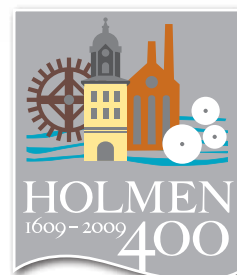


# HOLMEN



Holmen and its World  
Sustainability Report 2008



# Holmen – a journey through four centuries

In 1609, when Gustav Vasa's grandson Duke Johan of Östergötland had an arms factory built in Norrköping he hardly imagined that this would be the start of an epoch that has already lasted four centuries.

**SINCE THEN HOLMEN HAS** been transformed many times over. During the troubled 17th century muskets, pistols, cuirasses, and brass were the main products. Paper was first made in 1633 but only briefly – the mill was destroyed by fire after only ten years. Eventually, production concentrated on brass, together with wool, which enjoyed a reputation for keeping the country's populace and its soldiers warm.

**GOOD TIMES INTERSPERSED WITH BAD.** After the Russians laid waste the district in 1719 the mill lay in ashes. But Holmen has always recovered, in new guise, with new production more suited to the needs of the day. In 1837 Holmen started one of the country's

first paper machines. Since then, the formerly so widely diversified company has gradually evolved into an international forest products group whose main products are paper, paperboard and sawn timber. Forestry and energy are becoming increasingly important lines of business.

**HOLMEN'S STRUCTURE TODAY** is the outcome of changes in ownership that occurred between 1988 and 1992, when Holmen merged with MoDo and Iggesund, both of which have ancient roots. The ironworks in Iggesund was founded in 1685, and MoDo had its origins in a sawmill set up in Mo in 1759.



Louis de Geer, the father of Swedish industry, managed Holmen from 1627 until his death in 1652. However, it was a Walloon, Wellam De Besche, who was involved from the very start, who pointed De Geer in the right direction.



Holmen carried on its main business on Kvarnholmen in the rushing waters of Strömmen in the heart of Norrköping for 377 years. The last paper machine was still in operation there until March 1986.

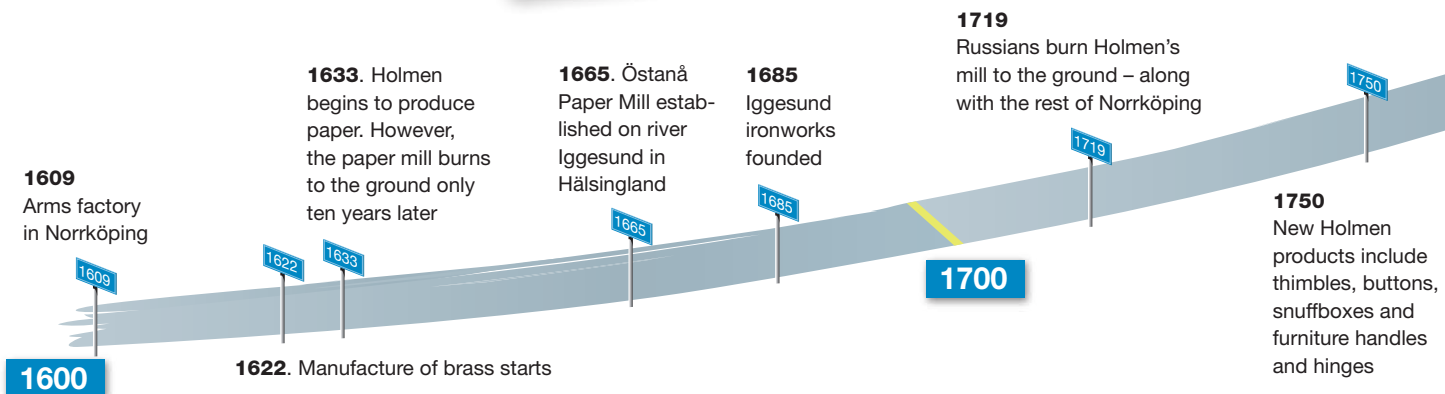


Duke Johan, who founded the arms factory, was in fact heir to the throne, but his uncle King Karl IX outmanoeuvred him in favour of his own son King Gustav Adolf.



These coils of brass wire lay in a wrecked ship on the seabed in Kattegatt for more than 300 years until the vessel was found in the 1950s and the cargo was salvaged.

This letter was signed by King Karl IX in 1610 confirming that the Norrköping arms factory received its charter in the previous year.







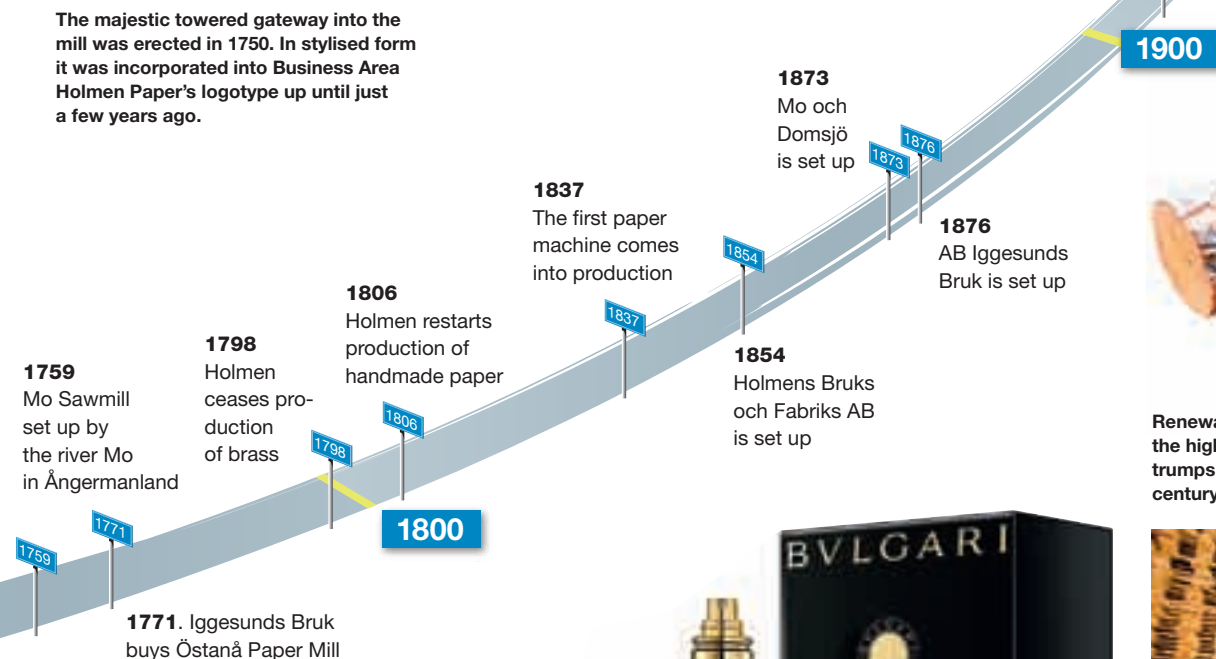
The majestic towered gateway into the mill was erected in 1750. In stylised form it was incorporated into Business Area Holmen Paper's logotype up until just a few years ago.



Holmen installed one of Sweden's first paper machines in 1837. It created a sensation with its continuous production of paper in long webs.



Newsprint has been one of Holmen's main products ever since the middle of the 19th century.



Renewable raw materials from the forest and the high level of self-sufficiency in energy are trumps in Holmen's hand as it enters its fifth century.

Paperboard packaging is light and makes lean use of resources – fully in line with society's sustainability requirements.



Sawn timber is a product of growing importance in the modern Holmen Group.



# Contents

Reporting principles .....	2
Highlights of 2008 .....	3
Magnus Hall, President and CEO .....	4-5
<b>This is Holmen .....</b>	<b>6-19</b>
The Group .....	6
Strategy and sustainability targets .....	7
Business areas .....	8-9
Holmen's products are made here... ..	10
... and this is how they are used .....	11
Products in terms of sustainability .....	12-13
R&D focuses on energy .....	14-15
Organisation and joint action .....	16-17
Policies and guidelines - code of conduct .....	18
Human rights .....	19
<b>Holmen in society .....</b>	<b>20-23</b>
Stakeholders .....	20-21
Local importance and involvement .....	22-23
<b>Raw materials .....</b>	<b>24-31</b>
Company forests - an increas- ingly important resource .....	24-25
Wood procurement .....	26-27
Recovered paper .....	28

Water .....	29
Energy .....	30-31
<b>Climate .....</b>	<b>32-37</b>
Natural raw materials .....	32-33
Holmen's forestry benefits the climate .....	34-35
Means used to control the climate .....	36-37
<b>Financial development .....</b>	<b>38-39</b>
<b>Concern for the environment .....</b>	<b>40-47</b>
Working practices .....	40
Environmental activities in 2008 .....	41
Emissions and waste 2008 .....	42
Permits and certifications .....	43
Environmental protection expenditure .....	44
Transportation .....	45
Waste .....	46
Chemicals, Discontinued businesses, Noise .....	47
<b>Social responsibility .....</b>	<b>48-57</b>
Working practices .....	48
HR activities in 2008 .....	49
Leadership development .....	50

Health and safety .....	51
More women for the future .....	52
Employee survey .....	53
Attractive employer .....	54
Competence development .....	55
Personnel reductions .....	56
Union co-operation .....	57
<b>Facts .....</b>	<b>58-62</b>
<b>Holmen and GRI .....</b>	<b>63-65</b>
<b>Glossary .....</b>	<b>66</b>
<b>Subject index .....</b>	<b>67</b>
<b>Acknowledgements .....</b>	<b>68</b>
<b>Addresses</b>	





## Reporting principles

*Holmen and its World 2008* describes Holmen from the perspective of sustainable enterprise with the emphasis on concern for the environment, social responsibility and financial development.

### Internal production

*Holmen and its World* is compiled and produced within the Group. Holmen sees internal production as a means of developing the sustainability process in the areas concerned.

A special working group with members from Holmen's Group Staffs has responsibility for co-ordinating sustainability issues. Among the responsibilities of this group, which is appointed by the CEO, is to publish *Holmen and its World*.

**HOLMEN AND ITS WORLD** describes the Holmen Group with a broad brush. It describes all its forestry and production activities, as well as social issues, in 2008, and gives an account of measures in response to growing demands for sustainable development.

*Holmen and its World* is published annually. Last year's edition was distributed in March 2008.

**STAKEHOLDERS AND AUDIENCES:** Employees and customers, shareholders, business partners, leaders of opinion, official bodies, analysts, the general public, people living near the mills, and school teachers and pupils.

**THE FACTS PRESENTED** are those reported to official bodies and those that have been obtained specifically for this report. *Holmen and its World* has not been assured by an external auditor. Holmen considers that the authorities' demands and their access to information concerning Holmen are an adequate guarantee that the information provided is correct.

**HARMONISATION WITH GRI AND UN'S GLOBAL COMPACT.** The object of the Global Reporting Initiative (GRI) is to induce companies and organisations to voluntarily describe their business activities from a financial, environmental and social perspective.

Holmen's method of providing detailed

financial, environmental and social information is harmonised with GRI's requirements and the UN Global Compact's ten principles.

Holmen's complete GRI report consists of *Holmen and its World 2008*, the *Holmen Annual Report 2008*, and comments in the GRI Register on Holmen's website.

**OPINION.** At the beginning of 2009 the KPMG audit company expressed their opinion of the contents of *Holmen and its World 2008*. KPMG considers that the report satisfies the standards for GRI's reporting level A, which is the highest level.

**COMMENTS.** During the year 2008 the Holmen Board decided to discontinue production on one of the paper machines at Hallsta in November. The Board also decided to close down the business at Wargön in December. To some extent the closures have affected the figures reported for raw material consumption and emissions.

**THE FINANCIAL AND MARKET INFORMATION** in *Holmen and its World* is relatively abridged. *Holmen Annual Report* for 2008 provides complete information on these two topics. It also contains the Corporate Governance Report as well as detailed information on the Board, Senior management, auditors and the Annual General Meeting.

### Contact for Holmen and its World 2008

Lars Strömberg  
Director of Sustainable  
and Environmental Affairs  
+46 (0) 8 666 21 54  
lars.stromberg@holmen.com



Iggesund Paperboard is market leader in the highest quality segment of the European paperboard market. Daniel Pihlström and Johan Larsson work for Iggesunds Bruk.

# Highlights of 2008



Holmen Skog's Linnea Forsmark gave an account of new nature conservation practices during Föreningen Skogen's autumn excursion.



In June, Iggesund Paperboard launched a new version of its classic Invercote board in the presence of invited customers and sales personnel from all over the world.



The new pulp line at Braviken will reduce electricity consumption by 25 per cent in relation to the previous line.

## Financial development

- Lower newsprint and sawn timber prices, combined with the higher prices of wood and other input materials had a negative impact on Holmen's result. The operating profit declined to MSEK 1 051 (2 843). This figure includes net costs affecting comparability of MSEK 361, largely associated with mill and machine closures.
- The Wargön Mill was closed down and production ceased on one of the paper machines at Hallsta in order to bring production into line with changing conditions on the market for printing paper.
- The planning of the new sawmill at the Braviken paper mill has continued.

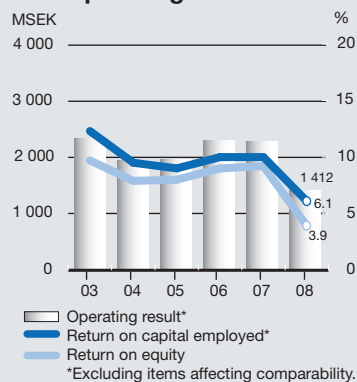
## Environmental responsibility

- Further reductions were made in the use of oil at the Swedish mills. Emissions of fossil carbon dioxide have been reduced by some 25 per cent since 2005.
- The pulp line that was brought into production at Braviken consumes some 25 per cent less electricity than the previous line. Holmen's specific energy consumption has declined by almost ten per cent since 2005.
- One effect of a development project in Madrid is that the mill there will be independent of fresh water by 2010. It will be the first paper mill in Europe to use 100 per cent recovered fibre and 100 per cent recycled water in its production.

## Social responsibility

- In connection with the closure of the Wargön Mill and one paper machine at Hallsta the Group has taken action to enable as many people as possible to find new jobs. Holmen's measures go beyond what the law requires.
- The number of female managers has increased. In 2008, one in every three newly appointed managers was a woman.
- The number of occupational accidents was the highest for many years. Holmen will analyse the causes and take corrective action.

### Operating result



### Facts

	2008	2007
Net turnover, MSEK	19 334	19 159
Operating profit, MSEK	1 051	2 843
Operating profit excluding items affecting comparability, MSEK	1 412	2 286
Profit for the year, MSEK	642	1 505
Earnings per share, SEK	7.6	17.8
Dividend per share, SEK	9*	12
Return on capital employed, %**	6.1	10.0
Return on equity, %	3.9	9.2
Debt/equity ratio	0.48	0.35
Capital expenditure, MSEK	1 160	1 433
Average number of employees	4 829	4 931

\* Board proposal \*\* Excluding items affecting comparability



# Challenges – and opportunities

Holmen is facing immense challenges. Newsprint consumption patterns are changing, and we are about to lay the foundation stone for Scandinavia's largest sawmill. As on so many occasions in the past during Holmen's four centuries of existence, we are adapting to new conditions that will present us with new and exciting opportunities.

**T**his year, Holmen is celebrating its 400th anniversary. We can trace our roots back to the days when Sweden was on the brink of becoming a great power, and the arms factory founded by Gustav Vasa's grandson Johan in 1609. Since then global conditions have changed time and again, and each time Holmen has had to change course and direct its energies towards partly new goals.

**ONCE AGAIN, WE HAVE REACHED** such a turning point. The new directions society is taking in response to climate change will present Holmen with immense opportunities. Our business is based on a natural and renewable raw material produced by living forests. Our products do not emit into the atmosphere any new quantities of carbon dioxide that would harm the climate. People can therefore with a clear conscience burn both biofuel and worn out paper to produce energy.

Parallel to this, we have also observed that newspapers are coming up against new rivals to challenge their dominating role as conveyors of news. In their place we can see many different types of electronic media emerging. Our view therefore is that the consumption of newsprint in Europe will most likely decline.

**BY CONTRAST, ALL FORECASTS INDICATE** a buoyant trend for structural timber, much due to its excellent climate profile. Most countries in Europe have programmes for building in sawn timber that stimulate



the use of wood. The view that it is both eco-smart and financially sound to use wood for constructing buildings is gaining widespread acceptance throughout the building industry.

I should also add that the paperboard we manufacture at Iggesund is fully in line with society's growing demands for sustainability. Paperboard packaging is light and makes lean use of resources. Everything suggests that such characteristics will become even more important in the future.

In Holmen we are currently adapting

very quickly to these new conditions. We have cut back our production of printing paper by closing down the Wargön Mill and by ceasing production on one paper machine at Hallsta. This will create a better balance with market demand, and provide a sound foundation for the continued profitable production of printing paper in the future. The fact is that even if conventional newspapers are losing ground there will still be ample demand for newsprint in the future. And we intend to go on playing a significant role on that market.

**THE SAWMILL WE ARE PLANNING** at Braviken has much more to offer than the product it will manufacture – structural timber – might imply. By integrating the sawmill and the paper mill with each other we will create what we call a bio co-location. One and one will add up to more than two. Here we will make fullest use of the renewable raw material from the forest to produce both paper and structural timber as well as utilising the bioenergy it also produces. In the somewhat longer range, we will be able to bolt on more lines of business that use wood as their input material.

**THERE ARE NUMEROUS EXAMPLES** of actions currently being taken by Holmen to meet tomorrow's demands:

- Leadership is high up on our agenda. Dedicated and capable managers are essential if we are to grasp the opportunities the future will bring.
- We are gradually raising the rate of growth in our forests, which will provide a foundation for stepping up the level of harvesting of wood and extraction of bioenergy. Alongside this we are pioneers in the use of more effective nature conservation practices as a means of achieving the goal of maintaining bio-diversity in our forests.
- Once the measures being planned for our mill in Madrid have been completed, production there will be based on 100 per cent recovered fibre and 100 per cent recycled water, which will make the mill unique.
- The new pulp line that was brought on stream at Braviken at the end of 2008 will reduce electricity consumption by 25 per cent in relation to the previous line.
- Oil consumption at our Swedish mills have been reduced by 25 per cent since 2005. Our target is eventually to phase out the use of oil completely.
- A significant proportion of our electricity requirements is met from production at our own hydro power plants; we are also exploring various options for windpower parks on our land.
- In association with our partner companies in BasEl, we are also exploring the possibility of building a new nuclear power plant in Sweden.

**WE HAVE ALSO BEEN TAKING** systematic action for quite some time to create sound working conditions for our personnel. Holmen has developed a system for regularly “taking the temperature” of the organisation, and we have effective procedures in place for converting shortcomings into remedial action. This is reflected in the steadily improving figures in our employee surveys.

The closures that we have had to make at Wargön and Hallsta will affect many employees and their families. We have therefore gone beyond what the law requires in our support for those who have lost their jobs. We see this as an important effort on behalf of capable people who have suffered the effects of market forces through no fault of their own.

**I CAN ALSO SEE** that the sustainability measures we have described in this report are generating a positive response on the market. Holmen has been included in several international corporate indices intended to make it easier for investors and others to identify companies that handle sustainability in an effective way.

**ALL IN ALL, THEREFORE,** it is with great confidence that I look ahead as Holmen enters its fifth century of more or less uninterrupted industrial activity. As I mentioned at the beginning, we have set off in new directions on several occasions. We are now facing a new change of direction. This is a challenge – let there be no doubt about that – but it is a challenge that presents untold opportunities.

Stockholm 20 February 2009



Magnus Hall  
President and CEO

### Comments on the result for 2008

For the first time in many years Holmen did not achieve its profitability target. A return of six per cent on capital employed is not enough to cover the cost of capital.

The principal reason for the weak result is further increases in the cost of wood and other input materials, and lower prices for newsprint.

By cutting capacity in the printing paper segment Holmen will establish a firm foundation from which to improve its profitability. Alongside this, we are also shifting our focus towards new paperboard products as well as canvassing our customers to gain acceptance for the price increases needed to cover the higher costs.

Our forestry and energy businesses continued to do well.

The Board's proposal to cut the dividend should be seen against the background of the poorer profitability and the fact that we are now in the middle of a severe recession.



# This is



# HOLMEN

Holmen is a forest products group that produces printing paper, paperboard and sawn timber. Some 90 per cent of the output is sold within Europe. Substantial forest holdings and a high degree of self-sufficiency in energy are the foundation for Holmen's future progress.

**COMPANY FORESTS PROVIDE MOST OF THE WOOD.**

Holmen's production is based on renewable raw materials from sustainable forestry. The Group owns approximately 1.3 million hectares of land, of which one million hectares are used for forestry.

**PRODUCTION IN THREE COUNTRIES.** Holmen has four production facilities in Sweden and one each in Great Britain and Spain. Holmen has some further processing in the Netherlands and France and has sales subsidiaries in several European countries. Holmen has a subsidiary for wood procurement in Estonia.

**BIOENERGY AND HYDROELECTRIC POWER.**

Holmen's thermal energy requirements are large met by biofuel. Its electricity requirements are covered by production at wholly and partly owned hydro power stations, back-pressure turbines and by purchase.

**PRODUCTS.** Holmen focuses on printing paper, paperboard, sawn timber, forestry and energy. Holmen's forests are assuming greater strategic importance in line with society's growing need for renewable, climate-neutral products.

**HOLMEN AB's TWO SERIES OF SHARES** are listed on NASDAQ OMX Nordic, Large Cap. Over the past decade, Holmen's shares have on average earned a total return of 11 per cent per year, including reinvested dividends.



