. Companies that haven't been completely knocked out by the extent of the current crisis must keep two things in mind. We must do everything we can to accommodate ourselves to a reality that has been turned upside down – while keeping

an eye on the goal of where we want to be when the crisis is past. We have three priorities in mind:

*Navigate the storm.* To secure cash flow, we have had to quickly adjust production to weakening demand. Massive global

inventories are pressuring prices in the short term, and will – if they continue to grow – contribute to lengthening the crisis.

*Stay the course.* We must maintain what is at the core of our business: outstanding performance and top safety. There is much



“It is a sign of  
solidity and continuity  
that my successor, Svein  
Richard Brandtzæg, with his  
23 years of experience in  
Hydro, has the same  
amount of time in the  
company as I do.”

*Eivind Reiten (far right), President and CEO,  
May 3, 2001–March 30, 2009*

that we cannot control when the situation around us changes so rapidly, but that which we can control, we will control fully.

*Shape the future.* We must continue to build a forward-looking, goal-oriented Hydro that is positioned to be best among equals when the storm has calmed. Along with handling the crisis, we must complete construction of Qatalum in Qatar, one of the world's biggest and most cost-efficient aluminium plants, continue research and development, and remain an attractive employer for the best talent around.

#### **A PART OF THE SOLUTION**

The future hasn't been called off. It is easy to put off buying a new car until next year – but the world has not stopped driving. It is natural to wait with a large investment like buying a house until the economy is more stable, but people still need a place to live. And even when the financial crisis is over, there is one crisis that will remain: climate change.

To beat this challenge will demand smart, energy-efficient solutions. Hydro is recognized as being at the forefront at helping to develop solutions for lighter, fuel-efficient transport, energy-efficient buildings, and technology for the production of primary aluminium with less impact on the environment.

In times of crisis, we cut costs where they can be cut. We are taking out of production the highest-cost, oldest and most marginal capacity. With the start of production of the Qatalum plant in late 2009-early 2010, we will have taken a considerable step in the right direction when it comes to the cost curve for primary aluminium. This makes Hydro more robust in bad times and more profitable in good times. In other words, it strengthens our competitive edge regardless of the times.

But there is one area where we will not cut, and that is developing the next-generation smelter technology and future products in aluminium. We are now laying the groundwork for an advance in producing aluminium with greater efficiency, lower electricity per tonne of produced aluminium, reduced emissions of greenhouse gases – and with the possibility of capturing and storing CO<sub>2</sub> when that technology becomes commercially viable.

#### **PARTNER WITH OUR CUSTOMERS**

We will continue to develop new products in partnership with our customers, such as taking our advanced precision tubing for automotive heat-transfer applications and applying them to buildings. Such as integrating solar energy modules in our building systems façades, so that buildings can evolve from energy consumers to energy producers. In remelting, we will continue to develop our capacity to take advantage of aluminium's best characteristics – that it can be recycled again and again with minimal energy use and without loss of quality, and head back to the market as new products.

To strive for quality in everything we do is key to being even better at the most important things we do. We believe that operational excellence, taking care of our customers, and acting with respect toward our employees, our communities and society as a whole are qualities that are intertwined – and ultimately necessary for commercial success.

We have skilled and motivated employees, and a culture worthy of pride that we call The Hydro Way. Our attitudes about social responsibility and integrity are reflected in everything we do, wherever we operate – and are anchored in the United Nations Global Compact. We are making progress in our safety work; still, we experienced three fatal work-related accidents in 2008.

We must do everything in our power to prevent accidents from happening.

#### **DEMANDING TIMES**

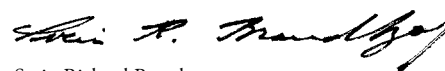
The year 2009 will be a very demanding one. We are prepared to make further adjustments to our production. At the same time, we are mindful of not taking actions that will cause long-term damage just to alleviate short-term damage.

Securing cash flow has top priority. While it is no goal in itself to be debt-free, at the outset of this financial crisis it is an advantage to have little debt. The importance of having freedom to maneuver is reflected in the recommendation of Hydro's Board of Directors, for the first time in 40 years, to forego a dividend. It is important to note that this comes after a long period of generous dividends. In addition, the investment program that will be complete with the construction of the Qatalum plant at the end of this year is one among several important contributions enabling us to continue to create considerable shareholder value.

It is now that we shape the future. As one of the world's few aluminium companies engaged throughout the value chain, we want to be a leader in the industry. Our advantages in the form of our own developed technology, expertise and drive to innovate, good access to energy and raw materials, strong market positions and improved cost positions enable us to shape our own future.



Eivind Reiten  
President and CEO



Svein Richard Brandtzæg  
Executive Vice President

# Yes, we are working to generate more *green energy*

ODDGEIR STEINHEIM, Power Plant Manager, Energy, Norway

WE'VE BEEN  
DEVELOPING  
HYDROPOWER FOR  
A CENTURY – AND  
WE'RE ALWAYS  
LOOKING FOR  
MORE.

“We're always hunting for more water. We've been doing this right from the start, over a hundred years ago.

We've developed a lot of hydropower resources in Norway, but there's still more we can get out of them. That's what we're doing now.

Take just one project at our existing hydropower location Tyin, near Årdal where I work. We're planning to increase the amount of electricity we can generate by gathering more water and renovating the equipment.

We have a long history here in Årdal, starting back in 1918. The first turbine in the 'old' Tyin plant started in 1944, and we built a new power station at Tyin that was completed in 2004.

We made better use of the catchment area of the old Tyin power station, increasing

power production from the same water resources.

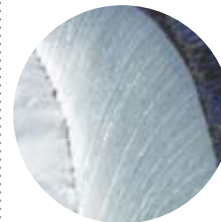
The next step is to run a new tunnel from Holsbru Lake and upgrade two turbines at the old Tyin plant. This will raise the total hydroelectric production there to more than 84 GWh. It's a great example of using existing resources to make more electricity – enough for nearly 4,000 households.

We have a couple of other projects here in my area and around the country that will add more power – all by squeezing more out of our existing concessions.