# Strategy

## Business concept

### Business areas and markets

#### Three product-oriented business areas

- **Holmen Paper** Printing paper
- **Iggesund Paperboard** Paperboard
- **Holmen Timber** Sawn timber

#### Two raw material-oriented business areas

- **Holmen Skog** Forests and wood
- **Holmen Energi** Electric power and energy

#### Markets

- The main market is Europe.

### Growth

Holmen shall develop the business areas via organic growth and selective acquisitions by means of:

- **Attractive products**
- **Active marketing**
- **Market-driven product development**
- **Higher production**
- **Committed employees.**

### Production

Holmen shall have high quality and low production costs by means of:

- **Large-scale production**
- **Efficient processes**
- **Active purchasing**
- **Integrated procurement of raw materials – wood, energy and recovered paper**
- **High level of competence and efficient organisation.**

## Guidelines

### Financial targets

**PROFITABILITY.** Holmen's profitability and return shall consistently exceed the market cost of capital.

**CAPITAL STRUCTURE.** Holmen's financial position shall be strong with a debt/equity ratio of 0.3–0.8.

**DIVIDEND.** The ordinary dividend paid each year shall correspond to 5–7 per cent of the company's equity.

### Sustainability

**FINANCIAL DEVELOPMENT.** Healthy profitability and a strong financial position will provide the conditions for sustainable development for business partners, employees, shareholders and society at large.

**SOCIAL RESPONSIBILITY.** Holmen shall respect ethical and social norms, be a good business partner and member of society and motivate and train its employees by means of committed leadership.

**ENVIRONMENTAL RESPONSIBILITY.** Holmen's business shall be characterised by a holistic approach that involves protection of the environment and lean use of raw materials and energy.

## Sustainability targets

Financial development	Targets	Outcome 2008	Comments
Profitability and return	Consistently higher than market cost of capital	Lower	Achieved the past five years except for 2008
Debt/equity ratio	0.3–0.8	0.48	
Ordinary dividend	Each year shall correspond to 5–7 % of equity	5 %	2008: Board proposal
<b>Social responsibility<sup>1)</sup></b>			
Human capital: the conditions to do a good job	2009: 635 at least	2007 <sup>2)</sup> : 616	600 = good, 700 = excellent
Leadership index	2009: 60 at least	2007 <sup>2)</sup> : 56	60 = good, 70 = excellent
Performance reviews	2009: 100 %	2007 <sup>2)</sup> : 70 %	
Occupational accidents with absence/1 000 employees	2009: no more than 10	23	
Number of female managers	2009: 13 %	13 %	
<b>Environmental responsibility</b>			
Reduction in use of fossil fuels at Swedish facilities	2020: 90 % reduction	25 %	Reference year 2005
Energy efficiency improvement	2020: 15 %	8 %	Reference year 2005
Certified energy management systems at all units	Introduced by 2009 at latest	Certification at the Swedish units and Workington <sup>3)</sup>	Madrid 2009
Higher growth rate in Holmen's forests	25 % within 30 years	–	Not measurable at present
Extract more/higher deliveries of biofuel	2020: 1.5 TWh	0.66 TWh	Reference year 2006: 0.42 TWh

1) The target applies to Holmen's Swedish units. 2) Measured every other year. The results for 2009 will be published on Holmen's website no later than June.

3) Certifiable system introduced. Certification will take place when English standard approved.



# Business areas



## Holmen Paper

### Products

- Newsprint, white and coloured
- Directory paper
- MF Magazine
- SC paper
- Book paper
- Coated printing paper.

### Brand names

Holmen News,  
Holmen Coloured News,  
Holmen Plus, Holmen XLNT,  
Holmen Book, Holmen Guide,  
Holmen Bravo, Holmen Premium.

### Markets

Holmen Paper's main market is Europe. The company has a strong position on the markets for MF Magazine, newsprint and directory paper.

### Production facilities

Hallsta, Hallstavik  
Braviken, Norrköping  
Madrid, Spain.

### Share of Group, % (external share)



<sup>1)</sup> Excl. items affecting comparability.



## Iggesund Paperboard

### Products

- Solid bleached board, SBB
- Folding box board, FBB
- Plastic coated and laminated paperboard.

### Brand names

Invercote,  
Incada.

### Markets

Iggesund Paperboard's main markets are in Europe, primarily Great Britain, Germany and France. Substantial volumes are also exported to South East Asia and the USA. In all, the company sells paperboard to more than 100 countries.

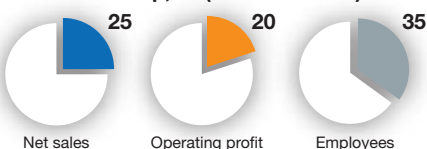
Iggesund Paperboard is market leader in Europe within the highest quality segment of the paperboard market.

The products are used for packaging for foods, cosmetics, tobacco and confectionery, as well as for graphic products such as book covers, greeting cards, and CD and DVD sleeves.

### Production facilities

Iggesunds Bruk, Iggesund Workington, Great Britain. Paperboard is coated with plastic and laminated in Strömsbruk. Sheetting units in the Netherlands and France.

### Share of Group, % (external share)





## Recovered paper

More than half of the recovered paper used by Holmen Paper's mill Braviken is sourced in Sweden, while the remainder is imported from Great Britain, Norway, Germany and Denmark.

Recovered paper is collected by PÅAB, an associate company.

The recovered paper used at the mill in Madrid is mostly procured in Spain. Most of it is collected by wholly and partly

owned paper collection companies, mainly wholly owned CARPA.

Recovered paper for the mill in Madrid is also imported from Portugal, the south of France and Great Britain.

## Holmen Timber

### Products

■ Redwood sawn timber for use in the manufacture of joinery work, such as window frames, doors and flooring.

### Markets

Holmen Timber's main market is Europe, mainly Scandinavia and Great Britain. The customers consist primarily of the joinery industry, planing shops and building merchants.

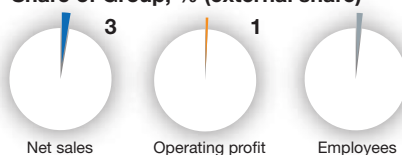
### Brand names

Monolit, Quatrolit, Relax.

### Production facility

Iggesund Sawmill, Iggesund.

### Share of Group, % (external share)



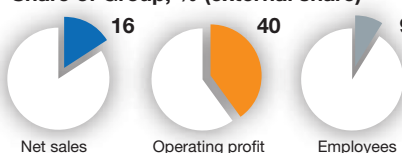
## Holmen Skog

Holmen Skog procures wood for Holmen's Swedish mills and manages the Group's forests, which extend over one million hectares of productive forestland. Some 60 per cent of the Group's wood requirements in Sweden are met from harvesting in company forests.

**Forest regions.** Örnköldsvik, Iggesund, Norrköping.

**Purchasing company.** Holmen Mets, Tallinn, Estonia.

### Share of Group, % (external share)



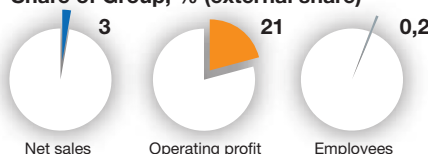
## Holmen Energi

Holmen Energi has responsibility for supplying Holmen's Swedish mills with electricity and for the Group's eight wholly owned and 15 partly owned hydro power stations. Holmen's electricity requirements are met from purchased electricity, production at the Group's hydro power stations and from back-pressure power turbines at the mills. Holmen Energi also has responsibility for co-ordinating energy issues for the Group.

### Wholly and partly owned hydro power stations in:

Umeälven, Faxälven, Gideälven, Iggesundån, Ljusnan and Motala Ström.

### Share of Group, % (external share)





# Holmen's products are made here...

Holmen has production facilities in Sweden, Great Britain and Spain. Some further processing takes place in the Netherlands and France. The Group's forests and hydro power stations are located in Sweden.

## HARVESTING IN HOLMEN'S FORESTS

accounts for around 60 per cent of the wood requirements of the Group's Swedish mills. The remainder is purchased from private forest-owners, obtained by means of exchanges with other forest companies, or imported. Imported wood accounts for less than 10 per cent.

The mill in Workington uses wood that is purchased in Great Britain.

The Braviken Mill uses recovered paper. Production at Madrid is based entirely on the use of recovered paper.

All of Holmen's mills, and its forestry, are managed in accordance with the international ISO 14001 environmental management system.

Holmen's forestry is certified in accordance with the international PEFC and FSC forestry standards.



### Hallsta

Holmen Paper

**Raw materials:** Sprucewood

**Processes:** TMP and groundwood pulp

**Products:** Newsprint, MF Magazine, SC paper and book paper

**Production capacity:** 680 000 tonnes/year\*

**Average number of employees:** 889

\*after the closure of PM 2



### Iggesunds Bruk

Iggesund Paperboard

**Raw materials:** Softwood and hardwood pulpwood

**Process:** Sulphate pulp

**Products:** Solid bleached board, plastic coated board and surplus sulphate pulp

**Production capacity:** 330 000 tonnes/year, of which some (incl. Workington board) are plastic coated in Strömsbruk. Capacity: 45 000 tonnes/year.

**Average number of employees:** 895 (incl. Strömsbruk)



### Braviken

Holmen Paper

**Raw materials:** Sprucewood, recovered paper

**Processes:** TMP and DIP

**Products:** Newsprint, coloured newsprint, directory paper

**Production capacity:** 790 000 tonnes/year

**Average number of employees:** 671



### Workington

Iggesund Paperboard

**Raw materials:** Sprucewood and purchased sulphate pulp

**Process:** RMP

**Products:** Folding box board

**Production capacity:** 260 000 tonnes/year

**Average number of employees:** 480



### Madrid

Holmen Paper

**Raw materials:** Recovered paper

**Process:** DIP

**Products:** Newspaper, MF Magazine and LWC Recycled

**Production capacity:** 470 000 tonnes/year

**Average number of employees:** 373



### Iggesund Sawmill

Holmen Timber

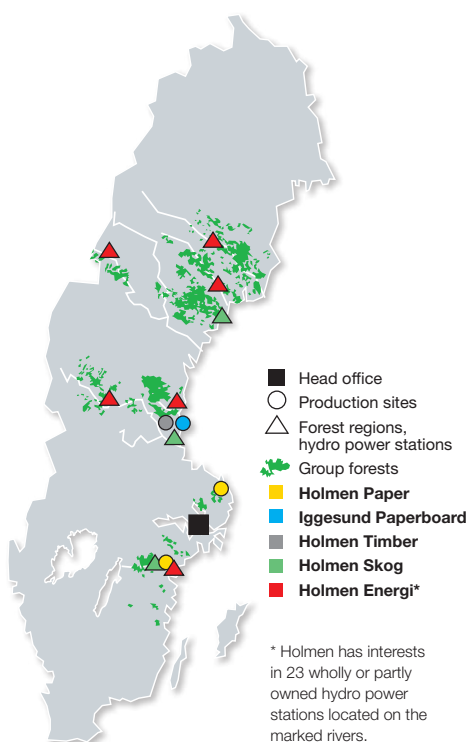
**Raw materials:** Pine saw logs

**Process:** Sawmilling

**Products:** Redwood sawn timber

**Production capacity:** 340 000 cubic metres/year

**Average number of employees:** 102



### Carpa

Wholly owned Spanish company that in 2008 collected 440 000 tonnes of recovered paper.

**Average number of employees:** 188

### Sheeting units

Paperboard is cut to specific sizes in Utrecht, the Netherlands, and Valence, France.

**Capacity:** 85 000 tonnes/year

**Average number of employees:** 55

### Skärnäs Terminal

Harbour in Iggesund that handles almost one million tonnes of forest products per year. 450 calls per year. Since 2009 Skärnäs Terminal has been part of Iggesunds Bruk.

**Average number of employees:** 46

... and this is how they are used



#### Daily newspapers

Numerous daily newspapers, mainly in Europe but also in other parts of the world, are printed on paper from Holmen.

#### Magazines, weekly magazines and specialist magazines

The market for specialist magazines is expanding with support from the Internet, which inspires people to read more.

#### Direct advertising

Direct advertising is a growing market and is printed on several of the different types of paper produced by Holmen.

#### Brochures and supplements

MF Magazine is used for newspaper supplements and is being used increasingly for other printed matter.

#### Packaging for foods, medicines, cosmetics, confectioneries and tobacco

There is high demand for cleanliness as well as printability and runnability of paperboard for these products. It is also important that the packaging conveys the right impression about its often exclusive contents.

#### Covers for printed matter

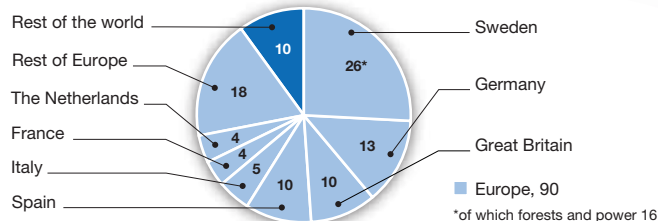
Paperboard is often used for the covers of printed material of different types, just look at the cover of this report, for example.

#### Wooden fittings and furniture, structural timber

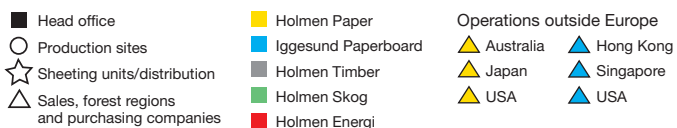
Holmen's sawn timber is used as visible wood in the home environment. With the new sawmill at Braviken Holmen will also be able to produce structural timber.

### Operations in different countries 2008

#### Net sales per market, %



#### Average number of employees





## Products in terms of sustainability



Wood is a sustainable raw material. With the aid of photosynthesis, trees convert sunlight, carbon dioxide in the air, and water nutrients into solid wood. The process is perpetual and it will continue as long as the sun shines on the earth.



Holmen uses renewable raw materials from sustainably cultivated forests in its products and biofuel. The proportion of biofuel and hydroelectric power in the production is high. The products have important roles in society. Paper and paperboard can be recovered either as a material or as climate-neutral energy. Used sawn timber products later become an excellent and climate-neutral biofuel.

### Raw materials

**SUNLIGHT, AIR AND WATER**, together with nutrients in the ground, are the main “raw materials” that trees use to produce wood.

**WOOD FROM COMPANY FORESTS.** Holmen employs sustainable forestry. The amount of wood harvested each year corresponds, on average, to 82 per cent of the long-term growth. These forestry practices mean that the harvesting potential will increase dramatically during the coming 30–40 years. Parallel to this, nature conservation methods are being developed with the aim of preserving habitats for the forest’s biologically diverse inhabitants.

**PURCHASED WOOD.** Holmen has chain-of-custody procedures for tracing all wood to its origins. Holmen’s Guidelines for Purchasing Wood stipulate that purchased wood shall have been harvested in accordance with applicable laws and shall satisfy Holmen’s environmental standards.

**RECOVERED PAPER.** Holmen is part of the European system for collecting and using recovered paper. Holmen uses recovered paper in the form of collected newspapers, magazines and directories at its mills in Braviken and Madrid. Production at Madrid is based entirely on the use of recovered paper.



## Products

**PRINTING PAPER** is produced from virgin sprucewood pulp and recovered paper. The paper is mainly used for daily newspapers, weekly magazines, books and other printed products. Paper is a versatile medium for the transmission and storage of information.

The production process has little impact on the environment. However, the process does consume a great deal of electricity. After de-inking, recovered newspapers and magazines make an excellent raw material for new printing paper. Worn out cellulose fibres can be used as a biofuel.

**PAPERBOARD** is produced from pine, spruce and birch wood. Much of the energy that is needed is produced using biofuel from internal sources.

The paperboard is mainly used for packaging and graphic purposes.

Paperboard can be used for hygienic packaging that can be treated to provide protection against moisture, fat, odour and taste. It is light and economical to transport. The advantages of paperboard in terms of the environment and use of resources emerge quite clearly when they are balanced against the value to consumers of receiving the purchases in usable condition.

**SAWN TIMBER.** Holmen produces sawn timber from pine logs. The products are mainly used as components for interior décor, such as wooden floors and panels. Holmen's planned new sawmill at Braviken will produce structural timber of spruce.

Using wood for buildings instead of materials that affect the climate, such as concrete, steel and plastic, reduces emissions of carbon dioxide. Wood products also "lock in" carbon dioxide so long as the product is in use, thereby functioning as a carbon sink.

## Energy

**BIOFUEL.** Holmen also produces a growing volume of biofuel in the form of branches and treetops from company forests.

Branches and treetops are the closest thing to a climate-neutral biofuel. When burnt, virtually the same amount of carbon dioxide is released as if the branches and treetops had, instead, been left to decay in the forests.

Bioenergy accounts for almost half of the thermal energy that is required for the production of Holmen's products.



**HYDRO POWER.** Holmen has 23 wholly or partly owned hydro power stations that meet around one-quarter of the Group's electricity requirements. The production of hydro power is a natural and sustainable process and therefore satisfies high environmental demands.

**WIND POWER.** Holmen plans to build wind farms on its own land. Wind measurements are being taken in a number of places in Västernorrland, Uppland and Östergötland.

**PEAT.** In the autumn of 2008 Holmen began to prepare to harvest peat on the Group's land north of Örnsköldsvik. Peat is regarded as a slowly renewable biofuel. Peat production is expected to start in the summer of 2009.

**DISTRICT HEATING.** The surplus heat from Iggesunds Bruk and Hallsta is delivered to the municipal district heating systems.

## Other types of products

Holmen intends to study the potential for producing other, non-traditional products from wood by means of biorefining.

## Product safety – paperboard

Iggesund Paperboard's products are produced exclusively from virgin fibre. The chemicals used in production are approved by the authorities.

The paperboard satisfies the requirements in national and international laws and regulations relating to safety, hygiene, odour and taste. The paperboard also meets the requirements of the EU Packaging Directive, which includes regulations relating to weight, volume and recovery potential. Iggesund Paperboard carries out regular customer surveys to determine how its paperboard is used to enable it to make further improvements.

## R&D focuses on energy

### Holmen R&D

Holmen's R&D activities are decentralised to the individual mills in order to maintain proximity to production and the market. In addition, there are two development centres, one at Holmen Paper and one at Iggesund Paperboard, which engage in joint research in closely related fields.

**Group Technology** co-operates closely with the development centres to develop relations with external research contacts and influence the focus of the research.

**Holmen is also involved in** joint research in Sweden with outside research and development institutes, including STFI-Packforsk, MoRe Research, the Royal Institute of Technology, Mid Sweden University, Karlstad University, the Swedish University of Agricultural Sciences, Skogforsk, Värmeforsk and Elforsk. Holmen co-operates with CTP in France, with Universidad Complutense in Madrid, Spain, with the University of Manchester in Great Britain, and mainly with Åbo Akademi and KCL in Finland.

### Exchange of know-how.

Holmen Paper's close co-operation with Universidad Complutense in Madrid involves a joint laboratory where the scientists' know-how is utilised in projects having direct links to its processes.

**In all Holmen invests** some MSEK 100 annually in R&D, of which about one-quarter is channelled through outside R&D players. Holmen Paper and Iggesund Paperboard also co-operate with universities and institutes of technology in connection with postgraduate projects.

**The sector research programme** in the Swedish forest industry and the EU's 7th general programme have opened up new opportunities for the financing of applied research, for example, in product development and energy efficiency.

In addition to traditional product development, Holmen's R&D activities are being increasingly focused on energy and the climate. Energy efficient processes, lower oil consumption, increasing forest growth, biorefining and the new bio co-location at Braviken are examples of this focus.



**ENERGY AND CLIMATE ISSUES** are now having an impact on virtually all areas of social development. For the forest industry this represents huge opportunities. Biological products and energy produced from raw materials that come from sustainable and environmentally sound forestry are strengths in a world that is paying greater attention to the concept of sustainable development.

Holmen and its products have a clear role in the sustainable society of the future. Consequently, the R&D resources are directed towards issues that create the necessary conditions to meet new demands and needs. This contributes to an increase in the Group's production of wood in company-owned forests, parallel to the development of nature conservation methods. The decision to build a new sawmill at Braviken is based on the insight that the use of climate-neutral timber for building purposes will increase.

### Holmen Paper

Holmen Paper concentrates on developing new and improved paper products.

**STRONGER AND LIGHTER NEWSPRINT.** During the past thirty years, the amount of fibre used per printed surface has almost halved, which has contributed to reducing transportation requirements. During the same period, the use of recovered paper has increased and it accounts now for approximately half of the raw material used in Holmen Paper's products. An R&D project is underway to further improve

the recycled fibre-based printing paper. At the same time, measures are still being taken to further raise the yield from the DIP process.

**LOWER ENERGY CONSUMPTION.** The amount of energy required to produce thermo-mechanical pulp (TMP) at Holmen Paper's mills has been radically reduced since the 1970s.

In the autumn of 2008 a further step in this direction was taken when a new pulp line for energy efficient production of TMP was brought into operation at Braviken. The new line will use some 25 per cent less energy in relation to the previous line.

**REDUCED WATER CONSUMPTION.** An extensive water-saving project is underway at the Madrid mill (see also page 29).

### Igesund Paperboard

The focus of the R&D activities for the high-quality paperboard produced by Iggesund lies on surface treatment, the physical properties of the board and fibre modification.

**SURFACE TREATMENT.** The paperboard is coated with fine-grained clay material to even out the microscopic irregularities between the fibres. The coating improves the paperboard's ability to take advanced print.

**PHYSICAL PROPERTIES OF PAPERBOARD.** As a result of R&D over a long period of time, Iggesund Paperboard's board has acquired properties that enable it to be folded, stamped and embossed using extremely advanced

methods. The paperboard also possesses good runnability, which allows it to be quickly and reliably printed on and formed into packaging.