If you take all the plans we have on the drawing board in Norway today, we're looking at over 500 GWh more energy!



**GLOBAL SOURCING**  
Finding renewable energy – at competitive prices – is the key to deciding where we can expand. Our Global Sourcing team scouts the world for sources of energy – preferably renewable – for new aluminium production.



**OUR ENERGY MIX**  
Energy accounts for roughly a third of the cost of production of aluminium. About two-thirds of our aluminium production today is powered by renewable energy.





Hydro continues to lead the cause for more energy efficiency in aluminium production. Renewable energy has always been our preferred choice, and we're working to harness every possible kilowatt from our existing hydropower resources.





While fossil fuel-based energy can account for much of the emissions from primary aluminium production, the electrolysis process used in smelting is also a source of emissions. Our new technologies reduce emissions per kilo of aluminium produced.

# Yes, we are working to *reduce emissions*

*ELIN HAUGLAND, Manager of Cell Design, Aluminium Metal Research Center, Norway*

WE'RE  
AIMING TO REDUCE  
OUR GREENHOUSE  
GAS EMISSIONS BY  
15 PERCENT BY  
2012.

“Our HAL4e electrolysis cell concept increases the amperage we use to make aluminium, but reduces what we call the specific energy consumption, or the number of kilowatt hours of electricity per kilogram of aluminium.

Lower energy consumption – plus some other improvements we’ve made – means lower emissions.

Today, electrolysis cells for making primary aluminium run at 200 to 300 kiloamperes (kA). HAL4e runs at up to 420 kA, and we want to go even higher. Our average amount of energy used to produce a kilogram of aluminium is about 14.5 kWh, while the target for HAL4e is less than 12.9 kWh.

What does HAL4e stand for? HAL is an abbreviation for Hydro and aluminium, while the 4 links us to the kiloamperage evolution above 400 and four other key “e” words: environmental improvements,

energy savings, emerging technology, and entry into partnerships.

The environmental improvements are related to carbon and fluoride emissions and the energy savings are based on some novel design solutions in the cells. It’s an emerging technology that we’re working on improving even more.

The new technology is primarily something for our next generation of primary aluminium plants, but much of what we’ve learned can also be applied to our existing plants to help make them more efficient.

These new cells represent more than 40 years of history and knowledge and experience, and yet they are also the future.



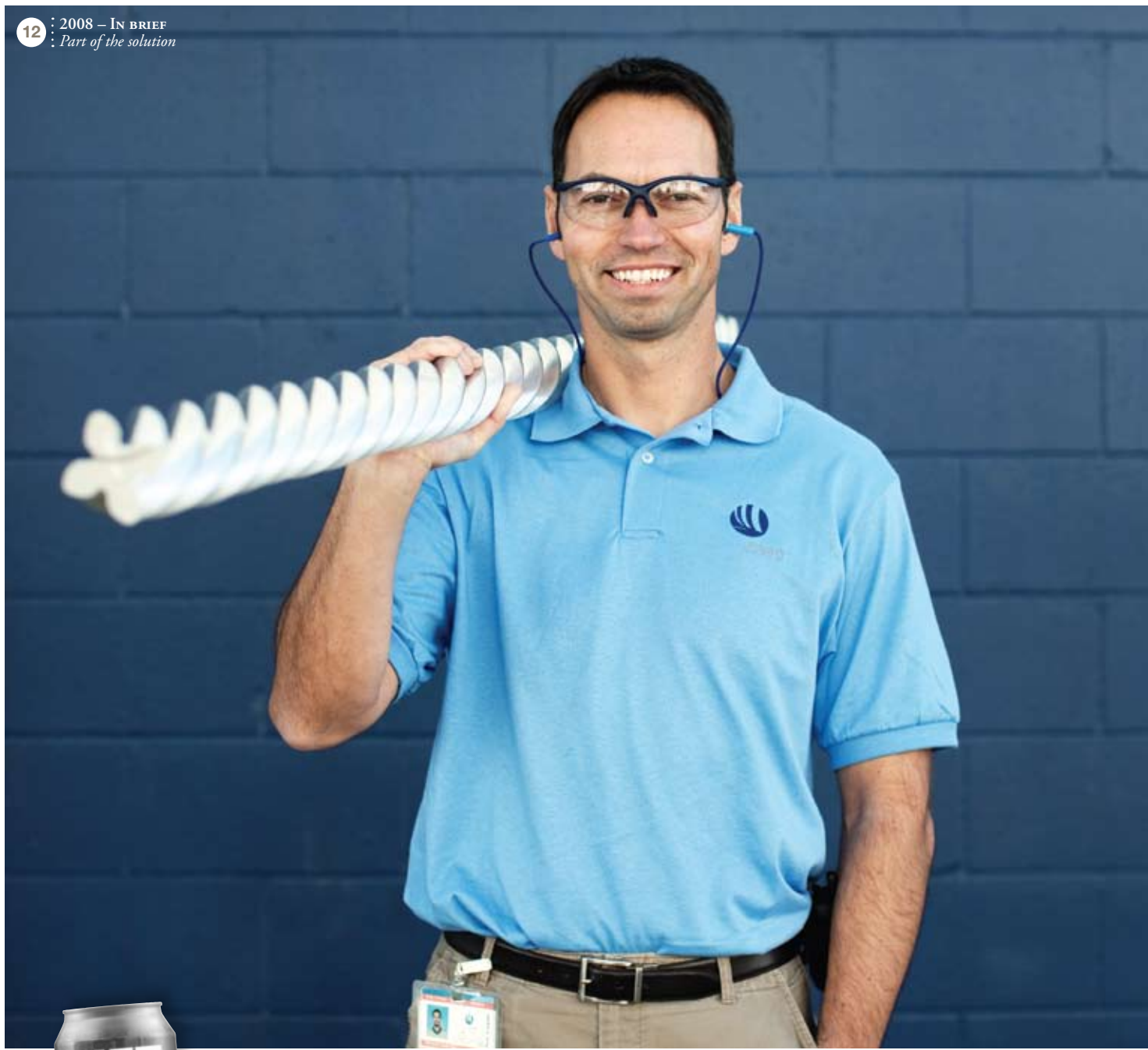
#### QATALUM

Our joint-venture primary aluminium plant under construction in Qatar will be the most modern smelter in the world when it begins full production in 2010. It will employ efficient natural gas power and technologies that minimize energy use and emissions.



#### CARBON CAPTURE

New electrolytic cell technology developed by Hydro paves the way for easier concentration and handling of CO<sub>2</sub> emissions from primary aluminium production. This patented technology will place Hydro at the forefront in meeting climate change challenges.



Reducing our energy consumption is one of the most important tools in the fight against climate change. Hydro is leading this charge by helping customers use aluminium to create more energy-efficient products, buildings and vehicles.



# Yes, we are putting cars on *an energy diet*

CARSTEN DEDE, Process Engineer, Extrusion, U.S.

BETTER  
PERFORMANCE  
FROM SMALLER  
ENGINES WILL REDUCE  
FUEL CONSUMPTION  
AND EMISSIONS.

“What we’re doing is to help the engine breathe easier. When it does that, you get greater engine performance and greater fuel efficiency. And if you do that, you get lower emissions of CO<sub>2</sub> and other pollutants.

It all happens with this supercharger from our customer, Eaton Corporation. We make the rotors that are the central part of their Twin Vortex Supercharger.

Here’s how it works. The rotors inside the supercharger fit together, turning in opposite directions from each other – at up to 18,000 rpm. As the rotors turn, they feed excess air into the intake manifold of the engine, and this improves combustion.

You can make a four-cylinder engine that performs like a six-cylinder engine – but with less fuel consumption.

We’ve worked really hard to get the extrusions perfect. The twists in the rotors

have to fit together just right – the tolerances are very precise – or the supercharger won’t perform as it’s supposed to.

This extremely complex extrusion is twisted 160 degrees as it comes through the die. To make a component with this level of complexity and to hold up to the rigors of an automotive engine, we developed a special aluminium alloy.

The supercharger market started with high-end vehicles, as a lot of innovations do. But the supercharger is going to be used in more everyday cars, especially in Europe, where emissions standards are increasingly strict.

These standards mean that engines with turbochargers, which use exhaust to power a turbine, will become less efficient. Engines with superchargers, on the other hand, will have an advantage.

We’re looking forward to it.



**LIGHTER CARS**  
The new BMW 7 Series is up to 55 kilograms lighter than its predecessors. We helped these cars slim down with a front-end module made of aluminium components that helps reduce fuel consumption and CO<sub>2</sub> emissions.



**LOW-ENERGY BUILDINGS**  
About 40 percent of energy use in Europe comes from buildings. Our new Wicona building systems research and testing center in Bellenberg, Germany, is an eco-efficient showcase for how buildings can really reduce energy use.



# Yes, we are making the *future recycled*

*NIGEL GIBBON, General Manager, Rolled Products, U.K.*

RECYCLING  
TAKES ONLY  
5 PERCENT OF THE  
ENERGY INITIALLY  
USED TO PRODUCE  
ALUMINIUM.

“About 45 billion aluminium cans are produced in Europe each year. Recycling them only makes good sense.

Our rolled products business supplies aluminium can stock to some of the biggest can producers in Europe, and we work closely with them to minimize waste and maximize recycling.

Minimizing waste starts with the material itself and the manufacturing process. That means using the right amount of aluminium – and no more – in each can.

When it comes to recycling, Hydro and our customers cooperate between themselves and with industry groups. We have a good relationship with our customers, based on a common approach. But most of our activity – in terms of the environment – is through joint industry bodies. It has to be.

Our partner in the U.K. is Alupro. In fact, Hydro is a founder member. It's an integrated, forward-thinking group that represents around 75 percent of the aluminium packaging chain.

Alupro works with government on legislative issues and to directly stimulate collection and recycling. One Alupro program is “Trees for Africa,” which Hydro and a major customer of ours are involved in. As part of the project, a tree is planted in Africa for every tonne of aluminium cans and foil recycled in the U.K.

Since Alupro started tree planting incentive campaigns in 2003, the amount of aluminium drinks cans and foil recycled each year has grown significantly. And more than 100,000 trees have already been grown in the U.K. and in Burkina Faso, West Africa. Not only are we recycling all these cans, we're planting trees that absorb carbon dioxide from the atmosphere.



**REMELT NETWORK**  
Aluminium is not waste at the end of its “first life.” It's a resource that can be reused nearly indefinitely, saving energy and reducing emissions. Our global network of aluminium remelters supplies top-quality casthouse products from scrap.



**CLIMATE AWARENESS**  
Our customers are showing a growing interest in viewing their products in a climate and life-cycle perspective. This strengthens the demand for products made from recycled metal – and how aluminium can help us meet the climate change challenge.



A viable future will be built with materials – like aluminium – that can be endlessly recycled without loss of quality. We're strengthening our own remelting efforts, helping foster 'end-of-life' recycling, and helping customers and stakeholders better prepare for recycling.







The world needs more solar energy solutions to reduce our reliance on fossil fuels. We are addressing this challenge with investments in solar energy conversion technologies and aluminium-based solutions for buildings and large-scale solar energy parks.

# Yes, we're making *solar shine*

JAN SCHELLING, Solar Technology Manager, Energy, U.S.

THIN-FILM  
SOLAR MODULES  
CAN REVOLUTIONIZE  
THE WAY WE POWER  
OUR BUILDINGS.

“This film is as thin as a strand of hair, and the beauty of it is that it produces electricity directly from the sun. And it's very flexible, so it can be used in many different ways.

It's made by Ascent Solar, based in Denver, Colorado, in which Hydro began investing in 2007. They use a unique technology that can be put into a number of products, from rooftop materials to building systems, which is what we're primarily interested in when it comes to further applications.

We're looking at how this film can be integrated into our building façade systems and sun-shading products. It really takes the concept of using our aluminium building solutions to help manage heat and light in buildings one step further – and saving even more energy in the process.

The film is made up of an absorber layer that converts sunlight into electricity, based on what is called CIGS photovoltaic technology.