Fibre modification is a new R&D area, which involves chemically or mechanically increasing the stiffness and bulk characteristics of the cellulose fibres.

**LOWER GRAMMAGE PAPERBOARD.** At Working-ton R&D activities are focused on reducing the grammage of the board whilst retaining its strength and stiffness and further improving its surface characteristics.

**A NEW GENERATION OF PAPERBOARD** for graphic purposes and packaging was launched at the beginning of 2008. The improvements are the result of the rebuilding of one of the board machines at Iggesund. Extensive R&D activities also include a new, patented method of surface treatment.

**BIOLOGICAL BARRIER MATERIALS.** Iggesund Paperboard has developed packaging with barrier coatings against moisture, fat, odour etc, based on biological substances. The aim is eventually to phase out oil-based materials such as polyethylene.

**IMPROVED OPTICAL PROPERTIES.** The focus is on improving the optical characteristics of the packaging surface.

## Holmen Timber

With the decision to build a large, new sawmill at Braviken Holmen is taking an important step into the market for structural timber, which will require concentrated R&D efforts. At present Holmen's development projects are directed towards:

**THE DRYING OF SAWN TIMBER.** R&D activities focus on eliminating defects such as cracks, deformities and the like, which arise when the sawn timber dries. Significant advances have been made in recent years.

**PATTERN FITTING.** This involves optimising the positioning of the saw blade so that selected characteristics of the wood are augmented and others minimised.

## Holmen Skog

**INCREASED FOREST GROWTH.** The target for Holmen's new silvicultural programme is to increase growth rate in company forests by around 25 per cent over the next 30 years. More wood also provides more biofuel.

**IMPROVED NATURE CONSERVATION METHODS.** In order to create better conditions for biodiversity Holmen Skog is taking measures to raise the biological quality of both managed and protected forests.

**MORE EFFICIENT SILVICULTURE.** Holmen Skog is working together with external researchers on a number of projects to develop more efficient silvicultural methods.

**LEAN-ENERGY TRANSPORTATION.** Holmen is participating in projects to develop new, efficient transport systems with a lower environmental and climate impact. One example of this is the testing of the El-Forest el-hybrid forwarder, which uses 30–50 per cent less fossil fuel than conventional forwarders. Holmen has purchased one forwarder for delivery in 2010.

Holmen also supports the *En trave till* (One more stack) industry-wide project whose purpose is to reduce the energy consumption of timber-carrying lorries.

**THE FOREST IN THE FUTURE.** Holmen Skog has taken the initiative and made a major contribution to the design of the national research project *Framtidens skog* (The forest in the future). The programme is the largest individual research investment ever in Sweden and focuses on three areas; increased wood production, the forest environment and the forest's social value.

## Holmen Energi

**WIND POWER.** Studies are being made into the feasibility of constructing wind farms on Holmen's land on the outskirts of Örnsköldsvik, in the vicinity of Hallstavik and south of Norrköping.

**BIOREFINING.** Holmen is examining the feasibility of producing products other than traditional wood products. These may include fuel, chemical products and entirely new materials. Holmen intends to strengthen the organisation in this important area, which can, in future, contribute to broadening Holmen's business.

**PEAT HARVESTING.** Holmen is preparing to harvest peat on the Group's land. A peatland site will be opened in 2009. Peat is classified as a slowly renewable biofuel of the type that is currently experiencing strong demand from municipal biofuel plants, for example.



## Braviken is developing into a bio co-location

Holmen's new sawmill project at Braviken is underway. The new plant is expected to come into operation at the end of 2010.

This is the first stage in the transformation of Braviken into a bio co-location, similar to the one Holmen already has at Iggesund. The synergies will be considerable. The paper mill will source much of its raw material in the form of chips from the sawmill. The intention is that both units will be supplied with energy from a common plant.

By gathering all fibre flows in one place conditions will be created to eventually supplement this with other operations. Pellets, district heating and electricity are just some of the more promising options.



## Organisation and joint action

Holmen's business is highly decentralised to business areas, mills and forest regions. The organisation includes a number of networks and various specialist expertise.

### Board and Senior management

**HOLMEN'S BOARD** has nine members who are elected by the Annual General Meeting, and three employee representatives and three deputies who are appointed by the union organisations. The Board held eight meetings in 2008. The company's auditors report their observations to the Board, the CEO and the AGM.

#### Board

- **Fredrik Lundberg**, Chairman
- **Carl Kempe**, deputy Chairman
- **Steeve Björklundh**, employee representative
- **Lilian Fossum**
- **Magnus Hall**, President and CEO
- **Torgny Hammar**, employee representative
- **Kenneth Johansson**, employee representative
- **Curt Källströmer**
- **Hans Larsson**
- **Ulf Lundahl**
- **Göran Lundin**
- **Bengt Pettersson**

#### Deputy members

- **Stig Jacobsson**, employee representative
- **Karin Norin**, employee representative
- **Andreas Rastbäck**, employee representative

**HOLMEN'S SENIOR MANAGEMENT** consists of the CEO and the heads of the five business areas and the five Group staffs. The Group management held eleven meetings in 2008, which dealt with such matters as the progress and result of the business, reports before and after Board meetings, business plans, budgets, capital expenditure, personnel, and the environment.

#### Senior management

- **Magnus Hall**, President and CEO
- **Anders Almgren**, Vice President and CFO, Group Finance
- **Ingela Carlsson**, Group Public Relations
- **Lars Ericson**, Group Legal Affairs
- **Thommy Haglund**, Group Human Resources
- **Sven Wird**, Group Technology
- **Brynolf Alexandersson**, Holmen Energi
- **Björn Andrén**, Holmen Skog
- **Björn Kvick**, Iggesund Paperboard
- **Håkan Lindh**, Holmen Timber
- **Arne Wallin**, Holmen Paper

### Information



**FINANCIAL INFORMATION.** Holmen publishes an annual report that is audited by the company's external auditors. The company also publishes *Holmen Business Report* four times a year, which includes the Group's year-end and interim reports. Financial information is also published on Holmen's website.

#### PRODUCT AND INDUSTRY INFORMATION.

Holmen Paper, Iggesund Paperboard and Holmen Skog publish their own magazines for customers, forest owners and politicians at both national and local level.

**PERSONNEL INFORMATION.** *Holmen Insikt*, Holmen's personnel magazine is published four times a year and reflects the Group's activities from the perspective of its employees. Local information sheets are available at most of the units.

The Intranet *Online* offers both Group and unit information.

**SUSTAINABILITY.** Holmen publishes its annual sustainability report *Holmen and its World*. This is complemented by more detailed information on the Group's website.

### Purchasing

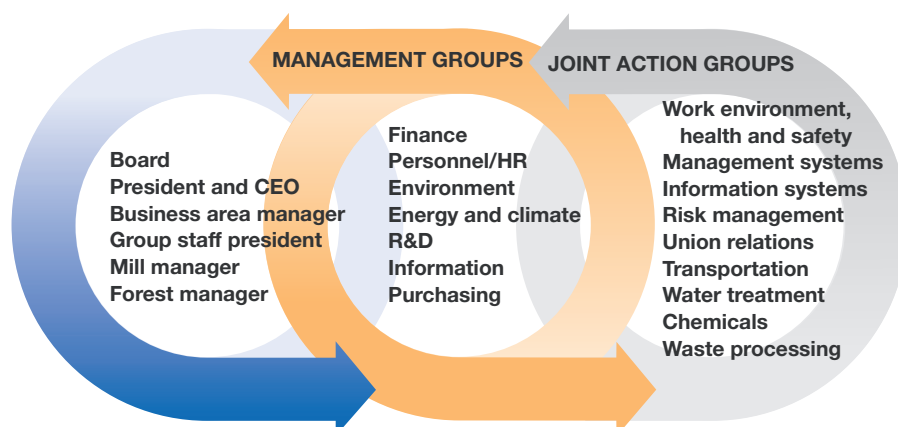
**THE PURCHASE OF GOODS AND SERVICES** is co-ordinated group-wide with the object of reducing the total cost. This also improves the scope for making unambiguous quality and environmental demands on suppliers.

### Organisation and joint action

**The Group's Board.** CEO, heads of Group staffs, the heads of the five business areas and mill and forest managers are each responsible for their own organisational level.

**Management groups** deal with policy and strategy, as well as exchanging experiences.

**Joint action groups.** In areas where more detailed work is important, joint action groups that include specialists have been set up. These groups are involved in competence development and the exchange of expertise and experience in their respective subject fields.





Members of Senior management participate each year in the induction programme for newly employed graduates.

## Social responsibility

**PERSONNEL ACTIVITIES AT HOLMEN** are carried out in accordance with the Group's personnel policy. They are co-ordinated by a management group for Human Resources (HR), which consists of the personnel managers from the business areas and is chaired by the Group's HR director. Working groups on which the unions are also represented are set up for specific HR issues. Large units have HR managers.

**HUMAN RESOURCE ACTIVITIES** are directed towards strategic goals for the work climate, leadership, performance reviews, occupational accidents and the number of female managers. In addition to these goals, the Group uses key ratios and goals that are based on the results of employee surveys.

**THE UNION ORGANISATIONS** meet regularly in the Holmen European Works Council and in consultation groups at each unit.

## Environmental responsibility

**ENVIRONMENTAL ACTIVITIES ARE CARRIED ON** in accordance with the environmental policy.

**ENVIRONMENTAL RESPONSIBILITY.** The Group Board and the CEO and the managers of the business areas have overall responsibility for the environment. Operative responsibility rests on the mill and forest managers.

Holmen's Director of Sustainable and Environmental Affairs chairs Holmen's environmental council, monitors developments in the field, follows activities relating to the Group's environmental goals and runs Group-wide joint action groups.

**ENVIRONMENTAL MANAGEMENT SYSTEM.** All units at Holmen, including forestry, apply certified environmental management systems. Certified energy management systems are in place at all Swedish units. Similar systems exist in Workington and will be introduced in

Madrid in 2009. All the systems are audited regularly by certified external auditors.

**FORESTRY CERTIFICATION.** Holmen's forestry is certified in accordance with the PEFC and FSC international forest standards.



The new energy-effective pulp line at Braviken.

## Surveys

**CUSTOMER AND SUPPLIER SURVEYS.** Holmen carries out regular surveys and interviews to find out what customers, wood suppliers and buyers of seedlings think about the company. The results are converted into action plans.

**ENVIRONMENTAL AND SOCIAL RESPONSIBILITY SURVEYS.** Holmen takes part in surveys from analysts and investors and regards them as valuable means of identifying strengths and weaknesses.

## Finance

**FINANCIAL ACTIVITIES AT HOLMEN** are decentralised to business area, mill and forest region level. Group Finance has functional responsibility for financing, controlling, accounting and reporting, taxes and insurance.

The financial activities are planned, co-ordinated and followed up by a group consisting of the Group's Chief Financial Officer, the finance managers of each business area and specialists at Group level. One key task is to develop the internal control system.

## Sustainability

**A SEPARATE PROJECT GROUP** with representatives from all Group staffs deals with sustainability issues. The group is appointed by the Group's CEO. *Holmen and its World*, the Group's sustainability report, is one of the group's responsibilities. Holmen's Director of Sustainable and Environmental Affairs chairs this group.

## International initiatives and guidelines

**GLOBAL REPORTING INITIATIVE (GRI).** Holmen has harmonised its reporting practices with the GRI recommendations.

**UN's GLOBAL COMPACT.** Holmen is a member of the UN's Global Compact and its Nordic counterparts.

**CARBON DISCLOSURE PROJECT (CDP).** Holmen participates in this international project by replying to an annual questionnaire on energy use and emissions of carbon dioxide.

## Risk management

**RISK MANAGEMENT IS CO-ORDINATED** by a Group-wide group. Extensive risk analyses serve as a basis for loss prevention measures and the procurement of insurance. The aim is for Holmen's major facilities to be classified as having the best possible fire protection. Holmen takes out insurance cover for property damage and sequential loss. The Group's forests are not insured as they are dispersed over large areas of the country, which reduces the risk of simultaneous damage.

## Policies and guidelines – code of conduct

### Sustainable development

Sustainable development is an overriding goal at Holmen. According to the Group's strategy, the business shall be characterised by a holistic approach, concern for the environment, lean use of raw materials and energy, and respect for ethical and social norms. Holmen's policies and guidelines together make up the code of conduct that steers the business towards sustainable development.

### All production takes place in the EU

Holmen's production takes place in the EU, where the bulk of its output is also sold. There are some sales to the USA and countries in Asia. In all countries, Holmen operates in accordance with local laws and agreements, and observes sound business practice. Holmen also endeavours to keep itself aware of how the Group's stakeholders deal with issues relating to the environment and personnel.

Holmen's policies and guidelines serve as a tool – the code of conduct – that is focused on sustainable development. Together with the laws in each country they provide the framework and govern Holmen's actions in different areas.

### Environmental responsibility

**THE ENVIRONMENTAL POLICY** contains general principles for the Group's environmental activities. It covers the environmental aspects to which Holmen and its stakeholders give priority. The policy was updated in 2008.

**GUIDELINES FOR PURCHASING WOOD.** Holmen requires the wood the company procures to be harvested in accordance with applicable laws and to satisfy environmental demands.

**GUIDELINES FOR SUSTAINABLE FORESTRY** stipulates how the forests are to be managed in both production and environmental perspectives. The requirements in the PEFC and FSC forestry standards are incorporated into the 60 guidelines contained in this document.

### Social responsibility

**THE PERSONNEL POLICY** reflects the Group's stance on what is sound human resources management and has been developed in association with the Group's union organisations. The policy highlights the joint responsibility of managers and subordinates for maintaining a sound work and development climate.

**THE EQUAL OPPORTUNITIES POLICY** stipulates that each work place shall be equally suitable for men and women and that Holmen regards it as natural to combine parenthood with work. The policy also reflects the Group's aim of promoting an increase in the number of women in managerial positions.

**BRIBERY AND CORRUPTION.** The policy makes it clear that in their contacts with customers and suppliers, where any form of favour is offered, employees must give careful consideration to its implications and purpose. This policy will be introduced in 2009.

**THE WAGE POLICY** clarifies the Group's view of what determines wage formation.



Among other things, the personnel policy defines Holmen's view of leadership. Iñaki Rojo, Carmen Ginés and Oscar García at Holmen's mill in Madrid.

**INTERNAL LABOUR MARKET.** The policy means that all vacancies are advertised internally and the company pays for the relocation to another locality as well as one month's additional salary as a relocation allowance.

**UNION AGREEMENT** between management and the union organisations focuses on health, equality of opportunity and competence.

### Financial development

**GUIDELINES FOR FINANCIAL REPORTS** state the goals of the Group's external financial reports and contain comprehensive guidelines for its internal financial reports.

**THE INFORMATION POLICY** regulates how the company is to manage internal and external information. It follows the recommendations of the Stockholm Stock Exchange.

### Other policies

**PURCHASING POLICY.** Holmen shall apply and maintain sound business ethics and conduct its business in a professional manner. The laws and rules that apply to the purchase of goods and services shall be followed and environmental issues shall be taken into consideration. The policy is being updated in 2009.

**IT SECURITY POLICY.** The policy defines responsibilities and contains guidelines as to how IT security aspects are to be handled.

**LOCAL POLICIES** have been adopted in several areas to meet specific circumstances.

More information about policies:  
[www.holmen.com](http://www.holmen.com)



# Human rights

Holmen is a member of the UN's Global Compact. The Group has thus taken a clear stance on issues that affect human rights, social conditions, the environment and the right to set up unions.

Holmen is a member of the international organisation for Global Compact and also, as of 2009, its Nordic network. The Group thus supports the ten principles listed below.

Holmen examines its activities regularly to determine if there is anything that could conflict with the UN's Declaration on Human Rights. However, there is little risk since all

production takes place in the EU, where such issues are closely regulated. Holmen annually reports the results of the studies to Global Compact.

In 2009 Holmen will again investigate whether any of its major suppliers or customers in risk countries are not complying with the requirements of the Global Compact.

UN Global Compact's ten principles		Comments
Human rights	<b>Companies shall:</b>	
	1. Support and respect protection of internationally proclaimed human rights in the sphere that the company is able to influence.	1–5. <i>Holmen only has production in the EU where these issues are regulated by EU legislation. Major customers and suppliers outside the EU have been surveyed and no suspect cases have been identified.</i>
	2. Make sure that they are not complicit in human rights abuses.	3. <i>EU legislation regulates the question of freedom of association in union cooperation agreements.</i>
	3. Uphold the freedom of association and recognise the right to collective bargaining.	6. <i>Holmen applies the EU's anti-discrimination laws and by means of regular employee surveys discovers whether any form of discrimination has arisen in the Group. Zero tolerance applies. See page 53.</i>
	4. Eliminate all forms of forced labour.	7. <i>Holmen's business requires environmental permits from the authorities, thereby meeting the demands for a precautionary approach.</i>
	5. Eliminate child labour.	8. <i>EU legislation is the cornerstone for the authorities' environmental conditions, which are reviewed regularly. Certified environmental management systems are applied at the mills and in the forestry operations. The forests are also managed in accordance with the PEFC and FSC forestry standards. Energy management systems will be in place at all units as of 2009.</i>
Environment	6. Eliminate discrimination in respect of employment and occupation.	9. <i>Environmental activities and technical development in the environmental area are mainly carried out in association with other companies in the sector. In most cases the results are published in reports and at seminars. Holmen is open to the exchange of information and diffusion of knowledge regarding environmental issues.</i>
	7. Support a precautionary approach to environmental challenges.	10. <i>In 2009 Holmen will introduce a new policy against bribery and corruption that draws attention to the strictness of the legislation in this field. The policy makes it clear that employees must consider very carefully the meaning and purpose of any favours offered in their contacts with customers and suppliers.</i>
	8. Undertake initiatives to promote greater environmental responsibility.	
Corruption	9. Encourage the development and diffusion of environmentally-friendly technologies.	
	10. Combat all forms of corruption, including extortion and bribery.	



## Global Compact

Global Compact is based on:

- The UN Declaration on International Human Rights
- The OECD (Organisation for Economic Co-operation and Development) draws up principles and standards that governments apply to multinational enterprises to enable them to engage in business on a responsible and sustainable basis
- The International Labour Organization's (ILO) declaration on the Fundamental Principles and Rights at Work
- The Rio Declaration on the Environment and Development.

[www.unglobalcompact.org](http://www.unglobalcompact.org)

# Holmen in society



## Stakeholders

Holmen engages in a continual dialogue with its stakeholders. This helps to build up knowledge regarding the demands that are made on the Group and vice versa. Holmen believes this is important as a means of identifying its strengths and weaknesses and for developing its sustainability activities.

Nowadays, Holmen faces increasingly specific demands for sustainability, and parallel to this international company indices are evaluating the Group's sustainability activities. Their object is to make it easier for investors to identify companies with a sound approach to sustainability. Holmen views these developments with favour.

A transparent approach to the company's sustainability process strengthens the Group's brand name. It also helps to generate value for Holmen and its stakeholders. The sections below describe the most important sets of stakeholders, and some of the topics of greatest current interest.

### Shareholders, investors and analysts

Holmen's shareholders expect the company to make effective use of its assets and to earn a healthy return. Investors and analysts follow Holmen closely. It is therefore important to keep these groups well informed about the business.

*Holmen's sustainability and financial information provides a true and fair picture of the company and its business.*

*The Group regards it as natural for the financial, environmental and social aspects of its*

*business to be scrutinised closely. The Group takes part in surveys and interviews in these areas and sees them as a valuable means of identifying strengths and weaknesses.*

#### Current issues

**SUSTAINABILITY DEMANDS.** Some investors have become increasingly demanding when it comes to transparent information on sustainability. In 2008, Holmen was judged favourably by several independent analysts for its sustainability reporting.

## Customers and business partners

Holmen's customers place demands on the company with regard to its products and services, sound business practice and its handling of important environmental issues. Holmen makes the same demands on its suppliers of input materials and services.

*Holmen's aim is to develop long-term relationships with its business partners. Holmen uses surveys to monitor their perception of the Group.*

### Current issues

**ENERGY AND CLIMATE.** Holmen has established targets for how it is to reduce its consumption of fossil fuels. It is also exploring the potential for wind power on its lands. Peat cutting will start on a trial basis in 2009.

**ACTIVE FORESTRY** has a beneficial effect on the climate as carbon dioxide is captured and coal is stored by growing trees. The main impact of forests on the climate is through the use of wood instead of steel and concrete to construct buildings and of biofuel to replace oil. It is estimated that the rate of growth in Holmen's forests can be raised by 25 per cent within 30 years, which will also increase the production of biofuel.

**FOREST ENVIRONMENT.** Holmen's forestry is certified in accordance with the PEFC and FSC forestry standards. The Group is also taking active measures to develop forestry practice in its forests.

**CHAIN OF CUSTODY FOR IMPORTED WOOD.** Holmen has developed chain-of-custody systems and can trace all its wood back to its origin.

## Official bodies

Official bodies expect to receive correct and regular information about the company.

*Holmen keeps government authorities informed about the company's progress.*

### Current issues

**CONTAMINATION OF GROUND.** The ground on the site of the discontinued Wargön Mill will be inspected in 2009. Ground contamination has been discovered at the sites of some of the Group's discontinued units. Ground tests and measures are being carried out in consultation with the environmental authorities.

**PERMIT APPLICATIONS.** The Environmental Court is expected to make its decision on the application for a permit for Holmen's new sawmill at Braviken in 2009.