The modules can be connected in a series, like a very thin battery – positive to negative – on large surface areas.

Ascent Solar uses a unique manufacturing process to produce these photovoltaic modules on large-format plastic rolls. This is one of the main advantages of thin-film solar modules over other types – the whole value chain is under one roof.

Ascent Solar has been fine-tuning its production techniques at a test facility, and now is moving into new, larger production facility, where they'll have a line starting up in 2010 that has the annual capacity to produce film representing 30 MW of electricity generation.

Ascent Solar's modules are already achieving good efficiencies. With production economies of scale and technological advances, everything is becoming cheaper fast.

We really believe solar energy is here to stay.



#### SOLAR PARK STRUCTURES

Our aluminium extrusion components are used in the frames and support structures of industrial-scale solar energy parks in the U.S. and Europe. We are a full-service partner, delivering container loads of frame kits on time to demanding construction schedules.



#### JOINING FORCES

We have invested in two ventures involved with making silicon-based solar energy products: a joint venture with Umicore of Belgium to produce solar-grade silicon for use in solar cells, and in NorSun, which produces mono-crystalline silicon wafers for solar cells.

## 2009 – MARKET SITUATION



### > MARKET OUTLOOK

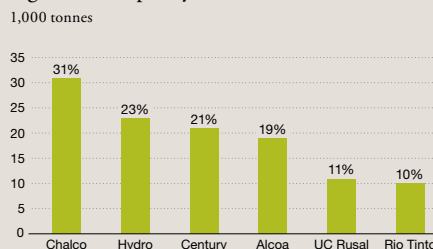
Demand in main aluminium market segments is expected to remain depressed, a situation that could continue throughout the year. There is substantial uncertainty regarding the timing of a recovery. Global primary aluminium consumption excluding China could decline by up to 10 to 15 percent in 2009 from a consumption level of 25 million tonnes in 2008. Chinese consumption may fall slightly from the 2008 level of 12.5 million tonnes.

Market demand for flat-rolled products in Europe is expected to continue declining during the coming months, driven by lower demand from most markets. The overall outlook for the European extrusion market is weak, with lower demand across most market segments, in particular the automotive and transportation segments. In the U.S., extrusion markets are expected to remain severely depressed, with no signs of recovery.

### > PRODUCTION CURTAILMENTS

The entire aluminium industry has contributed to reduce production following the sharp decline in demand toward the end of 2008. Hydro has committed itself to reduce primary aluminium production by 23 percent compared to 2008.

Significant capacity curtailments



### > CHINA

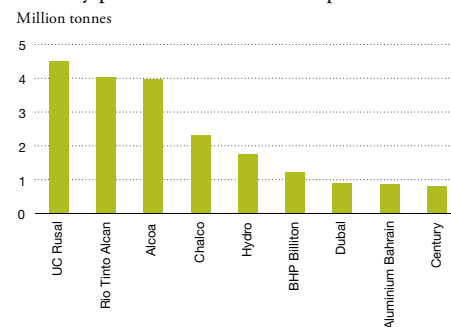
Chinese aluminium production has experienced a relatively sharper slowdown than the rest of the world, partly due to the higher operating cost levels for Chinese producers. Production in China amounted to about 950,000 tonnes in December, or roughly 11.1 million tonnes on an annualized basis. This was substantially lower than annualized production of 14.3 million tonnes reached earlier in 2008. Demand for primary aluminium in China increased 4 percent in 2008 compared with 2007, but consumption in the fourth quarter declined 17 percent compared with the fourth quarter of 2007. The Chinese authorities have discouraged the export of energy in the form of primary aluminium through the imposition of export duties. Fiscal measures make China a self-contained market for primary metal. As a result, the market balance for primary aluminium in China is not expected to have a significant impact on primary metal markets outside of China.



## > STRUCTURAL DEVELOPMENTS

During the past two decades, three major global integrated companies emerged as a result of the substantial concentration of upstream aluminium activities: Alcoa, Alcan and Hydro. In addition to these three integrated companies, several large companies have focused mainly on upstream operations – bauxite, alumina and/or primary metal – such as BHP Billiton, Rio Tinto and Vale. In 2007 Rio Tinto acquired Alcan, creating Rio Tinto Alcan as one of the major alumina and aluminium producers. In 2007 the Russian aluminium industry was consolidated into one major company, United Company Rusal. Since the 1990s, China has emerged as a major consumer as well as producer of primary metal.

Primary production selected companies in 2008



Source: CRU/Hydro

## > ALUMINIUM PRICE DEVELOPMENTS

Aluminium prices exhibited a historic decline in the second half of 2008 as the turmoil in the financial markets spread to the general economy.

During recent years, there has been a strong upward shift in the cost curve for primary aluminium production, triggered mainly by a significant increase in energy prices and natural resources. However, the cost of producing aluminium is declining due to the recent fall in commodity prices as a result of the deepening economic downturn. Production costs are expected to decline further depending on global economic developments.

## > PRODUCTION MOVING TO ENERGY-RICH AREAS

In the future, primary aluminium production is expected to be developed in energy-rich areas where power prices are more competitive than in developed energy markets such as Europe and the U.S. These countries and regions are expected to include the Middle East, Russia, Iceland and some countries in Africa, Asia and South America. China will also continue to be an important producer and consumer of primary metal.



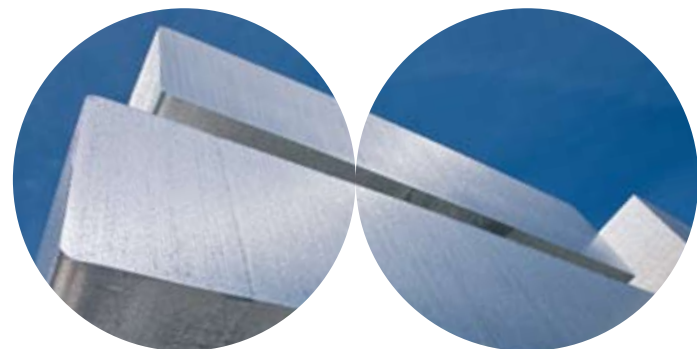
## YEAR IN BRIEF

Hydro has acted decisively in response to an unprecedented drop in aluminium markets.