In April Holmen Skog invited city-dwellers who own forestlands in the north of Sweden to a much appreciated information meeting at Holmen's head office in Stockholm.

## Employees

Employees, trade unions and prospective employees expect the company to have a sound personnel policy and to apply it, to provide a healthy work environment and to constantly improve working conditions.

*Holmen aims to be an attractive employer by offering interesting jobs that provide opportunities to develop.*

*Holmen carries out employee surveys every other year to obtain a basis for making improvements.*

### Current issues

**MILL AND MACHINE CLOSURES.** Around 580 employees will lose their jobs as a result of the closure of the Wargön Mill and a paper machine at Hallsta.

Each and every one of them will be offered a personal coach to support their efforts to find a new job. To facilitate the process, Holmen is offering early retirement, severance pay and training.

**OCCUPATIONAL ACCIDENTS.** All units use local action plans in their efforts to reduce occupational accidents.

**LEADERSHIP.** The managerial shortcomings that have been identified by means of employee surveys are being dealt with in management development programmes that will take place in 2009.

## General public and leaders of opinion

Holmen's forestry and its production activities have an impact on the public and other members of the community. The media, and environmental lobby groups are constantly probing Holmen.

*Holmen therefore adopts a proactive approach to keeping the public and these group well informed about its business. See also pages 22–23.*

## Schools and universities

School pupils and university students expect to receive correct information about Holmen's business and its role as a prospective workplace.

*Holmen arranges various activities for schools and universities. The company also takes on graduate researchers and offers a wide range of summer jobs.*



## Local importance and involvement

Holmen's business generates numerous jobs in those communities where the company is active. The closure of the Vargön Mill and of a paper machine in Hallsta will have consequences for the rest of the labour market in the communities affected.



Close to every fourth job in Hudiksvall is generated by Holmen's business.

**FOR SOME YEARS, HOLMEN HAS BEEN MEASURING** the effect the company has on local job markets. Holmen Skog's role as a creator of jobs in local communities where it is active is also measured. On top of this, the income earned by forest-owners on their sales of wood to Holmen is also converted into jobs.

Holmen has a total of around 3 500 employees in Sweden. However, the total number of jobs generated by the Group is far higher than that. Like ripples on the water, more jobs are created at suppliers and through the purchasing power that these jobs create elsewhere in the business community and in public services.

The studies carried out by the Group show that the average Holmen employee generates a further 2.5 jobs elsewhere in the community. If one also includes the Group staffs and Holmen Energi, the Group generates some 12 500 jobs in Sweden, which is 300 fewer than in the previous year.

The redundancies at Vargön and Hallstavik will be made gradually and will not make their full impact on the statistics before 2011.

### Cutbacks at Hallsta and Vargön

For small communities such as Hallstavik and Vargön, closures of the size made by Holmen have a major impact. Together with the Employment Security Council and Aventus, Holmen has, therefore, offered support to those who have lost their jobs to find new ones. All those affected are being given personal coaching to help them in their search for a new job. Holmen has also contributed considerable sums to company pensions and training grants.

At Vargön Holmen is active in a group, together with the Västra Götaland region, Vänersborg municipality and the town of Trollhättan. Some 80 proposals for future business activities at the Vargön site have been drawn up, of which several are believed to be viable.

### Local involvement

As a major employer Holmen is an active citizen in many communities, for example it is involved in different ways, such as representation on research councils and municipal marketing companies as well as awarding scholarships. In several communities surplus heat from the mills is distributed to the municipal district heating systems. Holmen also operates ports and lets housing. Waste products from the mills are used to provide land cover and as a roadbuilding material.

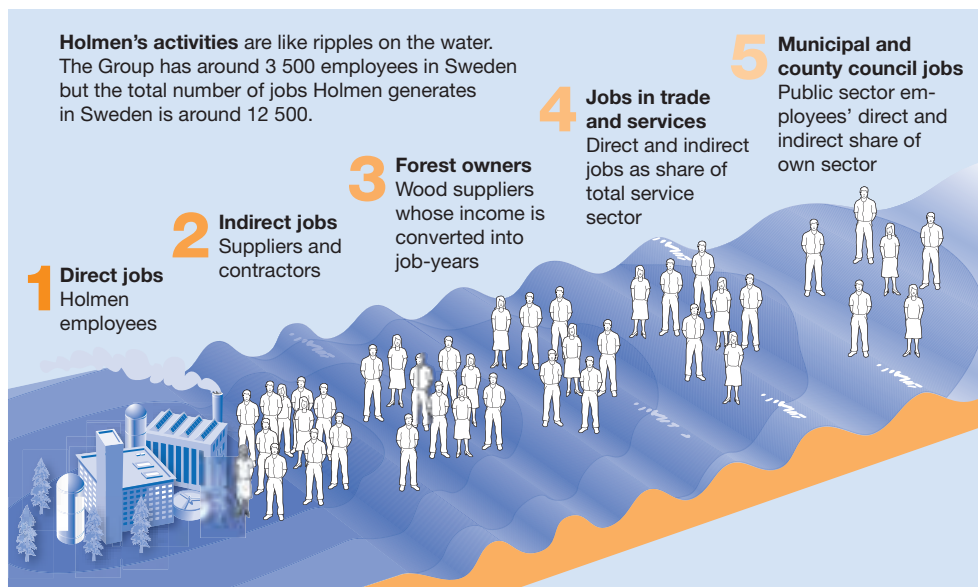
### Holmen's social impact surveys

are performed by Incedo AB in Örnsköldsvik, in close co-operation with Holmen and the respective municipality. Detailed descriptions of Holmen's social impact surveys are available on [www.holmen.com](http://www.holmen.com)

### Holmen creates numerous jobs in the community

No. of annual job opportunities 2008	Holmen Skog	Norrköping	Hudiksvall	Hallstavik*	Workington
Direct jobs	395	790	1 170	897	472
Indirect jobs and forest owners	1 846	220	719	114	243
<b>Total direct and indirect jobs</b>	<b>2 241</b>	<b>1 010</b>	<b>1 889</b>	<b>1 011</b>	<b>715</b>
Jobs in trade and services	813	492	592	217	398
<b>Total including trade and services</b>	<b>3 054</b>	<b>1 502</b>	<b>2 481</b>	<b>1 228</b>	<b>1 113</b>
Municipal and county council jobs	963	350	863	287	216
Public sector employees' share of service industry	339	172	282	69	122
Public sector employees' direct and indirect share of own sector	399	121	398	83	66
<b>Total</b>	<b>4 755</b>	<b>2 145</b>	<b>4 024</b>	<b>1 667</b>	<b>1 517</b>
Share of annual jobs in each town, %	–	4	24	56	5

\* Häverö-Singö, Edebo and Ununge parishes.



## Sponsoring

Holmen supports MODO Hockey and the IFK Norrköping football team, as well as the disabled athlete Jonas Jacobsson. Holmen also sponsors a number of local sports associations on a more modest scale.

The Group is also involved in several forms of cultural and humane sponsoring.

## Other contacts with the community

**CONSULTATION WITH THE SAMI PEOPLE.** Much of Holmen's forestland is located in northern Sweden in areas where Sami villages have winter feeding grounds for their reindeer. Holmen has regular consultations with the Sami villages with a view to arriving at solutions that best satisfy both parties' needs for land.

## Foundations associated with Holmen

**The Kempe Foundations** support research and education in the natural sciences in Västernorrland, Västerbotten and Norrbotten. In 2008, the Foundations donated MSEK 82, most of it to Umeå University, the Luleå Institute of Technology, the National University of Agricultural Sciences in Umeå, and the University of Mid Sweden and related research in Örnsköldsvik.

[www.kempe.com](http://www.kempe.com)

## Karl Erik Önnesjö

**Foundation.** In 2005 a professorship in paper electronics was instituted at the University of Linköping's Norrköping Campus. It will receive funding of MSEK 1 per year for 15 years from the Foundation.

[www.onnesjostiftelsen.se](http://www.onnesjostiftelsen.se)

# Social values of the forest

Forests possess significant social values, which numerous people enjoy in their leisure time. All of Sweden's forests are open to the public at large through the Swedish system of legal right of access. In the late summer and autumn they are filled with people picking all the berries and mushrooms they can carry home with them.

**Hunting** is to all intents and purposes a popular movement – in all, there are no less than 330 000 people who go hunting in Sweden, 5 500 of them are registered to hunt on Holmen's land. Each year they fell 3 500 moose that provide some 500 tonnes of meat when slaughtered and have a utility value of MSEK 25, at a low estimate.

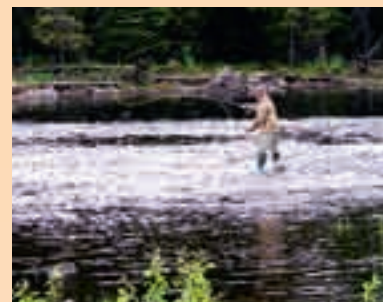
Holmen welcomes those who hunt on its land and supports local hunting interests in various ways. For instance, in Härjedalen, Holmen Skog regularly invites women and young people, who under professional guidance are invited to hunt on the Group's land. The interest in these hunting events has been tremendous and has resulted in an increase in the number of registered hunters on the company's land.

**Fishing** takes place in lakes and rivers on the Group's land. Nobody knows how many people go fishing, but they outnumber hunters by a wide margin. One in four Swedes claims to go fishing at least once a year.

**Health and well-being.** Recent research demonstrates beyond any doubt that forests have a beneficial effect on individuals' physical and mental health. Children and adults improve their mobility and ability to learn by spending time in nature. Consequently, many municipalities have taken steps to make local forests more accessible to the public.

**Forests, nature and young people.** Few young people today have any natural contact with a "forest". Growing numbers live in towns and built-up areas far away from forests and nature, and it is, therefore, important to highlight for them the recreational values that forests and nature can offer.

Holmen participates in the nationwide programme run by *the Forest in School* (Skogen i Skolan) organisation, which is active throughout the country. Holmen contributes by arranging study trips to forests and takes part in *the Forest Days* (Skogens Dagar) that are regularly held at a number of places.



**Eco-tourism** is a growing sector in Sweden, one that attracts many visitors from the densely populated urban regions on the Continent. Holmen has laid out an extensive network of roads in its forests, which are also open to the general public.

**Wetlands.** Holmen has been taking active measures with the Swedish Wetlands Fund since the end of the 1990s to restore wetlands. To date, thirty wetland areas have been restored. The primary purpose is to benefit the birds that depend on wetlands for breeding. But wetlands also fulfil a social function for birdwatchers, and Holmen has laid out tracks, built lookout towers and set up signboards on many of them.

# Raw materials



## Company forests – an increasingly important resource

The greater the efforts made to overcome the climate problem the greater is society's need for renewable raw materials. With steadily increasing growth, Holmen's forests have an important role in this development. But there are several more reasons why Holmen sees its forests as a resource of growing strategic importance.



Göran Johansson has responsibility for the management of Holmen's forests in the vicinity of Finspång.

### **The climate creates opportunities ...**

In the past century the growth in Holmen's forests has exceeded annual harvesting by a wide margin. In the past decade the average level of harvesting has been around 82 per cent of the growth.

As a result of society's climate aims, bioenergy has in recent years become an increasingly important forest product. Mainly it is a question of wood in the form of the branches and treetops that used to be left in the forest but which today has become a valuable commodity.

The trade in biofuel is also growing internationally. Flows in the form of pellets and chips are replacing oil flows to an increasing extent.

Holmen is participating in this development and extracting larger volumes of biofuel as demand grows. The main customers for the biofuel range are municipal district heating plants in Sweden.

### **.... but also involves risks**

A warmer climate will further stimulate growth in the forests. This also means that there will be a greater risk of storm-fellings and insect attack. However, at present it is impossible to judge the extent of the threat.

### **Stable raw material base**

Holmen is around 60 per cent self-sufficient in wood. Even though most of the Group's forests are located in northern Sweden, they also represent a strategic resource for Holmen's mills in southern and central Sweden.

The wood market around the Baltic Sea is currently characterised by uncertainty following Russia's earlier announcement firstly of a drastic increase in its wood duties and then of a postponement to the decision. A rise to the levels proposed would, in principle, have brought all exports of wood from Russia



to a halt. This would have a serious, indirect impact on the Swedish wood market. In such a situation Holmen, with its forests in Norrland, has a useful buffer stock of wood for its mills in southern and central Sweden.

### Biological production a future strength ...

Forests are a biological production apparatus that can produce valuable wood and energy with the aid of solar energy, carbon dioxide, and water - forever. Forests and their products thus have a guaranteed place in tomorrow's sustainable society. Awareness of

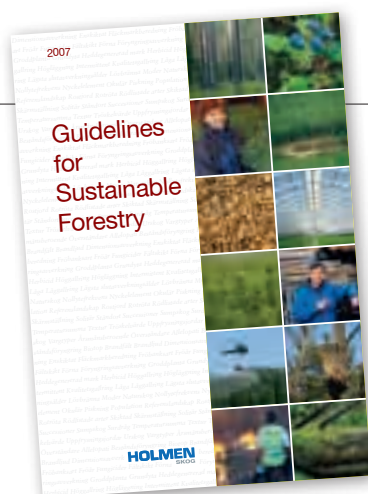
this and the growing scarcity of finite resources will strengthen the position of forest products.

### ... but stiffer competition for wood also involves risks

The need for forest raw materials is growing in Sweden as a result of the rapidly rising demand for biofuel. As a result of political decisions and controls biofuel installations have a very high earning potential. This means that industrial wood is sometimes used as fuel. Holmen considers that wood should be used in the right order; first as products and then, once they have served their purpose, as excellent biofuels.

### One fifth of the forest is excluded

Some 20 per cent of Holmen's forested land is excluded from forestry activities. Some five per cent of the productive forestland is set aside for nature conservation purposes. An equally large acreage in the form of border zones alongside watercourses, and around marshes and lakes as well as small biotopes is to be left untouched when the forests are harvested. On top of this ten per cent or so of low-productive forests are not cultivated.



## Growth increases in Holmen's forests

Given the way Holmen's forests have been managed for some time the total stocks of wood in them are increasing steadily. To this should be added the effects of the new silviculture programme that was first applied in 2006, which means that the growth rate in the Group's forests is estimated to rise by some 25 per cent within the next 30 years. All in all, therefore, it will eventually be possible to significantly raise the volume of wood and biofuel extracted.

*Holmen's Guidelines for Sustainable Forestry*

contains detailed directions as to how the forests can be managed effectively and in an eco-friendly way. Growth in the forests will be increased by applying a number of well-tested methods in a more effective way. It is the overall approach that will produce the real benefits. Some of the measures, such as fertilising, have an effect in a very short space of time while others are more long-term and result in higher growth only after 30 years or thereabouts.

## Development of nature conservation methods

Together with forest researchers Holmen is active in developing nature conservation methods for forests.

Tomorrow's forestry with its more intensive silviculture, shorter life cycles and more fertilisation is expected to put pressure on species whose habitat is in the forest. Holmen has therefore developed methods on a pilot scale that have the potential to provide better conditions for many species living in the forest habitat.

Natural values are largely associated with dead and dying trees. By actively accelerating the decomposition process in unharvested forests it is possible to increase their natural value. For example, it is possible to damage selected trees and lower their vitality. The point of this is to imitate what happens in a virgin forest – where these processes take far longer.

Holmen demonstrated these methods during a forest excursion in August 2008. There was a great deal of interest from both forest researchers and sector representatives.

## More energy-efficient transportation

Holmen expects to reduce energy consumption for harvesting and wood transportation by 15 per cent within the next few years.

This will involve a variety of measures. Among other things, the new *EI-Forest* hybrid electric harvester is on the brink of its commercial breakthrough. Holmen has taken an active role in the development of this machine which reduces fuel consumption by 30–50 per cent when used for transporting wood in the forests. Holmen's first *EI-Forest* will be delivered in 2010.

Holmen has also taken an initiative for a new forest machine concept, *Drivaren*, a machine that both harvests and transports wood. It uses much less fuel than a conventional two-machine system.

A new type of truck that can take four stacks of wood instead of three will soon be available on the market. Training drivers in "eco-driving" provides further scope for reducing the trucks' fuel consumption.

Holmen believes that there are bright prospects for achieving the forest industry's goal to reduce energy consumption for harvesting and transportation of wood by 20 per cent by 2020.

# Wood procurement

Holmen owns one million hectares of productive forestland in Sweden. Harvesting in Holmen's forests corresponds to around 60 per cent of the annual wood requirements of the Group's Swedish mills.

## Environmental certification in Holmen Skog

PEFC – silviculture  
PEFC – group certification  
PEFC – traceability  
FSC – silviculture  
FSC – group certification  
FSC – traceability  
FSC – Controlled wood  
ISO 14001  
See also page 43.

## Traceability (Chain of Custody)

Holmen Skog, whose traceability system has been certified in accordance with FSC's Controlled Wood standard and PEFC's Non-controversial wood traceability standard, procures all wood for Holmen's mills.

Iggesunds Bruk, Iggesund Sawmill, and Hallsta each have their own chain of custody certification (FSC and PEFC). Braviken and Workington are traceability certified in accordance with FSC.

Hallsta and Braviken have joint certification for FSC Mixed.

## Wood procurement in Sweden

Most of Holmen's forests are located in northern Sweden, while its mills are in the southern and central parts of the country. This means that the mills largely source their wood by purchase from private forest-owners in those parts of the country.

The wood from the Norrland forests is sold to sawmills and pulp/paper mills in the region. As competition stiffens on the Swedish wood market, wood from Norrland is transported to the Group's mills in central Sweden.

Holmen's Swedish mills used 4.4 million cubic metres of wood in 2008.

The volume harvested in Holmen's forests was 2.6 million cubic metres, which corresponds to more than 60 per cent of the Group's wood requirements.

### ENVIRONMENTAL CERTIFICATION IN SWEDEN.

All of Sweden's large forest companies, and some private forest owners, are certified in accordance with FSC. Holmen and many other private forest owners are also certified in accordance with PEFC.

Holmen offers its wood suppliers group certification in accordance with PEFC and FSC. Over half of Sweden's forests are now certified.

## Imports

In 2008 Holmen imported 0.3 million cubic metres of wood, most of which went to Iggesund Bruk. Lesser volumes also went to Hallsta and external buyers.

The bulk of Holmen's imported wood comes from Estonia, while some quantities are imported from Latvia and Russia.

## Wood procurement in Estonia

Holmen's wholly owned subsidiary Holmen Mets buys and ships wood to its own terminals. Almost all the wood is bought from private forest-owners. Holmen Skog's guidelines for wood procurement are complied with.



**HOLMEN METS** has been certified in accordance with FSC's standard for Controlled Wood since 2006 and has procedures and systems for tracing all wood to its origins. Smartwood, an FSC-accredited quality assurance auditor, verifies the system.

Holmen considers that the systems for traceability now in use in Estonia satisfy stringent demands. The return of land that was confiscated by the state after World War II has now mostly been completed. This means that there are now fewer forests whose ownership is unclear, which has greatly strengthened the supervisory role of the authorities.

### ENVIRONMENTAL CERTIFICATION IN ESTONIA.

State-owned forests, which account for around half the total area of forestland in Estonia, are certified in accordance with FSC. Certified, privately owned forests are relatively small in extent.

## Wood procurement in Great Britain

Iggesund Forestry procures annually around 0.4 million cubic metres of spruce wood and sawmill chips for the board mill in Workington. Most of the wood comes from state-owned forests, mainly in south west Scotland and northern England. A small amount is sourced from private forest-owners. Holmen does not own any forests in Great Britain.

### ENVIRONMENTAL CERTIFICATION IN GREAT

**BRITAIN.** All state-owned forests and most of the privately owned ones are certified in accordance with FSC.

## All the wood used by Holmen can be traced back to its origin



**Holmen's procurement guidelines mean that all the wood purchased must meet traceability requirements in accordance with PEFC and FSC.**

### Traceability, Sweden

All wood can be traced to the place where it was harvested. Each batch of wood is given an ID number, which accompanies it from the harvesting site until it passes into Holmen's possession. The ID number accompanies the wood even if it changes owner on the way. The system is administered by SDC, a third party organisation that administers all wood reporting in Sweden.

### Traceability, Estonia

The procurement of wood by Holmen Mets, has been certified in respect of traceability according to FSC's standards for Controlled Wood since 2006. All wood that is harvested and transported in Estonia is accompanied by a waybill containing information on where the wood was harvested, who owns the forest it comes from and who harvested it. The authorities continually monitor the system to ensure its correct application.

FSC Controlled Wood means that the wood:

- has not been felled illegally
- has not been felled in conflict with the interests of indigenous peoples
- has not come from controversial sources
- has not been genetically modified
- has not come from natural forests which have been converted into plantations.

### Traceability, Russia

In Russia the authorities also have the ability to control the origin of all wood. Traceability has improved in recent years. By comparison with Estonia Holmen Skog's imports of wood from Russia are small. In recent years wood has mainly been purchased from large companies,



whose forestry and wood trading are, or are about to be FSC certified. These companies have long-term contracts to harvest on state-owned land and do not buy wood from other forests. This means that the risk of Holmen buying illegally harvested wood is limited.

### Holmen's guidelines for purchasing wood

If the details provided on origin are incorrect this entitles Holmen to cancel a purchase without paying the vendor any compensation.

### Legal requirements, Sweden

All harvesting of stands larger than half a hectare in area must be reported to the National Board of Forestry. The report must also specify how the land is to be re-afforested. The National Board of Forestry monitors compliance with these requirements.

### Legal requirements, import countries

In all countries from which Holmen imports wood there are authorities, which, like the Swedish ones, monitor harvesting and re-planting.