Hydro's results for 2008 were significantly impacted as the global financial crisis led to a dramatic fall in world demand for primary aluminium and aluminium products toward the end of 2008. Underlying EBIT declined to NOK 6,009 million, down from the solid result achieved in 2007 of NOK 10,153 million. Higher raw material costs affecting the entire industry had a substantial impact on Hydro's underlying results in addition to the significant market downturn in the fourth quarter. Underlying results were also impacted by inventory write-downs of about NOK 700 million due to the sharp drop in aluminium prices towards the end of the year.

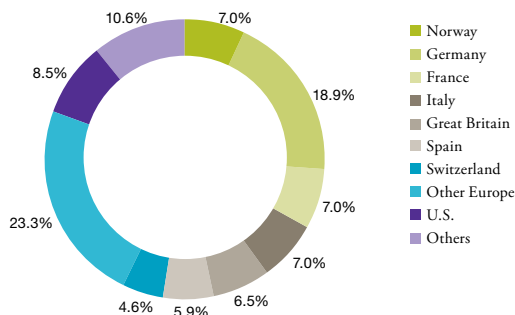
Due to the deteriorating market conditions and high input costs, reported EBIT and Income from continuing operations was charged with roughly NOK 2.5 billion of impairment losses.

Hydro has made wide-ranging adjustments in response to the severe drop in aluminium markets, and has announced reductions in its primary aluminium production of 23 percent, representing



### Geographic distribution of operating revenues in 2008

NOK 88,643 million



about 400,000 tonnes per year of our higher-cost production capacity. Approximately 140,000 tonnes of the total will be shut down by the end of the first quarter of 2009, and the remainder will be shut down by the end of the second quarter of 2009. These measures will improve the average cost of our smelter system. Production of remelted metal at Hydro's casthouses has been cut by 45 percent, or around 500,000 tonnes per year. Alumina production at the part-owned Alpart refinery in Jamaica has been reduced by 50 percent. Hydro has also taken out significant capacity in its downstream operations through shift reductions and has implemented cost-cutting measures throughout the company.

Underlying EBIT for Aluminium Metal declined significantly for the year, impacted by lower realized prices and substantial increases in the cost of power, fossil fuels, freight, caustic soda, alloying materials and carbon, in addition to the effect of the inventory write-downs discussed above. Prices measured in Norwegian kroner declined, having a negative impact on underlying results. Underlying EBIT for 2008 declined for the Aluminium Products business due to the sharp drop in market demand, particularly toward the end of the year. The Energy business area delivered record underlying results for the year, mainly due to record power production and continued strong spot prices.

The new 585,000-tonne Qatalum smelter was about 60 percent complete by the end of 2008, on schedule for start-up around the end of 2009 and within budget frame. Once on stream, Qatalum will be one of the most cost-efficient smelters in the world, positioned within the first decile on the industry cost curve. The total estimated cost of the Qatalum project is USD 5.6 billion, of which Hydro's share is USD 2.8 billion. Fifty-five percent of the total cost is funded by equity investments from the partners Qatar Petroleum

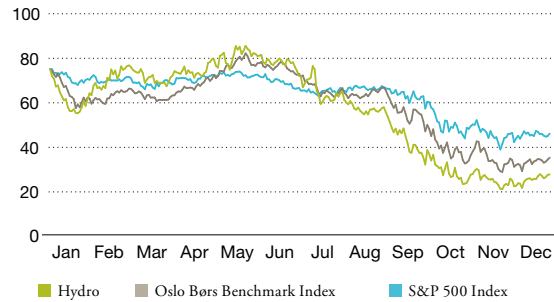
### Lost-time injuries

Per million hours worked



### Share price development in 2008

NOK



and Hydro, while the remainder is provided by project financing on favorable terms.

The third expansion of the Alunorte alumina refinery in Brazil was successfully started up in third quarter 2008 and achieved stable production at designed capacity in the fourth quarter. The project was completed on time and within budget.

Due to our present high investment level and expected lower level of cash generated from operations, Hydro is in the process of raising additional financing to meet future capital requirements. An existing USD 1.7 billion multi-currency stand-by credit facility maturing in 2014 is fully undrawn and available as back-up for unforeseen funding requirements. In addition, on March 6, 2009, Hydro signed a new EUR 750 million revolving credit facility with a syndicate of international banks. In order to secure our financial position, capital expenditures (excluding Qatalum) have been reduced by NOK 2.5 billion, roughly 40 percent from the 2008 level.

### VIABILITY PERFORMANCE

Since 2006 Hydro has headed the aluminium sector of the Dow Jones Sustainability Index (DJSI). We have been listed on DJSI every year since the start of the index in 1999. We are also listed on the corresponding UK index, FTSE4Good. Even though our systematic safety work continued through 2008, we failed to reach our targets. We did not reach our target of a 20 percent improvement in total recordable injuries (TRI), and we had three fatal accidents in 2008 and one in February 2009. Our ambition is still to improve TRI by 20 percent per year, and we are taking suitable measures to make this possible.

In 2008 we rolled out an interactive e-learning program dealing with our policies and employee rights and obligations. Produced in 12 languages, it is mandatory for all employees worldwide and discusses issues such as work environment and ethical dilemmas.

Since 1990 we have reduced our climate gas emissions by 49 percent. In 2008 we completed a comprehensive climate change strategy, including a revised set of priorities to guide our business to address this challenge.

In recent years we have accomplished several demanding restructuring processes world-wide, in line with The Hydro Way, which encompasses our vision and values. These experiences are important to build on as we are now in the middle of even more challenging restructuring.

### SHAREHOLDER INFORMATION

Hydro's share price closed at NOK 27.80 at the end of 2008. Taking into consideration the dividend of NOK 5.00 per share paid in 2008, the total return for 2008 was negative with NOK 44.80 or 58 percent. Due to demanding markets and low forward visibility in the aluminium and financial markets, Hydro's Board of Directors proposes to forgo a dividend payment for 2008. The Board regards it as prudent to conserve the company's financial resources for organic investments in the Qatalum project and to minimize other funding requirements. During 2008 we repurchased 4,408,000 shares for NOK 149 million.

# FOLLOW OUR PERFORMANCE

## ALUMINIUM METAL

### 2008 targets

- Successful advancement of Qatalum
- Alunorte phase 3 expansion complete
- Finalize agreement with Vale on new alumina refinery in Brazil
- Aluminium Metal Production System implemented in all Norwegian smelters

### 2008 results

- Qatalum on schedule for start-up and within budget frame
- Alunorte started successfully on time and within budget
- Agreement with Vale signed
- Completed implementation of Aluminium Metal Production System in all Norwegian smelters

### 2009 targets

- Effectively adjust capacity to decreasing demand
- Further improve smelter average cost position
- Reduce cost in continuing operations by improved effectiveness and fixed cost reductions
- Enhance market position
- Further develop next-generation smelter technology

### Ambitions going forward

Our ambition is to strengthen our market position as we adjust to contracting demand. We aim to significantly improve our cost position by phasing out older and higher-cost capacity and replacing it with new capacity for a world-class cost position. Our next-generation cell technology, HAL4e, will be the technological basis for continued organic growth. We will pursue growth in equity alumina coverage, with increased focus on an integrated bauxite supply. We intend to focus on improving our relative cost position, building upon Hydro's culture of continuous improvement, operational excellence and safety.

### Hydro's cash cost to decline

Cost\* in USD per tonne indexed, 2008=100



\* Includes only 100% owned smelters, 2009E excludes Karmøy Söderberg and Neuss  
LME basis for alumina cost: 2008 -USD 2,750, 2009 run rate -USD 1,600

## ALUMINIUM PRODUCTS

### 2008 targets

- Continued improvement in profitability for under-performing U.S. extrusion units and automotive structures
- Selected growth projects delivered in Extrusion Eurasia and Building Systems

### 2008 results

- Plant rationalizations and improvement programs executed
- Acquisition concluded for Extrusion and Building Systems in Southern Europe
- Upgrading portfolio in Rolled Products by start-up of continuous annealing line

### 2009 targets

- Decisive cost management and focus on cash flow
- Maintain high performance and margin focus in declining market environment
- Additional turnaround measures in Automotive and Extrusion U.S.
- Active portfolio management in Europe and Middle East
- Continuous improvement of our performance system

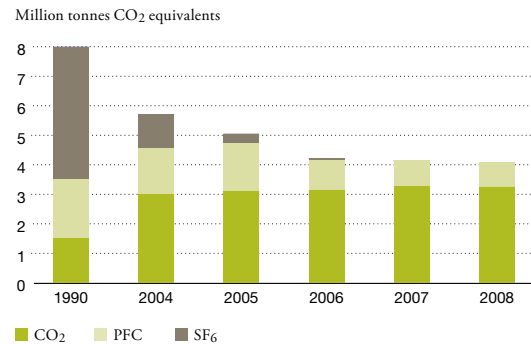
### Ambitions going forward

Our goal is to be the clear performance leader in the European extrusion and building system industries, reinforcing our leadership position through selective growth and further development of new high-performing solutions. We aim to increase the returns of our rolled products business. We will focus on innovation and technology to sharpen our competitive edge. We are committed to safety and to eliminating serious accidents in our operations.

## Power production



## Direct greenhouse gas emissions



## ENERGY

### 2008 targets

- Energy sourcing arrangements for aluminium growth
- Operational efficiency and improvement in safety of operations
- Technology development and start-up of commercial operations in solar business

### 2008 results

- Strong operational performance, with best-ever financial results
- Record high power production
- Further investments in solar partnership companies
- NorSun's wafering plant in Norway completed and commenced production

### 2009 targets

- Competitive energy sourcing arrangements for aluminium operations
- Operational excellence and safety of operations
- Technology development and ramp-up of commercial operations in solar business

### Ambitions going forward

Our goal is to capitalize on our energy competence supporting the sourcing of power to our smelters on a global basis. We aim to develop our investments in solar power, building on our initial, promising investments in this emerging high-growth industry.

## VIABILITY PERFORMANCE

### 2008 targets

- No fatal accidents. Total recordable injuries per million hours down by 20 percent
- Complete our new climate strategy, including setting specific targets
- Effective restructuring carried out with respect to employees and local communities

### 2008 results

- Three fatal accidents. Total recordable injuries per million hours down 7 percent from 4.1 to 3.8
- Developed a thorough climate strategy with a revised set of priorities. The electrolysis process of aluminium production emitted 2.12 tonnes of CO<sub>2</sub> equivalents per tonne of produced aluminium
- Substantial restructuring processes initiated in cooperation with employees and local communities

### 2009 targets

- No fatal accidents. Total recordable injuries per million hours down by 20 percent to 3.0
- Continue working towards our climate ambitions
- Responsible restructuring carried out with respect to employees and local communities

### Ambitions going forward

Our ambition is to have no fatalities or other serious injuries. Our aluminium production should not exceed emissions of 1.71 tonnes of CO<sub>2</sub> equivalents per tonne of produced aluminium in 2012. We intend to be a preferred partner world-wide due to our responsible business operations.



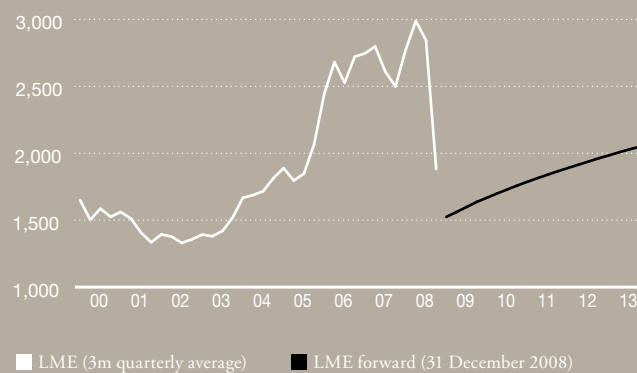
## Underlying EBIT

NOK million	2008	2007
<b>Bauxite &amp; Alumina</b>	<b>334</b>	<b>681</b>
<b>Primary Aluminium</b>	<b>2,666</b>	<b>6,552</b>
<b>Commercial</b>	<b>435</b>	<b>946</b>
<b>Other and eliminations</b>	<b>140</b>	<b>84</b>
<b>Total</b>	<b>3,575</b>	<b>8,265</b>

## HIGHLIGHTS

The construction of the Qatalum primary aluminium plant in Qatar was about 60 percent complete by the end of the year, on schedule and within budget frame for start-up around the end of 2009.