**More information about forests and wood:**  
All the facts, page 61 and [www.holmen.com](http://www.holmen.com)



**Rein Kullik measures wood at Kunda in Estonia.**

### Holmen's Guidelines for purchasing wood

Holmen has been applying its Guidelines for purchasing wood since 1998. These Guidelines include a definition of the types of wood the Group does not buy.

[www.holmenskog.com](http://www.holmenskog.com)



# Recovered paper



## Producer responsibility for newsprint

A law on producer responsibility for recovered paper was introduced in Sweden in 1994. This act regulates the responsibility of newsprint manufacturers for collecting and dealing with recovered paper. The target to reach a collection rate of 75 per cent has been met for many years. The figure for 2007 was 85 per cent. A joint venture company, Pressretur, has been set up by the largest newsprint producers in Sweden, including Holmen, to handle the practical aspects of producer responsibility.

## Good for many types of paper – but not all

Recovered paper is a valuable raw material for newsprint, printing paper, direct advertising, tissue paper, corrugated board and certain types of packaging board.

However, recovered paper is not suitable as a raw material for high quality paperboard or for packaging that has direct contact with foodstuffs for which cleanliness requirements are much higher.

Holmen uses recovered paper in the form of collected newspapers, magazines and directories at its mills in Braviken and Madrid.

At Braviken recovered paper is used in the production of newsprint and directory paper. The admixture rate varies between 30 and 60 per cent. In Madrid production is based solely on recovered paper.

Recovered paper was also used at Hallsta until the end of 2008 when one of the paper machines was closed down.

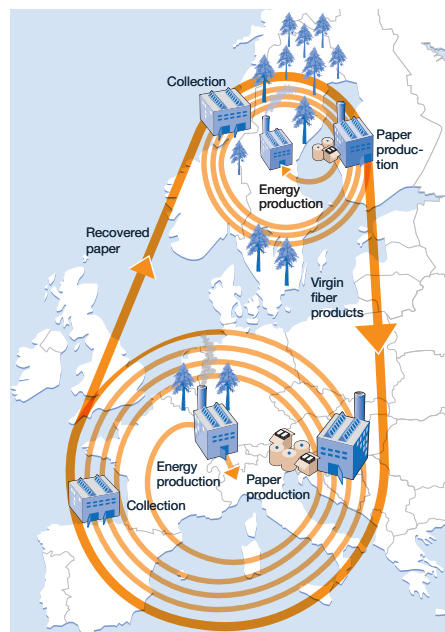
**PROCUREMENT, SWEDEN.** In 2008 Holmen's part owned company PÅAB collected paper. Just over half the volume comes from within the country and the rest is imported from Great Britain, Norway and Denmark. The paper from Great Britain is shipped on their return leg by the vessels used to ship paper products to Great Britain. The closure of the recovered paper unit at Hallsta means that the need for imports has declined.

**PROCUREMENT, SPAIN.** Much of the recovered paper used at the mill in Madrid comes from CARPA, a wholly owned paper collection company, and from part owned companies. Most of it is sourced in Spain with some volumes also being imported from Portugal, southern France and Great Britain.

## Recovered paper collection

In Sweden 71 per cent of all the paper and board used in the country is recovered. In Spain the corresponding figure is 64 per cent and for Europe as a whole it is 66 per cent. All these figures relate to 2007, the latest year for which comprehensive statistics are available.

As the supply of recovered paper in Sweden does not cover the volume required 0.5



The Nordic region is an engine driving Europe's increasingly self-sufficient fibre system. It must be continually topped up with fresh fibre from the Nordic forests so that the quality can be maintained. Holmen's Swedish mills form part of the European flow of fresh fibre and recovered paper.

million tonnes are imported. In Spain around 0.8 million tonnes are imported.

In 2007 9.6 million tonnes of recovered paper were exported from Europe, mainly to Asian countries, especially China. This is an increase of 16 per cent in relation to 2006.

## Chain of Custody certification

In 2008 Braviken obtained chain of custody certification in accordance with FSC Mixed for the manufacture of printing paper based on both virgin fibre and recovered paper. The process of gaining such certification is underway at the Madrid mill, where production is based entirely on recovered paper.

## Facts about recovered paper

### Recovered paper collection 2007\*

Share of collected paper (paper/board) in relation to total consumption in the area.

	Share, %	Million tonnes
Sweden	71.4	1.6
Spain	63.9	4.6
Europe	66.1	58.2

\* The latest year for which comprehensive statistics are available.

### Use of recovered paper 2007\*

Share of recovered paper (paper/board) in relation to total amount of paper/board produced in the area and at Holmen Paper.

	Share, %	Million tonnes
Sweden	16.8	2.0
Spain	84.6	5.7
Europe (Cepi)	48.4	49.6
Holmen Paper (2008)	49.2	1.0

### Recovered paper at Holmen

Use, 1 000 tonnes

	2008	2007	2006
Braviken	370	373	372
Hallsta	70	105	106
Madrid	559	562	547
Holmen, total	999	1 040	1 025

# Water

The volume of water used in production is being steadily reduced by the adoption of increasingly efficient methods and equipment. As of 2010 the mill in Madrid will only use recycled water.

## Supply of water

In Sweden and Great Britain there are ample supplies of water. Precipitation is high, which means that rivers and streams are well filled throughout the year.

**MADRID.** Holmen's mill in Madrid is different to the Group's other mills in that it is not located close to any watercourse. Municipal fresh water is therefore used in the process. Despite the dry climate there are normally ample supplies of water in the Madrid area. Requirements are met via a system of surface water reservoirs that draw their water from small rivers and streams.

## How Holmen tackles water issues

Holmen monitors the status of recipients regularly in close cooperation with the environmental authorities. At each mill there are local environmental targets for the use of water and effluent. The conditions in the permits regarding type of effluent treatment are determined on the basis of the unique water conditions in the vicinity of each mill.

**MADRID.** Following a series of efficiency measures, the mill's specific water consumption is now among the lowest in Europe. To further reduce the need for fresh water, the mill, in co-operation with the water supplier, has developed advanced methods to use treated municipal effluent.

In June 2008 an agreement was signed with the water supplier and the state of Madrid whereby the mill, starting in 2010, would replace all fresh water in the processes with recycled water, "recovered water", which the water supplier has first treated to the high standards required. This will enable fresh water corresponding to the annual requirements of 80 000 households to be replaced.

The mill in Madrid will be the first in Europe to produce paper based 100 per cent on recovered paper using 100 per cent recycled water.

In 2008 the prospects of further reducing water consumption were studied together with a group of scientists from one of Madrid's universities.



**Holmen's mill in Madrid will be the first in Europe to produce paper based on 100 per cent recovered paper with 100 per cent recycled water. Alvaro Sanchez, Technical director, played an active role in the development of the new treatment technique.**

**IGGESUNDS BRUK.** A plant for chemical treatment of effluent is being constructed to ensure a healthy status in the water environment outside the mill. This means that the 30-year-old treatment plant will now be complemented with an additional treatment stage.

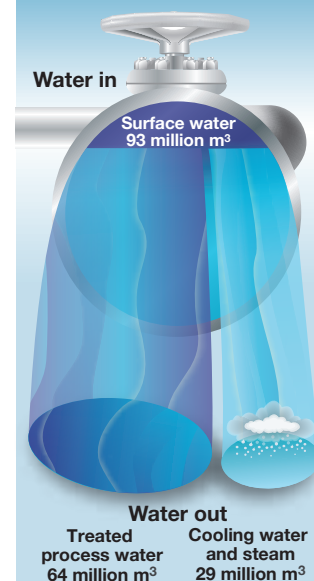
## Legislative requirements

The EU's Water Directive is being implemented. Its target is to bring all water in Europe up to a healthy status by no later than 2015. It also requires the sustainable use of water to be guaranteed. This may mean that the industry will face new demands for measures to ensure that all water courses attain a good water quality.

The Group is active in local water management associations, which are expected to play a key role when the Directive is implemented.

Holmen is well placed to satisfy the requirements of the EU Water Directive thanks to the measures that have been taken to reduce water consumption and effluent.

## Water – an important raw material for Holmen



Holmen uses water to transport and wash fibres at the mills. Water is also used for cooling, to produce steam, cleaning, sealing and watering pulpwood and timber.

The water used is almost 100 per cent surface water drawn from lakes and rivers. Holmen's specific water consumption (cubic metres of water per tonne of end product) has declined by some 20 per cent during the past decade.

Water is recycled many times over in a pulp and paper mill. Effluent from the process is treated in several stages before being discharged back into the recipient. Holmen's mills use various combinations of mechanical, biological and chemical treatment.

Water flows are also used to generate electricity at Holmen's 23 wholly and partly owned hydro power stations.

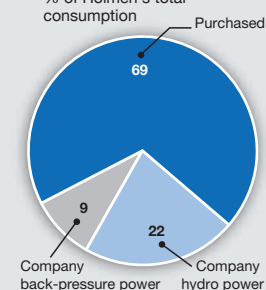
**Descriptions** of the aqueous environment in the vicinity of Holmen's mills are available at: [www.holmen.com](http://www.holmen.com)

# Energy

## Energy supply in Holmen 2008

### Electric energy

% of Holmen's total consumption



Holmen owns, wholly or partly, 23 hydro power stations. Back-pressure power is produced at the mills. The electricity that is purchased in Sweden is mainly produced at hydro or nuclear power stations.

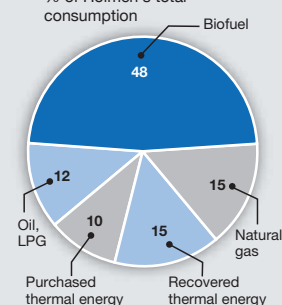
### Electric energy

% of Holmen's total consumption

	2008	07	06
Purchased electricity	69	69	70
Company hydro power	22	23	18
Company back-pressure power	9	8	12

### Thermal energy

% of Holmen's total consumption



At Iggesunds Bruk thermal energy is produced by the incineration of wood-containing liquors. At Hallsta and Braviken surplus heat is recovered from the TMP-process. Thermal energy is also generated through burning bark. Natural gas is used at Workington and Madrid.

### Thermal energy

% of Holmen's total consumption

	2008	2007	2006
Biofuel	48	46	45
Recovered thermal energy	15	14	14
Natural gas	15	14	15
Oil, LPG	12	16	16
Purchased thermal energy	10	10	10

Holmen uses large amounts of electricity. It is mainly the production of thermo-mechanical pulp (TMP) that is electricity intensive. Having access to electricity at competitive prices is therefore one of the key factors affecting Holmen's development.

As energy costs rise and society becomes more aware of the connection between energy and the climate, energy issues are taking on growing importance in the Group. It is of the utmost importance for Holmen's long-term profitability to keep energy consumption and costs as low as possible.

### Company-generated electricity covers one-third of requirements...

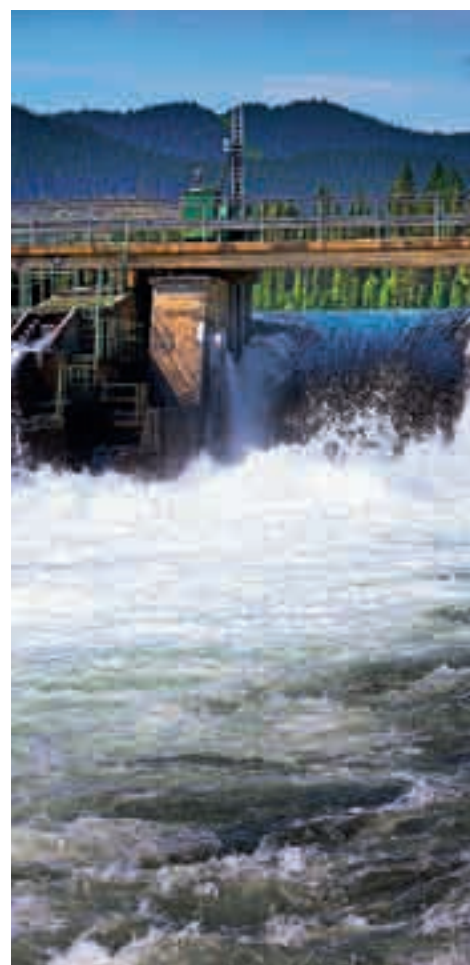
Holmen owns, wholly or partly, 23 hydro power stations located on the Umeälven, Faxälven, Gideälven, Iggesundsån, Ljusnan and Motala Ström rivers. These normally produce 25–30 per cent of the Group's total electric energy requirements. Combined with the company's own back pressure power production, this means that Holmen is approximately one-third self-sufficient in electricity. In 2008, the relative output of company-generated hydro power was one per cent higher than in a normal year.

### ...the rest is purchased

Most of the electricity needed at Holmen's mills is purchased externally, which makes the Group one of Sweden's largest buyers of electricity. In order to control the risks associated with this, Holmen hedges prices by entering into long-term agreements with electricity suppliers. The prices of 100 per cent of its purchased electricity in Sweden have been hedged up to 2012 and, for the following years up until 2015, 85 per cent has been hedged.

### Bioenergy covers half of thermal energy requirements

Biofuel, mainly in the form of bark and wood-containing liquors from the sulphate pulp process, meets approximately half of Holmen's thermal energy requirements. Combined with the heat recovered from the TMP-process this means that almost two-thirds of the thermal energy needed is produced internally. The new pulp line at Braviken means that the amount of thermal energy



Bågede in north-west Jämtland – one of Holmen's wholly owned hydro power plants.

recovered has increased. The rest of the heat is either produced by the mills using natural gas, oil, LPG, or purchased from external suppliers.

### Surplus heat delivered to local municipalities

Iggesunds Bruk and Hallsta are located close to built-up communities. The surplus thermal energy at these units is delivered to the municipal district heating networks in Iggesund and Hallstavik.



# Holmen's approach to energy issues

## More energy-efficient production

In the autumn of 2008 Holmen Paper started a new line for energy-efficient production of thermo-mechanical pulp at Braviken. The unit will reduce energy consumption by some 25 per cent in relation to the previous line. The investment cost amounted to some MSEK 500, of which the Swedish Energy Agency contributed MSEK 40.

## Oil to be phased out

Measures have been taken at Hallsta to reduce the use of oil by just over 20 per cent. Since 2005 the oil requirement has been halved.

Plans are in hand to convert the oil-fired boilers at Braviken to biofuel or to replace them with a new boiler. Eventually this means the mill will use no oil.

Iggesunds Bruk is also making investments that will reduce oil consumption. It is expected that by the end of 2009 the mill's oil requirement will have decreased by 75 per cent in relation to 2005.

## More company hydro power

Holmen is building a new and more efficient hydro power station on the river Iggesund, where it will replace three old ones when it comes into production in 2009.

The Group is also exploring the possibility of making careful use of undeveloped water-fall rights.

## Higher share of internally generated energy

Holmen has an explicit goal of raising the share of internally generated energy. This involves making more efficient use of energy and greater use of waste heat, as well as increasing the relative use of bioenergy.

## Energy management systems

The Group's Swedish mills have certified energy management systems. Workington has been operating in accordance with a certifiable energy management system since the start of 2008, while Madrid will introduce a certified management system during the course of 2009.

## Preparations for wind power

Preliminary studies into the construction of wind parks on Holmen's land outside Örnsköldsvik and in the vicinity of Hallstavik and Norrköping are underway. All the sites being



A new hydro power plant is being constructed at Iggesund to replace three old ones.

studied are on forestland. If the outcome of the studies is positive, the intention is to build relatively large wind parks on these sites.

## More biofuel

Holmen is successively extracting more bio-fuel from its forests and becoming more active as a buyer and a seller on the biofuel market.

Given the way that Holmen has been managing its forests for some time the total stocks of wood they contain are increasing. By applying further measures to stimulate growth it will eventually be possible to significantly raise the volumes of wood and biofuel extracted.

## Peat land

Holmen is investigating the possibility of harvesting peat on the Group's land. To gain experience peat cutting will begin on land near to Örnsköldsvik in 2009.

## Industry-wide measures

In association with some of Sweden's other electricity-intensive companies Holmen is a member of BasEl i Sverige AB, which is engaged in increasing the supply of electricity at competitive prices.

Within the framework of BasEl's wind park project, VindIn, one of the first wind parks is being developed at Skutskär and will come into operation at the end of 2009.

Holmen and four other companies have begun discussions on the possibility of building a nuclear power station together with an energy company.

## Different paper – different energy requirements

**The manufacture of printing paper requires considerable amounts of energy. In return, the yield from the wood is high – almost 100 per cent. In the production of paperboard using the sulphate method half of the wood is used while the rest becomes a valuable biofuel.**

**Sulphate pulp** is produced at Iggesund's Bruk. The wood is cooked in liquor, which dissolves it. The cellulose fibres are released whole and undamaged and with all their strength. Around half of the content in the wood is cellulose fibre, which can be turned into paper. The rest of the wood substances are used as biofuel.

**Mechanical pulp** is produced at Hallsta and Braviken (both TMP), and at Workington (RMP). The wood is ground mechanically in refiners. As these require a great deal of energy, these mills are heavy consumers of electricity. In return, the entire content of the wood can be used. The heat generated in the refiners is recovered and used elsewhere in the process. Bark and other wood residues are used as bioenergy.

**De-inked pulp (DIP)** made from recovered paper is an excellent raw material for newsprint. The process at the Madrid mill is based entirely on DIP. At Braviken DIP accounts for 40 per cent of the raw material.

In contrast to the production of sulphate or mechanical pulp, no surplus heat is generated, nor is there any bark or wood residues. External energy sources are therefore required.



## Natural raw materials

Holmen's business is based on wood, a natural and climate-neutral raw material that can be processed into products that can be recovered either as material or as energy. As the analysis on the following pages shows, Holmen's forests and products have a positive impact on the climate.

### Research on carbon dioxide/Facts

Much of the information presented on this and the following pages is taken from the Lustra research programme, which focused on the role of forests and forestlands in the emission of greenhouse gases.

**Lustra**, which came to a conclusion in 2007 after eight years, was a joint project involving numerous scientists and post-graduate researchers from a number of Swedish universities and colleges.

[www.mistra.org/lustra](http://www.mistra.org/lustra)

The climate has become a key issue on the global agenda. In order to slow down the ongoing changes in the world's climate carbon dioxide emissions and other greenhouse gases must stabilise at their current level and eventually fall. In December 2008 the EU adopted specific climate goals for 2020 (see page 36).

**THE CARBON CYCLE ON THE PLANET** is complicated. If the emission and fixation of carbon dioxide into and from the atmosphere were equal there would be no impact on the climate. However, if new amounts of carbon dioxide collect in the atmosphere as a result of the combustion of fossil fuels such as coal and oil the conditions change; it becomes hotter and weather patterns change.

The amount of carbon dioxide in the atmosphere also increases as a result of felling trees without replacing them, or by turning forests into agricultural land.

**EFFICIENT FORESTRY** has a positive impact on the environment. For climatic reasons it is best to cultivate forests actively, produce plenty of wood and manufacture products that can be

used instead of concrete and steel in buildings. The same applies to bioenergy, which can replace oil. The production of sawn timber generates low carbon dioxide emissions. It differs from steel, concrete and plastic, which are finite materials and which give rise to considerable emissions of fossil carbon dioxide when they are produced.

More efficient forestry also ensures that the forests absorb more carbon dioxide, which is then stored as carbon in the trees and in the ground. For this reason it is sensible to fertilise forests with nitrogen. This enables the trees to grow better and fix more carbon dioxide while the nitrogen ensures that more carbon can be absorbed into the ground.

**MANUFACTURING PRODUCTS** from natural resources and energy that do not consume finite resources or cause environmental problems is an increasingly powerful environmental argument. Holmen is in a strong position with its natural and climate-neutral raw material and a high proportion of bioenergy.

# Forests have an important role for the climate

The most important role of forests for the climate is when wood is used as a building material instead of other materials that impact on the climate and when fossil fuels – oil and coal – are replaced by biofuel.

**ABSORPTION.** Growing forests absorb more carbon dioxide than they emit, which benefits the climate. Trees convert this carbon dioxide into carbon in their biomass.

Forests also emit carbon dioxide after harvesting when needles and branches decompose. But the absorption during a cycle (70–100 years) is many times greater than the release of carbon dioxide.

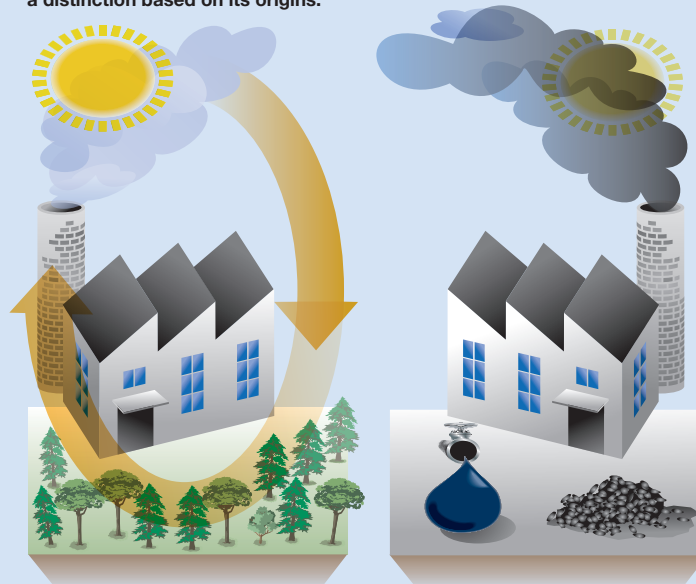
**STORAGE.** The carbon stored by trees can be seen as a temporary carbon sink that is broken up as the trees die and begin to decompose. By using wood in house building and in products this stored carbon is, instead, “locked in”, often for a very long time – as long as the building or the product fulfils its function.