## Aluminium price in USD/tonne



**1,750**

*Primary aluminium  
 production in 2008,  
 1,000 tonnes*



# ALUMINIUM METAL

Following the extreme market decline during the final quarter of 2008, we took significant measures to adjust production capacity and initiated other actions to further align our upstream business with the market. We will take further steps to secure our ongoing operations and a key ongoing strategic focus is to continually improve our competitive position by increasing the efficiency of our smelter system.

Hydro is one of the world's largest primary aluminium producers. In recent years we have completed a major program aimed at re-positioning our primary aluminium capacity by closing less competitive production in our European system and replacing it with new capacity in larger and more efficient smelters. As a result, we have increased our share of production at smelters having a capacity of 300,000 tonnes per year or higher from none in 2000 to approximately 32 percent of our total production capacity in 2008, and plan to reach 41 percent in 2011 following the start-up of the Qatalum smelter in Qatar.

Alumina is one of the most important cost elements in the production of aluminium metal. We have ownership interests in alumina refineries that provided approximately 69 percent of our alumina needs in 2008. The most important of these interests, Alunorte in Brazil, is the world's largest alumina refinery with one of the lowest conversion costs in the industry. Our remaining alumina supply requirements are covered through medium- to long-term contracts. We source bauxite for Alunorte from MRN, in which Hydro has an equity participation of 5 percent, and partly by long-term contracts.

We have access to substantial self-generated power capacity based on hydropower production in Norway and a planned captive gas-fired power plant for Qatalum. We have negotiated long-term power contracts for the vast majority of our world-wide production, with the exception of our plant in Neuss, Germany, which is covered by short-term contracts for 2009.

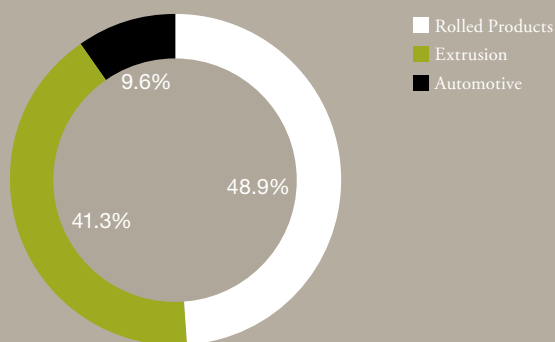
## 2008 RESULTS

Hydro's Aluminium Metal business delivered an underlying EBIT of NOK 3,575 million, significantly lower than the strong underlying result of NOK 8,041 million for 2007. Substantial increases in the cost of power, alumina, freight and carbon, as well as high oil and gas prices heavily impacted underlying results for the year. Results were also affected by inventory write-downs of NOK 700 million due to the sharp fall in aluminium prices at the end of the year. Underlying results for our Bauxite and Alumina operations fell compared to the previous year, impacted by losses from our part-owned Alpart alumina refinery in Jamaica and lower underlying results for Alunorte in Brazil. Results from Hydro's commercial operations dropped significantly, reflecting the dramatic decline in market demand experienced mainly in the final quarter of the year together with negative results from trading and hedging activities.

In May 2008, six electrolytic test cells were put in operation, meeting our expectations for lower energy consumption, higher current efficiency, and lower anode effect frequency to reduce emissions further. Through this concept, we achieve reduced specific capital expenditure and operating cost, and improved environmental performance (energy, greenhouse gas emissions, waste).

## External revenues per segment in 2008

NOK 48,018 million



## Underlying EBIT

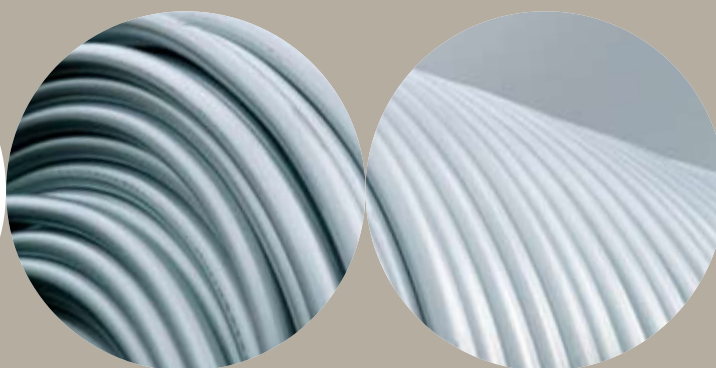
NOK million	2008	2007
<b>Rolled Products</b>	<b>652</b>	<b>562</b>
<b>Extrusion</b>	<b>668</b>	<b>852</b>
<b>Automotive</b>	<b>(326)</b>	<b>(67)</b>
<b>Other and eliminations</b>	<b>(6)</b>	<b>5</b>
<b>Total</b>	<b>988</b>	<b>1,352</b>

## HIGHLIGHTS

During the year, Hydro added to its high-performance extrusion and building systems operations with acquisitions of Expral and Alumafel, placing Hydro among the market leaders in Spain and providing opportunities to further develop the Iberian market.

1,558

Sales volume to external market in 2008, 1,000 tonnes



# ALUMINIUM PRODUCTS

Aluminium Products entered the year with a portfolio of solid downstream businesses following extensive restructuring activities in 2007 and further improvements and manning reductions in 2008. Following the dramatic market decline towards the end of 2008, significant additional initiatives were implemented to reduce costs, adjust production volumes and turn around underperforming units.