**SUBSTITUTION.** Wood is an excellent alternative (substitute) to steel and concrete in most types of building. Both these materials generate high emissions of carbon dioxide when they are being manufactured. In contrast, wood only generates low carbon dioxide emissions.

Branches, treetops and stumps are also an important replacement for energy sources such as coal and oil. This is also true for demolition timber.

## Two “kinds” of carbon dioxide

Carbon dioxide is carbon dioxide – but there are good reasons for making a distinction based on its origins.



The biogenous carbon dioxide that is emitted when biofuel and wood-based products are burned corresponds to the amount that would have been released if they had, instead, been left to decompose naturally. The biogenous carbon dioxide is already part of the atmosphere's carbon cycle and therefore does not contribute to the greenhouse effect.

Fossil carbon dioxide, which is released when oil is burned, adds new amounts of carbon dioxide to the atmosphere. Both oil and carbon have been stored in the earth's crust for millions of years. It is the fossil carbon dioxide that is the villain in the climate drama.

## The age of the forest governs the absorption of carbon dioxide

A forest's ability to absorb carbon dioxide is in proportion to a number of factors: the age of the trees, how the forest has been managed, where it is located in the country, the climate, the richness of the soil and the level of precipitation.

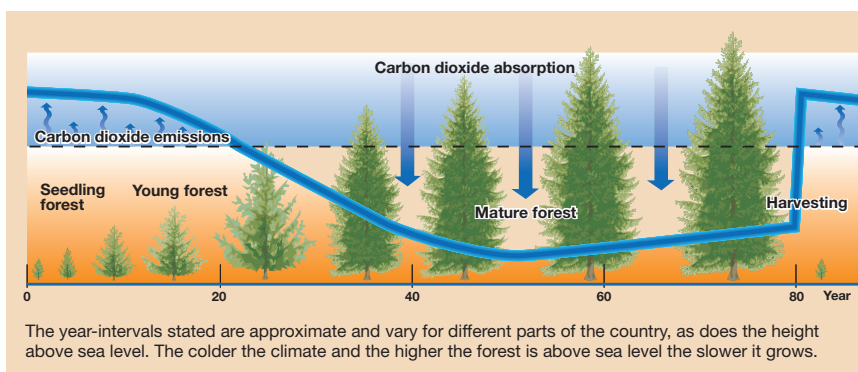
The forests in the south of Sweden absorb more carbon dioxide over a shorter period of time than the forests in the northern part of the country. Vice versa, more carbon dioxide is emitted from southern Sweden's forestlands than from those in northern Sweden. This is because the rate of decomposition is faster in the south owing to the higher average temperatures.

**Seedlings and new forests – 1 to 20 years.** The forestland emits carbon dioxide and needles and branches (fallen) decompose. More sunlight raises the ground temperature, which speeds up decomposition. The trees are still too small to compensate for the release.

### Young and middle-aged forests – 20 to 90 years.

The trees grow fastest during this period and absorb far more carbon dioxide than the ground emits.

**Old forests – 90 years and older.** The trees' growth and ability to absorb carbon dioxide declines when they have passed 90 years. At the same time the decomposition forces take over. Trees die and branches fall to the ground, which boosts the emission of carbon dioxide.





# Holmen's forestry benefits the climate

Holmen's forestry and the use of the Group's products means that each year a total of 1.3 million tonnes of carbon dioxide is removed from the atmosphere.

The volume of standing timber in Holmen's forests is steadily increasing thanks to the way they have been managed for a long time. At present, however, since much of the growth is in young forests that are not yet ready for harvesting, only 80 per cent or so of the annual growth is harvested. As these forests age it will be possible to increase the amount of wood harvested. The new silviculture programme is expected to raise the growth rate by 25 per cent within 30 years. This also means that the forest's ability to absorb carbon dioxide will increase.

**AT THE SAME TIME THE EXTRACTION** of biofuel from the Group's forests is increasing. This reduces the volume of oil the economy needs to a corresponding degree. Holmen has set itself the target of raising its production of bioenergy – from company forests and by purchases from private forest owners – by 1 TWh by 2020 (reference year 2006; 0.42 TWh). In 2008 production amounted to 0.66 TWh, one-third of which was from company forests.

## Carbon Footprint

Holmen has begun taking steps to calculate the Carbon Footprint of its products. This provides information about the amount of carbon dioxide a product generates. The absorption of carbon dioxide by forests is included as a positive factor while production and transportation give rise to carbon dioxide emissions. The carbon balance presented here is an important tool for calculating Carbon Footprints.

### How the analysis is structured

It is impossible to determine with precision all the data about the effect of forests on the climate. Holmen has therefore chosen to report the data under two headings:

- 1. Analysed effects:** Data that can be determined with a relatively high degree of certainty.
- 2. Estimated effects:** Data that can only be estimated.

## Carbon analysis of Holmen's forestry activities

### Analysed effects



#### Growing volume of standing timber

The annual growth in Holmen's forests exceeds the volumes harvested. Therefore more carbon is absorbed by the forests, so they function as a carbon sink. It is estimated that on average some 82 per cent of the growth will be harvested during the coming ten years. This means that the total stock of standing timber in the forests, including needles and branches, will increase by around 700 000 cubic metres (m<sup>3</sup>sk) per year.

The increase is the result of Holmen's increasingly effective forestry practices. This growth in the stock of wood will continue for another 30-40 years, when the production capacity of the forestlands will be utilised to the full.

***The growing stock of standing timber including needles and branches in Holmen's forests will store a further 830 000 tonnes or so of carbon dioxide in the trees annually.***

#### Absorption and emission (m<sup>3</sup>sk) from the forest floor

Nowadays there is more carbon in the forest floor than in the trees that grow there as it has accumulated there over several thousand years. The carbon is stable in solid ground. In contrast carbon is released from peatlands, particularly where the ground water level has been lowered in the past as a result of ditching.

#### Solid ground

***Holmen estimates that its solid ground neither absorbs nor emits carbon dioxide.***

#### Peatlands

***Holmen estimates that emissions of greenhouse gases (converted into carbon dioxide) from the Group's peatlands amount to around 300 000 tonnes per year.***

#### Nitrogen fertilisation fixes more carbon dioxide

The use of nitrogen fertiliser enables the trees to grow faster and thus absorb more carbon dioxide. Nitrogen also helps to hinder the decomposition of dead parts of the trees in the ground, which means that less carbon is lost. Nitrogen thus plays a beneficial dual role when it comes to the quantity of carbon in the ground.

***In 2008 Holmen fertilised 8 800 hectares of forestland, which corresponds to the absorption of 33 000 tonnes of carbon dioxide. The production, transportation and spreading of fertiliser gave rise to emissions of 4 000 tonnes of carbon dioxide.***

# Estimated effects



## Harvesting

The harvesting and transportation of wood, fertilisation, clearing, seedling production and the transport of employees give rise to carbon dioxide emissions.

**Holmen reforests almost 13 000 hectares of forestland and harvests on average 3.2 million cubic metres of wood each year. The machines and equipment used cause emissions of some 16 000 tonnes of carbon dioxide each year.**

## Transportation

For the most part, wood from Holmen's forests is transported by truck to Holmen's mills and those of other forest companies.

**The transportation of wood causes emissions of some 16 000 tonnes of carbon dioxide per year.**

## Biofuel

Biofuel is a direct substitute for oil and thus eliminates emissions of fossil carbon dioxide. In 2008 Holmen produced just over 0.18 TWh of biofuel in company forests.

**The volume of biofuel from Holmen's forests reduces emissions of fossil carbon dioxide by some 46 000 tonnes.**



The effects reported under this heading are such that they cannot be measured exactly at present, and are what are known as substitution effects. The figures reported are based on informed estimates and research results in the field.

## Saw logs, structural timber

In many situations wood can be used as a substitute building material for concrete and steel, the manufacture of which causes high emissions of fossil carbon dioxide. Sawn timber, by contrast, only gives rise to low emissions.

One cubic metre of wood stores 0.9 tonnes of carbon dioxide from the atmosphere and replaces materials that emit 1.1 tonnes of carbon dioxide. The combined effect of carbon fixation and substitution thus amounts to 2 tonnes of carbon dioxide per cubic metre of wood.

**Holmen estimates that the quantity of structural timber that is produced from wood from the company's forests can reduce emissions of carbon dioxide by around 215 000 tonnes per year.**

**The effect of fixing carbon in sawn timber is estimated to be equivalent to 525 000 tonnes of carbon dioxide per year.**

# Summary

Tonnes of carbon dioxide (CO<sub>2</sub>) per year

## Analysed effects

Carbon sink in trees through growing stock of wood	– 830 000
Solid ground, absorption and emissions of greenhouse gases	0
Peatlands, emissions of greenhouse gases	+ 300 000
Effects of forest fertilisation	– 33 000
Effects of production of fertiliser	+ 4 000
Silviculture, felling and transportation within the forest	+ 16 000
Transportation of wood	+ 16 000
Biofuel, substitute for oil	– 46 000
<b>Total analysed effects</b>	<b>– 573 000</b>

## Estimated effects

Spruce wood, structural timber, substitutes for other materials with an impact on the climate	– 215 000
Spruce wood, carbon sink	– 220 000
Pine wood, carbon sink	– 305 000
<b>Total estimated effects</b>	<b>– 740 000</b>

## Total

<b>Analysed effects</b>	<b>– 573 000</b>
<b>Estimated effects</b>	<b>– 740 000</b>
<b>Total analysed and estimated effects, tonnes CO<sub>2</sub> per year</b>	<b>– 1 313 000</b>

Calculation data are provided at [www.holmen.com](http://www.holmen.com)

## Holmen's carbon analysis/Facts

In 2007 Holmen carried out a study of the Group's impact on the climate. The results of this, combined with research by the Swedish University of Agricultural Sciences, Skogforsk and the Lustra research programme, provide the basis for the calculations.

The figures for the growing stock of standing timber and the estimated effects are an average for 2004–2008. Other figures are based on the situation in 2008.



## Means used to control the climate



Almost daily new reports are received that confirm the prevailing belief that the earth's climate is getting warmer.



In order to combat climate change new laws are being passed and various initiatives are being taken globally. Among other things, the EU has proposed new climate and energy targets for 2020.

### **The trade in emission rights is beneficial to the climate...**

Since 2005 the EU has had a system for trading in fossil carbon dioxide emission rights. The system affects facilities and companies that emit carbon dioxide into the atmosphere.

The companies were allotted a specific number of emission rights for the 2005–2007 trial period. The companies that emitted more fossil carbon dioxide than they had been allotted had to purchase emission rights on the market that had been created. The vendors were primarily companies that did not need to make full use of their allocation.

The system has now become permanent. For the 2008–2012 period the total allocation of emission rights is less than for the trial period, which was one of the objects of the system.

***Holmen's mills** are included in the system of emission rights. The Group has set targets for emissions of fossil carbon dioxide for 2020.*

### **... but there are negative side effects**

Holmen views with favour the initiatives now being taken to overcome climate problems.

However, the Group objects to the fact that the trading system does not take into account the indirect effects on the price of electricity. In the Nordic region around 70 per cent of electricity is generated in the form of hydroelectric power and nuclear power. The rest of the production is largely based on the use of fossil fuels. For the power stations that use such fuels, the trade in emission rights involves major costs, which show through in the price of electricity. The price is set in accordance with the marginal cost principle, which means that the price of the most expensive electricity has an impact on all electricity.

***Holmen welcomes** initiatives intended to prevent the trade in emission rights pushing up the price of electricity.*

### **Kyoto rules, but....**

According to the Kyoto Protocol's rules on "Forest Management", those countries that have ratified the Protocol should utilise the forest's ability to fix carbon dioxide. This provides an opportunity to create a trading system based on stored carbon dioxide instead



of emissions, as has been the case so far. This would mean that countries that manage their forests so their ability to absorb carbon dioxide increases are given credits that correspond to the extra volumes absorbed by this means.

**Holmen considers** the effects of such a system have not yet been adequately investigated. For instance, there is a risk it will lead to the build-up of standing timber in the forests instead of greater use of sawn timber, which would have a counter-productive effect on the climate.

### Energy taxes and voluntary agreements

A tax on electricity was introduced in Sweden in 2004. Electricity intensive companies can avoid the tax by saving energy and introducing energy management systems in accordance with the PFE law (Programme for Energy Efficiency), which was introduced in the following year. The law will remain in effect until 2009 and there is every indication that it will be extended.

In accordance with the CCA (Climate Change Agreement) British companies can reduce their energy tax by 80 per cent.

**Holmen has introduced** energy management systems at all its Swedish units and has a programme for energy efficiency. The company has thus been able to reduce the cost of electricity tax by some MSEK 20 annually.

An energy management system was introduced at Workington in 2008, and Madrid will introduce such a system in 2009.

### Electricity certificate

According to a Swedish law from 2003 companies that generate renewable electricity are allocated an electricity certificate for each MWh produced. By renewable electricity is meant electricity that has its origin in sustainable energy sources such as new hydro power and biofuel. Electricity consumers are obliged to purchase a certain number of these certificates in relation to their consumption, known as a quota duty. This will be raised successively, which will lead to higher demand for renewable electricity. Electricity intensive industries are exempt from the quota duty. The system has been extended until 2030 and the target levels have also been raised.

**In 2008 Holmen produced** certificate-eligible electricity at its mills in Sweden and at a number



Forests have great potential as producers of climate-neutral products and various kinds of energy.

of small-scale hydro power plants. The reported result for 2008 for electricity certificates was MSEK 72 (2007: 49).

### EU climate package

At the end of 2008 the European Parliament agreed on a climate change and energy programme. This means that by 2020 the EU will reduce its emissions of greenhouse gases by 20 per cent in relation to 1990.

Holmen belongs to a business sector that takes part in the system of trading in carbon dioxide emission rights. For these sectors the demands are higher. Based on levels in 2005, emissions are to be reduced by 21 percent by 2020.

Another important EU target is that energy consumption shall be cut by 20 per cent by 2020 and that 20 per cent of the energy produced shall come from renewable energy sources.

**Holmen is positive** to the climate package, which is in line with the climate and energy goals that apply to the Group and the sector as a whole.



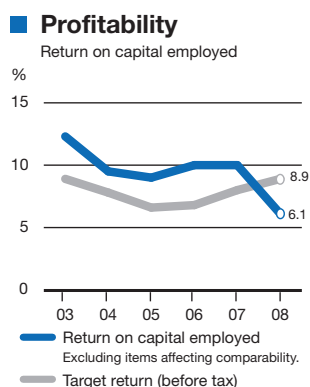
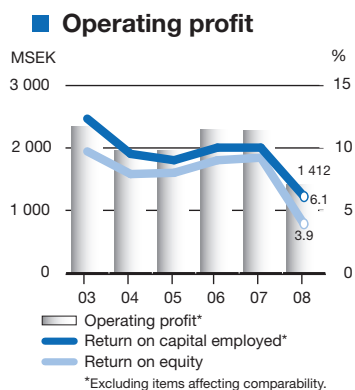
Holmen takes wind measurements at several sites as a step in its preparations to build wind parks on the Group's forestland.

# Financial development



## Result deteriorates – capacity cuts

For the first time in many years Holmen did not achieve its profitability target. The main reason was further increases in the cost of wood and other input materials, as well as lower newsprint prices.



Demand for newsprint in Europe declined in 2008. However, the balance between supply and demand was relatively robust as a result of significant capacity reductions. Demand for virgin fibre board also fell but prices could be raised during the second half of the year. The sawn timber market was weak owing to a falling level of building activity. The demand for wood from the Swedish forest industry remained high and wood prices reached peak levels during the year. The production of hydro power was slightly higher than normal.

**RESULT 2008.** Holmen's consolidated operating profit, excluding items affecting comparability, amounted to MSEK 1 412, which may be compared with MSEK 2 286 for the previous year. The decline was due mainly to lower prices for newsprint and sawn timber, coupled with higher costs. Net cost items affecting comparability amounted to MSEK 361 (income 557), which were due mainly to closures during the year.

### Holmen Paper

The total consumption of newsprint in Europe declined by 3 per cent in 2008. By contrast, Holmen's deliveries increased by 1 per cent.

The decline in demand was due in part to the

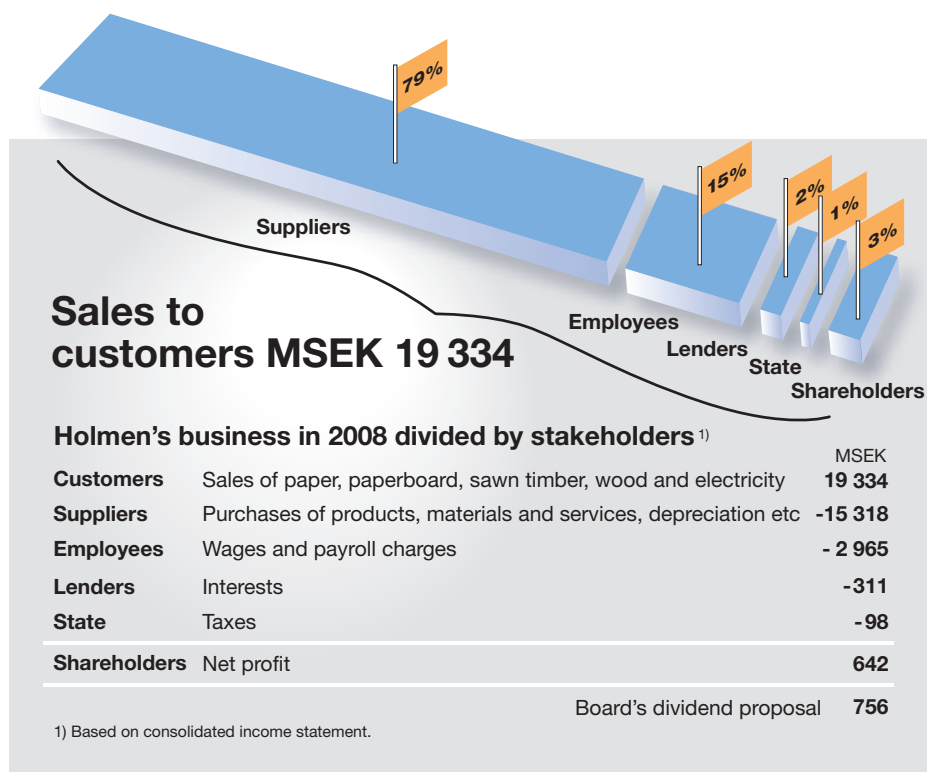
weaker economic conditions, but probably also to changing consumption patterns with less interest in reading newspapers. Holmen is responding to this situation by altering the production mix. The proportion of MF Magazine and DIP based LWC paper is rising, while newsprint capacity has been reduced by 15 per cent as a result of the closure of a paper machine at Hallsta. At the same time the production of coated printing paper was being reduced by 145 000 tonnes by the closure of the Wargön Mill.

Several investment projects designed to cut costs have been carried out, including completion and start up of a new pulp line at Braviken that will reduce energy consumption by 25 per cent in relation to that of the replaced line.

**THE OPERATING PROFIT**, excluding items affecting comparability, amounted to MSEK 280 (623). The lower profit was mainly an effect of lower selling prices and the higher cost of input materials.

### Iggesund Paperboard

The market situation for virgin fibre board weakened in 2008. Total demand in Europe decreased by 2 per cent. Iggesund Paperboard's deliveries declined by 4 per cent.



Iggesund Paperboard's board has a very strong position on the market and enjoys very good growth potential.

Following a comprehensive development programme, Iggesund launched a new generation of its now classic Invercote paperboard. An independent survey shows that the business area's two brand names, Invercote and Incada, are still the strongest in Europe.

**THE OPERATING PROFIT** amounted to MSEK 320 (599). The deterioration was due to lower production and deliveries, combined with higher raw material costs.

### Holmen Timber

After a very strong year in 2007 the market weakened and prices fell. Holmen Timber's deliveries rose slightly.

The factor behind the lower demand is the economic downturn and the lower level of building activity throughout Europe. In the longer range, however, the outlook is bright, not least because of the excellent climatic profile of sawn timber. With the new sawmill at Braviken, which will produce structural timber, Holmen will strengthen its position on a market of growing importance.

**THE OPERATING PROFIT**, excluding items affecting comparability, fell to MSEK 13 (146), mainly as a result of lower selling prices.

### Holmen Skog

The demand for wood continued at a high level. Swedish wood prices reached record levels around the middle of the year before turning back down in the autumn.

Holmen Skog's activities in southern Sweden mainly involved making preparations for the new sawmill at Braviken. The catchment area was extended and the organisation strengthened.

**THE OPERATING PROFIT**, excluding items affecting comparability, amounted to MSEK 632 (702). Higher wood prices had a favourable effect on the result, but harvesting and silviculture costs increased.

### Holmen Energi

More electricity was generated at the Group's wholly and partly owned hydro power plants than in a normal year thanks to ample supplies of water in rivers.

The process of evaluating various options for renewable types of energy continued as a high priority project.

Several sites on the Group's land are being evaluated as possible locations for wind parks.

**THE OPERATING PROFIT** increased to MSEK 327 (272) as a result of higher electricity prices.

## Financial targets

**A profitable business creates jobs and makes it possible to purchase input materials, pay taxes and pay dividends and interest to shareholders and financiers.**

Profitability is also a pre-condition for investments that enable the company to develop in line with gradually changing market conditions. Holmen has therefore set itself two financial targets that support sustainable financial development.

**Financial target 1:** Profitability shall be robust and the return on invested capital shall consistently exceed the market cost of capital. In short, this means that an investment in Holmen shall be at least as rewarding as an average investment in any other business. This will give Holmen access to capital to finance growth and development.