Hydro is an industry leader for a range of downstream aluminium products and markets, in particular the building, packaging, lithographic and automotive market sectors. We are a high-quality, value-added supplier of aluminium products and solutions, with strong positions in markets that provide opportunities for value-added products giving good financial returns. Our ambition is to be recognized as the world's best aluminium solutions supplier, an agile and innovative technology leader working in partnership with our customers, and driving our business and the aluminium industry forward.

Our operations are primarily located in Europe, where we generated approximately 80 percent of our total operating revenues in 2008. We are the second-largest supplier in the European rolling industry, with an estimated market share of 17 percent in Europe. We hold leading global positions in high value-added products segments such as lithographic (printing) plates and aseptic foil. Our extrusion operations consist mainly of general soft alloy extruded products and building systems for façades, wall partitions, doors and windows. Our network of extrusion plants serves local customers with customized profiles and building systems. We are a world-wide leader in precision tubing with production in all major regions and one of the leading suppliers of extruded structural automotive components to original equipment manufacturers (OEMs) in Europe and North America.

## 2008 RESULTS

Aluminium Products underlying EBIT declined to NOK 988 million in 2008 compared with NOK 1,352 million in the previous year. The underlying performance of our rolled products business improved for the year and our European extrusion and building systems operations delivered another strong performance, but the results for these businesses were impacted by the weak fourth quarter, ending the year lower compared to the previous year. Our U.S. extrusion operations continued to struggle with weak markets, operating at a loss for the year. Our automotive business incurred substantial losses for the year, in particular for the automotive structures sector.

Cost cuts and manning reductions have been implemented in response to the declining market. This includes reduced shifts, layoffs and other cost-cutting initiatives. Our automotive component activities and operations in the U.S. have been severely affected. All reductions involving union employees have been communicated in advance to the unions and have followed the layoff requirements specified in each collective bargaining agreement. Non-union layoffs have been handled fairly, objectively and in a manner that reduces the risk of discrimination by age, gender, race, or veteran status, while preserving the competence needed at each plant.

## Underlying EBIT

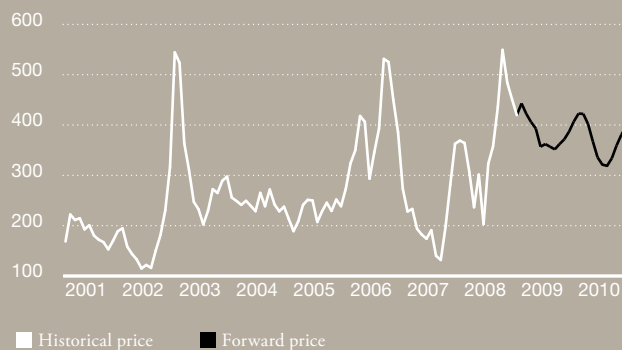
NOK million	2008	2007
<b>Energy</b>	<b>1,736</b>	<b>1,184</b>

## HIGHLIGHTS

Hydro's power production in Norway amounted to nearly 11.4 TWh in 2008, which is the highest-ever recorded volume.

## Nordic system power price (Nord Pool)

NOK/MWh



# II.4

Power production in 2008,  
 TWh





# ENERGY

Hydro's captive power covers a substantial part of the energy needs for our smelter operations, about one-third in 2008. With Qatalum in full production from 2011, the share of captive power will increase further. Our strong energy resource base with significant amounts of renewable, self-generated power ensures stable supplies of power at competitive prices to our smelter operations.

Energy is responsible for managing Hydro's captive hydropower production in Norway and external power sourcing arrangements to the aluminium business. Energy is also engaged in developing Hydro's position in the solar energy industry.

With more than 100 years of experience in hydropower, Hydro is the second-largest power producer in Norway, and the largest privately owned producer. Hydro operates 17 hydroelectric power plants in Norway, including four partly owned plants, and has a normal annual production of approximately 9.4 TWh. In addition, we purchase around 7 TWh annually under long-term contracts, mainly with the Norwegian state-owned company Statkraft. Our portfolio provides long-term power at predictable prices for our industrial operations in Norway.

In addition to sourcing power for our aluminium operations, we also sell an average of about 2-4 TWh of power externally. External power sales primarily relate to spot sales on the Nord Pool power exchange, to concession power obligations to the local communities where the power stations are located, and to some long-term contracts with industrial customers.

Building on its long standing experience in metallurgy, electrolysis and industrialization of new technologies, Energy is working with external partners to develop new technologies and manufacturing processes in the solar energy industry. In 2008 we invested NOK 612 million in our solar business, around NOK 900 million on an accumulated basis.

## 2008 RESULTS

Underlying EBIT for Energy was NOK 1,736 million, up 47 per cent compared with 2007. The improvement was mainly due to significantly higher spot prices, higher power production and somewhat lower operating costs.

Hydro's power production in Norway amounted to nearly 11.4 TWh in 2008, which is the highest recorded volume historically. Due to high reservoir precipitation in 2007 and 2008, power production has been significantly higher than the historic average in both years. Direct power production costs, which include operations and maintenance, transmission costs, property taxes and concession fees, decreased slightly from 2007. The decrease primarily reflects lower transmission grid tariffs.

Our Solar businesses, which are in a development phase, incurred an underlying loss of NOK 130 million for the year, compared to an underlying loss of NOK 82 million in 2007.

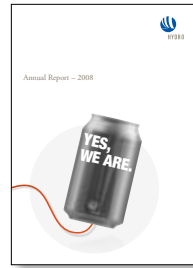
# HYDRO'S REPORTING 2008



2008 – in brief



Financial Statements and Board of Directors' Report – 2008



Annual Report – 2008



Internet

Information type

Overview	✓		✓	✓
Financial depth/analysis		✓	✓	✓
Viability reporting		✓	✓	✓
Corporate information			✓	✓
Interactive report				✓



Hydro is a Fortune Global 500 supplier of aluminium and aluminium products. Based in Norway, the company employs 23,000 people in more than 40 countries and has activities on all continents. Rooted in a century of experience in renewable energy production, technology development and progressive partnerships, Hydro is committed to strengthening the viability of the customers and communities we serve.

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