*The Group has regularly achieved its profitability target over a long period of years. In 2008, however, the return was 3 percentage points below the target.*

**Financial target 2:** Holmen shall have a strong financial position that will enable it to make long-term decisions regardless of the prevailing economic conditions and the state of the credit market. This means that the level of debt should not be too high. Defined in terms of the debt/equity ratio (financial net debt in relation to equity) it should be 0.3–0.8.

*At the end of 2008 Holmen's debt/equity ratio was 0.48.*

**Dividend.** Holmen also has a financial target for its dividend. This means that each year's ordinary dividend should amount to 5–7 per cent of the company's equity. This gives shareholders a stable return from the retained earnings that do not need to be ploughed back in the business.

*During the past ten years Holmen has paid ordinary dividends that have amounted on average to 5–6 per cent of its equity. The Board has proposed that the 2009 AGM resolve in favour of paying a dividend of SEK 9 per share, which corresponds to 5 per cent of the company's equity.*



# Concern for the environment



## Working practices

### Joint action groups

**The aim of the Environmental Council** is to ensure that the environmental policy is applied. The council consists of the environmental managers of each business area and mill.

**The Energy Council** makes decisions on the hedging of electricity prices, electricity certificates and emission rights. The Energy Council consists of representatives from the relevant business areas and Group staffs.

**Climate issues** are mainly monitored by Group Technology. Responsibility for energy efficiency rests on the business areas. There is some co-ordination via Group Technology and Senior management, which also follows up the Group's climate and energy targets.

**Other joint action groups** deal with matters pertaining to management systems, chemicals (REACH), water treatment, transportation and waste.

Holmen's environmental policy stipulates how responsibility for the environment is to be allotted, and how environmental activities are to be carried on. The business is subject to supervision by the environmental authorities and auditors.

**HOLMEN'S ENVIRONMENTAL POLICY** contains principles for the Group's environmental activities and covers the aspects that are of relevance to Holmen and its stakeholders. The environmental policy was updated in 2008.

**ENVIRONMENTAL RESPONSIBILITY.** The Group's Board and the CEO, as well as the heads of the business areas have overall responsibility for the environment. Operative responsibility rests on mill managers and forest region managers.

The Group's sustainability director chairs Holmen's environmental council and coordinates environmental measures.

**OFFICIAL SUPERVISION.** All the Group's mills have environmental permits containing conditions regulating emissions into air and water. The environmental authorities regularly inspect

the activities at the mills. The forestry activities are supervised by the National Board of Forestry.

### Management systems and forestry certification

**ENVIRONMENTAL MANAGEMENT SYSTEMS** certified in accordance with ISO 14001 are applied at all mills and in the forestry. All the mills have quality management systems that have been certified in accordance with ISO 9001.

**THE SWEDISH UNITS** have energy management systems. Workington has been operating since the beginning of 2008 in accordance with a certifiable management system. Madrid will introduce a certified management system in 2009.

**CERTIFIED FORESTRY STANDARDS.** Holmen's forestry is certified in accordance with the international PEFC and FSC standards.

**SUPERVISION OF ENVIRONMENTAL CERTIFICATION.** All certified systems are audited regularly by external certified auditors.

**SUPPLIER APPRAISALS.** Holmen's purchasing units are being coordinated, and suppliers are required to satisfy Group-wide environmental and quality demands.

# Environmental activities in 2008

Holmen's environmental impact has gradually been reduced by a series of interconnected factors. The current changes in the earth's climate are causing the Group to intensify its efforts to improve energy efficiency and reduce its oil consumption.

**HOLMEN'S BUSINESS** is regulated by the conditions established by the environmental authorities. The certified management systems make additional environmental demands. The systems include quantitative environmental and energy targets that are regularly reviewed and tightened with the object of making continuous improvements. Some of the targets are presented for each unit on Holmen's website.

**EMISSIONS INTO AIR AND WATER**, along with waste, are priority environmental issues. Progress is monitored regularly by means of continuous measurements and extensive statistics that are public and supervised by the environmental authorities.

Seen over the long term, progress has been made in terms of changes per tonne of final product for all environmental parameters. Detailed figures for each unit are presented on pages 60–61.

## Climate- and energy targets

- The use of fossil fuels by the Swedish mills is to be reduced by 90 per cent in relation to 2005 by 2020.
- The Group's specific energy efficiency is to be improved by 15 per cent in relation to 2005 by 2020.
- Certified energy management systems are to be introduced by 2009.
- It is estimated that the growth rate in Holmen's forests can be raised by around 25 per cent within 30 years.
- The extraction of biofuel in Holmen's forests will be increased by 1 TWh by 2020, in relation to 2006.

**ENERGY AND USE OF RESOURCES** are parameters that have a natural place in almost every project in the Group. Holmen is particularly strongly placed in these areas. Production is based on wood, a renewable raw material. Around half of the thermal energy is produced using biofuels.

**DECLINE IN USE OF FOSSIL ENERGY.** Holmen will reduce the consumption of oil by its

Swedish mills over the next ten years. The English and Spanish mills use electricity and heat from local gas-fired combination power plants that are based on natural gas. As far as the climate is concerned this is the best fossil based alternative to biofuel.

In 2008 environment-related measures were carried out. Here is a selection:

- The Group's environmental policy was updated with regard, for example, to energy and the climate.
- A new line was commissioned at Braviken for the energy-efficient production of TMP. It will reduce electricity consumption by some 25 per cent in relation to that of the replaced line.
- The County Administrative Authority required Iggesunds Bruk to dredge the mill's effluent treatment plant to improve its functionality. Threshold values were exceeded on two occasions. In consultation with the Authority the mill completed the dredging after which emission levels returned to normal.
- Iggesunds Bruk started to install a chemical precipitation stage to complement its effluent treatment plant.
- Iggesunds Bruk reduced its oil consumption by a further 15 per cent or more. Oil consumption has declined by almost 30 per cent since 2005.
- At Hallsta oil consumption was reduced by more than 20 per cent. Consumption has almost halved since 2005.
- The Madrid mill will replace all fresh water by recycled municipal effluent with effect from 2010. The mill will be the first in Europe to manufacture paper from 100 per cent recovered paper using 100 per cent recycled water.
- An analysis of Holmen's forestry activities (including products) shows that approximately 1.3 million tonnes of carbon dioxide is removed from the atmosphere each year. This may be compared with emissions of fossil



A great-horned owl was released in connection with the excursion on the theme of Nature Conservation arranged by Holmen Skog. Lennart Öhman is involved in the Great-horned Owl North project, which has bred and released almost 1 700 great-horned owls since 1982.

carbon dioxide from all the Group's mills, which amounted to around 0.4 million tonnes in 2008.

- Holmen Skog arranged a forest excursion to demonstrate the Group's nature conservation methods for forest scientists and industry representatives.
- The construction was started of a new, efficient hydro power plant on the river Iggesund to replace three old ones.

**EXCEEDED LIMITS.** At some of the mills the guidelines for emissions into air and water were exceeded. However, all threshold values were met, except for some at Iggesunds Bruk. The environmental authorities were informed and measures taken to prevent a recurrence.

**COMPLAINTS.** A small number of complaints about noise and odours were received from people living close to some of the mills, as were comments on completed or planned harvesting activities. All complaints and comments were handled in accordance with the rules in the certified environmental management systems.

## Emissions and waste 2008

The use of oil at the Swedish mills has continued to decline. Emissions of fossil carbon dioxide have declined by some 25 per cent at these mills. However, emissions into water rose temporarily in 2008 owing to unexpected emissions from dredging activities at Iggesunds Bruk.

### Emissions into air

**FOSSIL CARBON DIOXIDE.** The Group's total emissions fell slightly in relation to 2007. Those of the Swedish mills declined by around 10 per cent. Measures are now being planned to successively phase out the use of oil in favour of biofuels. Since 2005, emissions of fossil carbon dioxide from the Swedish mills have declined by some 25 per cent in total and per tonne of end product.

There is limited scope for reducing carbon dioxide emissions at Workington and Madrid as these mills are dependent on natural gas.

**SULPHUR DIOXIDE.** The Group's total emissions rose slightly in relation to 2007. This was largely due to Iggesunds Bruk's starting to use pitch oil, a type of biofuel that has a higher sulphur content than fuel oil.

**DUST.** The Group's total emissions increased



slightly, partly owing to the use of a drier fuel at Hallsta.

**NITROGEN OXIDES.** The Group's emissions rose slightly, both in total and per tonne of end product. At Hallsta this was due to problems with the air cleaning equipment.

At Braviken, on the other hand, emissions declined as a result for more effective combustion during the year.

### Emissions into water

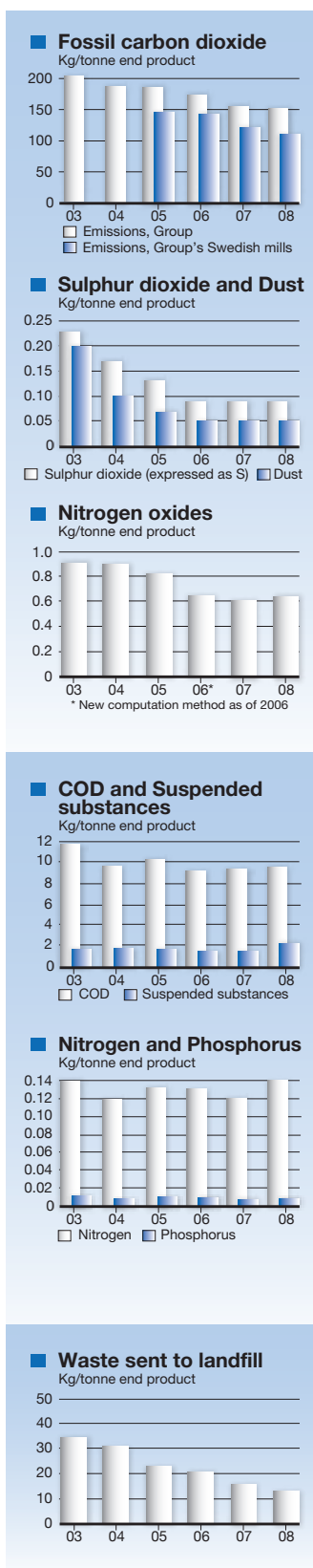


**COD, SUSPENDED SUBSTANCES, NITROGEN AND PHOSPHORUS.** Holmen's emissions of all these substances increased, both in total and per tonne of end product in relation to 2007. The cause was unexpected emissions in connection with dredging of the effluent treatment plant at Iggesunds Bruk to improve its efficiency. Levels returned to normal once the dredging was finished.

At Hallsta emissions of suspended substances declined as a result of measures to improve the efficiency of the effluent treatment facility.

### Waste

**WASTE SENT TO LANDFILL.** The volume of waste sent to landfill was reduced, both in total and per tonne of end product. The reduction in relation to 2002 is almost 70 per cent. No less than 97 per cent of the total volume of waste is recovered as energy or put to use in other ways (see page 46).





# Permits and certifications

Holmen's production activities in each country require a permit from the environmental authorities there. Similarly, the forestry authorities monitor Holmen's forestry and wood trading activities to ensure they comply with laws and regulations.

**THE EU'S INTEGRATED POLLUTION PREVENTION CONTROL DIRECTIVE (IPPC)** is a keystone in its environmental legislation. In Sweden, the formal requirements of IPPC were satisfied by the introduction of the Environmental Code of Statutes in 1999. The permits for mills whose permits are based on the Environment Protection Act have been harmonised with IPPC in accordance with guidelines issued in 2004.

**CERTIFICATIONS.** Holmen's activities are based on certificated systems for environmental, energy and quality management as well as for its forestry. All of its systems are integrated into the business and audited annually by both internal and external specialists.

**ISO 14001 AND ISO 9001** are international standards for environmental management and quality management.

**SS 627750** is a Swedish standard for the introduction of energy management systems at energy-intensive facilities.

**FSC** – Forest Stewardship Council – is a system for certification of forestry that has the support of many environmental organisations.

**PEFC** – Programme for the Endorsement of Forest Certification schemes – was originally a European system for certification of forestry, but has now also gained global recognition.

**TRACEABILITY CERTIFICATION** (chain-of-custody) enables wood used at a certificated mill to be traced back to its origin.

**HOLMEN SKOG'S TRACEABILITY** certification provides an assurance that non-certificated wood satisfies certain conditions:

- has not been harvested illegally or in conflict with indigenous peoples, does not come from controversial sources, has not been genetically engineered, does not come from natural forests that have been converted into plantations.

Certificates can be accessed on

[www.holmen.com](http://www.holmen.com)

## Permits from authorities, year

Hallsta	Environment Protection Act	2000
Braviken	Environment Code of Statutes	2002
Madrid	IPPC	2006
Wargön	Environment Code of Statutes	2002
Iggesunds Bruk	Environment Protection Act	2003
Strömsbruk	Notifiable activities subject to local government supervision	2007
Workington	IPPC	2002
Sheeting units	Only require a permit for a few parameters	–
Skärnäs Terminal	Environment Code of Statutes	1999
Iggesund Sawmill	Environment Protection Act	1994
Holmen Energi	Permit under Water act (Environment Code of Statutes)	–

## Certifications, year

	ISO 14001	SS 627750	ISO 9001
Hallsta	2001	2005	1993
Braviken	1999	2006	1996
Madrid	2002	–	2000
Wargön	1999	2006	1995
Iggesunds Bruk	2001	2005	1990
Workington	2003	2008 <sup>1)</sup>	1990
Iggesund Sawmill	1999	2006	1997
Holmen Skog	1998	–	–

<sup>1)</sup> Certifiable system introduced. Certification will take place when English standard approved.

## Forestry certifications, year

	FSC	PEFC
Holmen Skog	1998	2003

## Traceability certifications, year

	FSC	PEFC
Hallsta	2008	2007
Braviken	2008	–
Wargön	2008	2007
Iggesunds Bruk	2007	2007
Workington	2005	–
Iggesund Sawmill	2005	2004
Holmen Skog	2007	–
Holmen Mets	2007	–

## Environmentally certified forests in Sweden 2008

	Acreage, million hectares	Of all forests, %
FSC, forest companies	9.3	41
FSC, private forest owners	1.1	5
PEFC, forest companies	2.9	13
PEFC, private forest owners	3.2	14
<b>Total</b>	<b>13.6</b>	<b>59</b>

The total figure has been adjusted for the wood from forests with double certification

## Proportion of certified wood reaching Holmen's mills 2008, %

	Hallsta	Braviken	Wargön	Iggesunds Bruk	Workington	Iggesund Sawmill
FSC	19	14	1	31	100	45
PEFC	15	14	0	24	–	25
<b>Total</b>	<b>19</b>	<b>14</b>	<b>1</b>	<b>31</b>	<b>100</b>	<b>45</b>
of which from company forests	3	7	0	23	–	28

The total figure has been adjusted for the wood from forests with double certification

The figures used are based on both verified and estimated volumes. The relatively low proportion of certified wood from company forests is due to most of Holmen's forests being located in Northern Sweden. See also page 26.

# Environmental protection expenditure



The construction of a new effluent treatment plant at Iggesunds Bruk began in the autumn.

## Comments

**Direct emission-treatment investments.** Most of the costs were incurred on the construction of an effluent treatment plant at Iggesunds Bruk and improvements to the effluent treatment facility at Hallsta.

**Integrated emission-prevention investments.** The bulk of the costs relate to the construction of a new power station on the river Iggesund.

**Electricity and heat saving investments.** Most of the costs stated relate to the new thermo-mechanical pulp line at Braviken that started in 2008. The investments in progress at Iggesunds Bruk as well as the heat recovery project in Madrid are also included.

**Internal and external environmental costs.** The increase between 2007 and 2008 is due to additional costs in Madrid relating to the development project for water utilisation and saving. Costs associated with waste handling also rose at the Madrid mill.

Holmen reports its environmental costs in accordance with guidelines from Statistics Sweden (SCB).

## Environmental investments

**DIRECT.** Costs relating to emission treatment investments (e.g. different types of treatment equipment).

**INTEGRATED.** Costs relating to emission prevention investments. For example, the replacement of old process equipment with new, more environmentally efficient technology.

**ELECTRICITY AND HEAT SAVING.** Costs relating to investments intended to make leaner use of electricity and thermal energy.

## Environmental costs

**INTERNAL AND EXTERNAL.** These include costs for personnel, running of treatment plant, waste management, maintenance, supervision, environmental administration, training, site investigation and environmental consultants.

**CAPITAL COSTS.** Depreciation of treatment equipment, for example.

**ENVIRONMENTAL TAXES AND CHARGES.** For example tax on waste sent to landfill, carbon dioxide tax and charges for emissions of nitrogen dioxide.

bon dioxide tax and charges for emissions of nitrogen dioxide.

**THE ENVIRONMENTAL COST OF FORESTRY** is estimated as the value of the wood that is not harvested for environmental reasons. Holmen protects around ten per cent of the productive forest acreage and refrains from harvesting some ten per cent of the possible volume. The annual loss of income is estimated at some MSEK 60.

## Income

Holmen's mills are included in a system for trading in emission rights and electricity certificates. Environmentally related income was received from both these systems in 2008.

**SALE OF HEAT AND WASTE.** In 2008, surplus thermal energy produced by several of the mills was sold to municipal district heating systems.

Holmen's processes involve the production of various types of waste, much of which can be recovered and put to use. In 2008, several mills sold such material to outside users.

## Penalty charges

If official threshold values for emissions are exceeded penalty charges can be imposed on the company that causes the emissions. Holmen did not cause any emissions in 2008 that resulted in such a penalty being imposed.

Environmental investments (MSEK)	2008	2007	2006
Direct (emission treatment)	92	6	16
Integrated (emission prevention)	36	14	39
Electricity and heat saving	396	189 <sup>1)</sup>	–
<b>Total</b>	<b>524</b>	<b>209</b>	<b>55</b>
<sup>1)</sup> New separate information for 2007.			
Environmental costs (MSEK)	2008	2007	2006
Internal <sup>1)</sup> and external	224	198	177
Capital	90	82	76
Environmental taxes and charges	60	62	78
Forestry	60	60	50
<b>Total</b>	<b>434</b>	<b>402</b>	<b>381</b>
<sup>1)</sup> All business areas and environmental function at Group Technology.			
Environmentally related income (MSEK)	2008	2007	2006
Emission rights (carbon dioxide)	18	1	5
Electricity certificates	72	49	41
Heat to district heating systems	5	3	4
Waste for recovery and re-use	32	22	16
<b>Total</b>	<b>127</b>	<b>75</b>	<b>66</b>

# Transportation

Holmen takes regular measures to limit the impact on the environment from the transportation of raw materials and products. The follow-up of extensive transport data provides a basis for making improvements.

Holmen's business areas have responsibility for transporting their products from the mills to the customers. Holmen Skog organises the transportation to the mills of wood from forests in Sweden and of imported wood from its countries of origin. In Great Britain, the transportation of wood is organised by the mill in Workington.

The respective suppliers are normally responsible for the transportation of other raw materials and consumables.

**MORE THAN HALF OF** Holmen's transportation (tonne-km) goes by ships operated on long-term charter. Capacity utilisation on the ships is high at over 90 per cent. The ships are also employed to carry recovered paper to Sweden.

**RAIL** is mainly used for the distribution of products from Sweden to southern Europe and to a certain extent also for incoming raw materials. Holmen aims to use rail whenever it is practical and financially viable.

**TRUCKS** are the main means of transport for saw logs and pulpwood. Trucks are also often the only option for transporting products from the terminals in Europe to the customers. The same also applies to distribution over short distances from mills to customers.

## Holmen's approach to transport and the environment

**TRANSPORTATION STUDIES.** Holmen aims to improve transport efficiency and reduce the impact of transport on the environment. The transportation environment group collects data relating to Holmen's transportation within Europe. The transport data can then be used to propose improvements.

**MORE ENVIRONMENTALLY EFFICIENT SHIPS.** One of Holmen Paper's chartered ships has now been fitted with a catalytic converter, which reduces emissions of nitrogen oxides. As of 2010, three of the company's four ships will be equipped with such converters.

All the ships employed by Holmen run on oil that satisfies the condition that their fuel

has a sulphur content of less than 1.5 per cent, the level required for Baltic and North Sea shipping. Holmen will also modify its ships to enable them to satisfy future demands for a lower sulphur content.

### HOLMEN SKOG IS TAKING ACTIVE

measures to minimise transportation by means of flow optimisation and the exchange of wood with other forest companies. Holmen Skog is also involved in the industry-wide *En trave till* (One more stack) project that aims to raise the load capacity of trucks used to transporting wood, without raising the axle pressure.

**THE EL-Forest HYBRID ELECTRIC HARVESTER** reduces fuel consumption by 30–50 per cent when used for transporting wood in the forests. Holmen has ordered one such harvester for delivery in 2010.

**THE GROUP'S TRAVEL** is being examined with a view to reducing its extent and impact on the environment. A company travel policy will be finalized in 2009.

**SUSTAINABLE DEVELOPMENT** is a definite goal, not only for Holmen but also for the entire Swedish forest industry. The Swedish Forest Industries Federation has adopted industry-wide transportation and climate targets for its member companies, whereby emissions of fossil carbon dioxide from transportation are to be reduced by 20 per cent by 2020 and general sustainability criteria to be applied to the procurement of haulage services are to be ready by no later than 2010. Holmen plays an active role in the sector's projects.



The El-Forest hybrid electric harvester consumes 30–50 per cent less diesel fuel than a conventional harvester. The harvester in the photo is a prototype. Holmen will take delivery of its first El-Forest in 2010.

## Holmen's transport within Europe

Holmen's transportation has been analysed in 2004 and 2007 respectively. Production increased by around 14 per cent between these two years, mainly owing to a new paper machine being brought into production at the Madrid mill. Transportation by truck increased and with it the Group's overall transport requirements.

The table shows the breakdown by type of transport for 2004 and 2007, and estimates of the volume of carbon dioxide emissions it caused. Definitions used and estimates of emissions differ slightly from one year to the other.

Holmen's total transport requirements (for raw materials, products and waste) amount to around 5.5 billion tonne-kilometres.

### Transportation within Europe

	2007	2004
Ship, %	54	62
Truck, %	39	34
Rail, %	7	4
Specific CO <sub>2</sub> emissions, kg per tonne of end product	79.3	82.2



# Waste

## Four categories of waste

Waste from production can be roughly divided into four categories:

**Combustible waste** is mainly used to produce thermal energy in the mills' solid fuel boilers. After processing, certain kinds of waste, such as effluent treatment sludge, can be used as soil improving materials.

### Non-combustible waste that is used.

In recent years several projects have been carried out with the object of finding alternative uses for non-combustible waste. For example, ash has been tested as a road construction material, as a soil improving material, as an alternative to cement, and for covering landfills.

**Non-combustible waste sent to landfill.** As a result of successful efforts to find alternative uses the amount of waste sent to landfill has been reduced by almost 70 per cent since 2001.

**Hazardous waste** consists of waste oil, chemical residues, fluorescent lights and such like. The hazardous waste is taken away by authorised waste management companies for recovery. Some of it is destroyed under controlled conditions.

Various kinds of waste are produced in the manufacture of Holmen's products. Most of it is recovered or used as energy. The volume of waste sent to landfill has declined by almost 70 per cent since the beginning of the century.

**HOLMEN AIMS TO MINIMISE** the amount of waste and to utilise it. Laws, taxes on waste and landfill costs make it essential to process waste as cost-effectively as possible.

Waste is sorted at source at all of Holmen's units. Employees and contractors receive regular training in waste procedures.

A group-wide team is taking steps to identify environmentally sound ways of using the waste that arises.

## Current waste projects

Holmen is continuing its joint project with Värmeforsk to develop methods and equipment for the environmentally-sound use of incinerator ash. The new contract period extends until the end of 2011.

**IGGESUNDS BRUK.** Ash, precipitation sludge and woodroom grit are used for covering municipal landfills. A local recycling company is producing site-levelling earth using quicklime from the mill.

In 2008 a forest road was built on a trial basis for which a mixture of fly-ash and green liquor sludge was harrowed into the road to provide a bearing and strengthening layer. Initial tests indicate that the road's parameters, including stability are very good.

A facility is being installed for the chemical precipitation of effluent with the aim of improving treatment efficiency. This will pro-



A mixture of ash and green liquor sludge from Iggesunds Bruk undergoing tests as the roadbed on a forest road.

duce around 20 000 tonnes of sludge a year. Several projects are underway with the aim of identifying the best uses for the sludge.

**HALLSTA AND HOLMEN SKOG.** Large-scale trials are underway involving the use of incinerator ash as a filler in road construction. The admixture of ash raises the bearing capacity of the roads and reduces the risk of frost damage.

Following the closure of one of the mill's paper machines there will be less need for biofuel. The surplus bark that will arise will be sold to external power stations.

**MADRID.** Sludge from the de-inking of recovered paper is used as a binding agent in the production of building blocks in the ceramics industry. The sludge is also used for agricultural purposes.

As production at the mill has increased in recent years, so has the need for recovered paper. This in turn is producing more waste in the form of sludge and rejects – including plastics. In 2008 the mill launched several projects intended to identify ways of using this waste.

**HALLSTA, BRAVIKEN AND MADRID.** Metals in the form of staples and packing wire are removed from recovered paper at the sorting stage and sold externally for recycling.

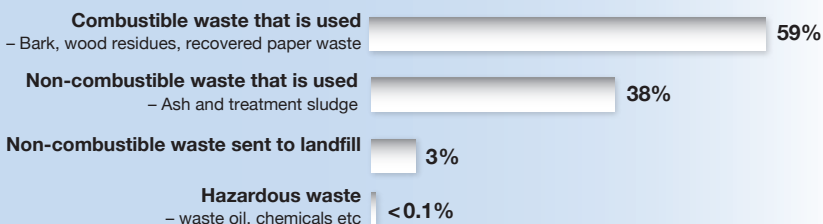
At Braviken DIP sludge is used for covering over an outside landfill.

Holmen Paper has launched a project intended to improve the handling of sludge and rejects from recovered paper.

**WARGÖN.** Production ceased in December 2008. In accordance with the environmental permit steps were immediately started to deal with surplus chemicals and hazardous waste.

## Holmen's waste by type

As a result of Holmen's measures to utilise waste the proportion going to landfill has declined to only 3 per cent.



## Chemicals

The EU's REACH chemical regulations were introduced in 2007. Holmen is taking systematic action to satisfy these rules.

Chemicals are needed in the production of paper and paperboard to give products specific characteristics. Certain chemicals are used in large quantities, while others are used only in small amounts.

**ONLY APPROVED CHEMICALS.** Chemical groups have been set up at all of Holmen's mills. The chemicals are assessed on the basis of technical function, product safety, work environment and external environment.

**HOLMEN IS TAKING REGULAR STEPS** to develop and improve the industry-wide chemicals database that is used within the Group. The mills in Great Britain and Spain are also involved in these activities, which are taking place in association with the suppliers.



Annsofi Lindvall, environment and quality engineer at Iggesund Bruk, taking samples.

**EACH YEAR, HOLMEN SENDS** a comprehensive report on its use of chemicals to the environmental authorities.

**THE EU'S REACH REGULATORY SYSTEM** for chemicals has raised the demands on manufacturers and importers of chemicals to make health and environmental risk assessments. Holmen is taking steps to satisfy the new demands. A REACH network has been set up. Holmen is also monitoring the REACH process through its trade associations in Sweden, Great Britain and Spain.

## Discontinued businesses

In 2008 Holmen took action in relation to several cases of contaminated ground at discontinued sawmills and sulphite pulp mills.

The Swedish Environmental Code of Statutes, contains clear rules regulating how sites that have been contaminated by previous businesses are to be dealt with. Cases of ground contamination have been discovered at some of the Group's discontinued facilities. These require investigations, hazard assessments, and possibly action. This process is being carried out in consultation with the environmental authorities. Responsibility for follow-up treatment is allotted after detailed investigation.

### Discontinued sawmills

It used to be the practice at Swedish sawmills to use various types of wood preservatives to protect sawn timber against rot and insect attack. These agents turned out later to be environmentally hazardous and they have long been prohibited.

**AGENTS OF THIS TYPE WERE USED** at the Group's discontinued sawmills, namely

Hästarholmen, Stocka, Lännaöholm and Sikeå. Part of the Sikeå site was decontaminated in 2008. The authorities have approved the measures taken and the case is now closed. Ground investigations are underway at other sawmill sites.

### Discontinued sulphite mills

Most of the sulphite mills produced waste in the form of pyrite ash, which contains metals and was often used as a filler.

Some mills also produced bleaching chemicals. The ground at sulphite pulp mills is usually contaminated with substances that are typical of that type of business.

Investigations are underway at Strömsbruk, Lodbj and Domsjö.

**PRODUCTION AT WARGÖN**, where there used to be a sulphite mill, ceased at the end of 2008. Holmen, in consultation with the supervisory authority, will investigate the site in 2009 for possible ground contamination.

## Noise

Noise is included as an important aspect of the environmental activities at Holmen's mills. A variety of measures can be used to limit or eliminate disturbances from noise in the vicinity of each mill.

Holmen measures the noise emitted by its mills. All units are below or close to the threshold levels in the environmental permit.

Noise levels at Holmen's mills have been reduced by bringing noise into the equation when replacing old equipment and by taking noise abatement measures of various kinds.

**Iggesund Bruk.** Noise-abatement measures were taken in 2007. The measurements made in 2008 show that the threshold levels are now satisfied.

**Skärnäs Terminal.** Noise measurements were taken in 2008 beside the harbour. Based on the results, the authorities demanded that Skärnäs take action to meet the threshold values for noise at night. These measures were taken at the beginning of 2009.

**Iggesund Sawmill.** Noise protection equipment was installed so that the timber grading facility could also run at night. Measurements taken in 2008 show that the permit conditions for noise are being met.

**Workington.** A programme to reduce noise levels has been drawn up together with the authorities and local residents. Follow-up measurements will be made in 2010.

**Hallsta.** Noise abatement measures were taken in 2008. Follow-up measurements will be taken at the beginning of 2009, when the effect of closing down one of the paper machines and DIP handling will also be assessed.

**Madrid.** Noise abatement equipment was installed at the mill in 2007. Measurements taken in 2008 show that the mill now satisfies official requirements.

# Social responsibility



## Working practices

### The HR concept

Personnel issues at Holmen are coordinated under the internationally established HR concept (Human Resources). This emphasises the direct link between personnel activities and the company's business concept.

### Laws and collective agreements/Facts

A number of laws and collective agreements regulate the Swedish labour market. Similar laws exist in Great Britain, Spain and the Netherlands.

- Work Environment Act
- Working Hours Act
- Act on the Position of Union Representatives and labour laws that relate to the right to form and belong to unions
- Co-Determination At Work Act
- EU Anti-discrimination law
- Agreements between the Forest Industries Federation and union organisations
- Local agreements between Holmen and local union organisations.

Holmen's personnel policy is aimed at developing leadership, the organisation, and the employees. Activities in this area are based on laws, collective agreements, and internal policies.

Important issues affecting employees are coordinated by the HR management team. This consists of the personnel managers of the large business areas and is chaired by the Group HR director. For specific HR issues, working groups are formed in which union representatives participate. The large units have their own personnel managers and HR specialists.

### The HR process

The activities of the Group's personnel departments are based on Holmen's personnel policy and HR strategy. Emphasis is given to competence sourcing, leadership and the organisation. The results are followed up by means of key ratios and in Holmen Inblick, the Group's employee survey. HR is a natural component in the Group's business plan.

### Policies

Holmen's HR policies reflect the Group's view about personnel policy. All the policies have been drawn up in association with, or have the support of the Group's union organisations.

**THE PERSONNEL POLICY** expresses the Group's view of what constitutes sound personnel activities.

**THE EQUAL OPPORTUNITIES POLICY** promotes a more equal gender distribution and an increase in the number of women in qualified positions.

**THE WAGE POLICY** expresses the management's attitude towards the factors that shall determine wage formation.

**THE POLICY FOR THE INTERNAL LABOUR MARKET** supports employees who wish to change jobs within the Group and views internal personnel mobility as a means of employee development.

### Other HR-policies

There are additional policies for:

- Supplementing salaries of employees while they are on parental leave
- Service abroad
- Pensions
- Work environment, protection and safety
- Discrimination
- Drugs
- Rehabilitation

### Work environment, fire and safety

These issues are handled by a Group-wide team consisting of specialists from the business areas. A work environment policy is at present being drawn up.



# HR activities in 2008

Holmen's HR activities are based on clear goals in well-defined areas. The increasingly harmonised working practices at the Group's mills foster the positive trend that has for many years typified the HR process at Holmen.

Holmen's aim is that HR issues such as hiring, competence development, and discontinuation should be handled consistently in the Group. The new HR system that is being introduced at Holmen's Swedish mills in 2009 will improve the efficiency of the HR activities.

## HR targets

For a number of years Holmen has set strategic targets for its HR activities:

- Human capital
- Leadership
- Performance review
- The number of accidents at work
- The proportion of female managers

As of 2009 they also apply to the units in Spain and Great Britain.

In addition, there are key ratios that are followed monthly via the payroll system and complemented with the results of the employee surveys. The ratios are analysed and, in the event of shortcomings, result in action plans.

## Goal achievement Sweden 2008

**THE HUMAN CAPITAL AND LEADERSHIP INDICES** have improved as a result of a sharper focus on leadership and personnel.

**PERFORMANCE REVIEWS.** Each manager shall perform annual performance reviews. The number of reviews carried out has increased, although the quality in many cases is not satisfactory.

At some units both the manager and the subordinate are given opportunities to undergo training to enable them to carry out these reviews constructively. The new HR system provides aids to help carry out performance reviews.



Holmen Paper's HR manager Ingegerd Engqvist visiting the recovered paper collection company Carpa. Here she is talking to Ramon Aguilar, Technical manager, and Ruben Cruz, HR manager at the Madrid mill.

## THE NUMBER OF OCCUPATIONAL ACCIDENTS

involving sick leave has been declining steadily since 2000. Unfortunately, the accident rate increased in 2008 to 23 (18) per 1 000 employees, which is far from satisfactory. For 2009, therefore, Holmen has set itself the target of reducing the incidence of accidents to 10 per 1 000 employees. This is not only important for the people who already work for the company, but also for its effect on recruitment.

**THE PROPORTION OF FEMALE MANAGERS** has risen from 11 per cent to 13 per cent. The target for 2008 was therefore achieved.

At the end of 2008 there were 12 women in Holmen's management groups, of whom one had joined Group management. Holmen's target is that in 2009 the proportion of female managers should be at least as high as in 2008.

## Group-wide HR system

In 2008 Holmen began to introduce a Group-wide HR system for all units. With the new system all HR routines are co-ordinated; it also makes it possible to make recruitment, competence development and wage management activities more effective. The HR specialists will have more time for strategic HR activities. The system simplifies follow-up of time and manning plans for the managers and provides support for employee competence development.

The scope to follow up the targets that apply to HR activities is just one of the many advantages of the system.

## Employee Stock Option Plan

The 2008 Holmen AGM decided to invite all employees to take part in an options programme that will be run until 2013. In all, one-third of the employees chose to take part. The level of interest was higher among managers, 80 per cent. Holmen's union organisations were in favour of the programme.

## HR targets and results, Holmen's Swedish units

	Target 2009	2008	2007	2006	2005
Human capital <sup>1)</sup>	635	–	616	–	605
Leadership index <sup>1)</sup>	60	–	56	–	54
Performance reviews, % <sup>1)</sup>	100	–	70	–	58
Accidents at work leading to sick leave/1 000 employees	10	23	18	21	23
Proportion of female managers, %	13	13	11	9	9

<sup>1)</sup> Measured alternate years. The 2009 results will be presented on Holmen's website by June 2009 at the latest.

## Leadership development

Holmen adopts a systematic approach to identifying and developing employees with management potential. Good leadership is a strength and requires regular measures if it is to be maintained and developed.

### Manager at Holmen /Facts

The Manager at Holmen programme includes numerous aspects of what it means to be a manager:

- Leadership values
- Aptitude to be a manager
- The dual role as manager and leader
- Management training for different target groups
- Evaluation of management and leadership
- Induction programme for all new managers.

In 2009 all managers at Holmen will come into contact with this management development programme.

Local leadership courses are also being arranged at Holmen's units in Spain and Great Britain.

Every second year Holmen picks out employees with the aptitude for, and interest in being promoted to more qualified tasks. Identifying managers ready to shoulder broader and more demanding responsibilities is equally important. A clear aim is to identify more female employees with managerial potential.

Holmen's aim is that at least 75 per cent of all managerial vacancies in the Group should be filled by internal recruitment.

**AN INTERNATIONAL PROGRAMME** to develop capable managers within the Group is carried out in association with the Swedish Institute for Business Management (IFL). The aim is to develop leadership and management skills and to create a common approach to strategic issues. The programme is arranged every second year, and the latest one began in 2008. It has brought together 24 managers from all parts of Holmen, of whom five are women.

**DEFINITE LEADERSHIP REQUIREMENTS.** It emerged from the 2007 employee survey that some managers have a low leadership index. This resulted in action programmes focused on giving the managers in question an opportunity to match up to the demands placed on leaders. A number of managers have also been allocated duties without leadership responsibility.

The target is that by the time of the 2009 employee survey there will be no managers with a low leadership index.

**WOMEN MAKE BETTER MANAGERS.** One interesting result of the employee surveys is that in general women score better on leadership than their male colleagues. They are judged to be better at making decisions, and making clear demands. They are also regarded by their subordinates as better at listening and encouraging than male managers. When it comes to serving as a role model, the gap between men and women in managerial positions is no less than 15 percentage points. One possible conclusion is that since women have to date found it harder to become managers in the male-dominated forest industry they have to be more sensitive in order to advance. Another important aspect could be that women quite simply make better managers.



Mikael Wirén, Holmen Paper, and Carlo Einarsson, Iggesund Paperboard, discussing brand names at a meeting during Holmen's international leadership programme.

### Manager at Holmen – a programme for better leadership

The Manager at Holmen programme was launched in 2008 with the aim of clarifying the guidelines that apply to leadership in the Group. The programme started at Senior management level and was then broadened to include numerous managers at different levels. Manager at Holmen will be introduced in all areas of the Group in 2009.

The principle behind the programme is the understanding that sound leadership is the platform on which to create motivation and dynamism in the organisation; a leader who has the ability to inspire himself and his subordinates to reveal strengths that would not otherwise see the light of day.

As part of the programme, all new managers in the Group will be given a mentor, a colleague with several years of managerial experience.

The evaluation of managers will be complemented with new tools that will provide a fairer view of management and leadership. The aim is to evaluate all managers in accordance with the 360° feedback method, i.e. from peers, from superiors, from subordinates and how managers see themselves and their role.

# Health and safety

Holmen has the explicit aim of creating a safe and stimulating work environment. Sick leave has declined in recent years but, in contrast, the number of accidents at work is still running at an unsatisfactorily high level.

Local policies and guidelines lay down procedures for the registration and follow-up of accidents and incidents. The authorities also monitor compliance regularly. Each year internal audits are made of Holmen's work environment and fire safety activities.

## Rise in occupational accidents

The number of accidents in the Group that resulted in more than eight hours of sick leave rose to 38 (2007: 23) per 1 000 employees. This remarkable rise is explained by the negative tendency at all units. Far too many accidents are caused by failure to use safety equipment and failure to adhere to procedures. Reducing the number of unnecessary accidents represents a major challenge for Holmen. No fatal accident has occurred in the Holmen Group for a long time.

**HOLMEN'S TARGET** of reducing the number of occupational accidents to 10 per 1 000 employees by 2009 has proven to be very hard to achieve. The Group will make an in-depth study of the situation, take measures and set new targets for 2009–2011.

**LOCAL ACTION PLANS.** As part of the process to achieve these targets, Holmen's work environment task force has intensified its activities. Each unit bases its activities on a customised action plan with the aim of significantly reducing the number of occupational accidents. The Holmen Inblick employee survey has also been expanded to include a number of questions about accident hazards. The aim is to emphasise the importance of this issue in the Group and to create a better picture of attitudes and why accidents occur.

**INCIDENT REPORTING.** The risk of accidents can be reduced by reporting and learning from incidents.

**WORK ENVIRONMENT TRAINING.** All new employees at the mills undergo training in safety and the work environment. All managers and safety representatives attend safe work environment courses that last 3–5 days.

**A GROUP-WIDE WORK ENVIRONMENT POLICY** will be introduced in 2009.

## Less sick leave

**TOTAL SICK LEAVE.** As a consequence of various measures, total sick leave showed a further decline at Holmen's units. In 2008, the level of sick leave fell to 4.3 per cent (4.5). The target was 4.5 per cent. It is not possible to compare different countries owing to differences in the insurance systems.

**LONG-TERM SICK LEAVE** (longer than 60 days) remained unchanged at 2.7 per cent. The rate for women is still higher than that for men, which is also true of society as a whole. In all probability, there are many different factors behind the relatively high level of long-term sick leave seen overall: lifestyle, poor leadership, shift work and long hospital queues.

**SHORT PERIODS OF SICK LEAVE** (1–14 days) have for several years been below 2 per cent, which is lower than for industry in general.

**GOOD HEALTH INDEX.** Holmen measures what it calls its Good health index, which is defined as the proportion of the employees who were not off sick at all during a calendar year. In the past few years the Good health index at Holmen's Swedish units has been between 40 and 45 per cent. Holmen offers its employees a range of health and fitness activities.

**COMPANY HEALTH SERVICE** at the larger units offers rehabilitation and supports occupational training.

## Legionella

The effluent treatment plants at several Swedish pulp and paper mills contain legionella bacteria. The Swedish Institute for Infectious Disease Control has recommended all mills in the industry to assess the risks. An industry-wide method of doing this has been drawn up. All of Holmen's mills have initiated or completed risk analyses.

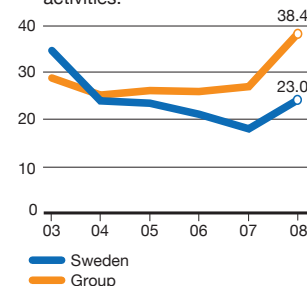


Anders Bergström fitness training at the gym in Iggesund.

## Occupational accidents with sick leave

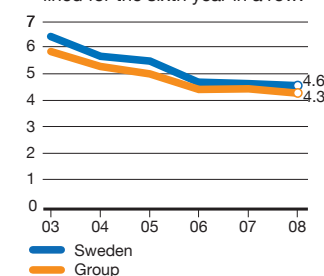
Number per 1 000 employees

The number of occupational accidents rose sharply in 2008. Holmen has therefore intensified its work environment activities.



## Sick leave, %

The level of sick leave declined for the sixth year in a row.





## More women for the future

For many years Holmen has been taking steps to increase the proportion of women in the organisation. This is reflected in the fact that there has been a gradual increase in the number of female managers.

### Employee survey looks at equality of opportunity

The 2007 employee survey shows that the women's human capital index is higher than that of men. In the 2003 survey it was quite the opposite. Holmen interprets this to mean that equal opportunity activities are having an effect.

However, some workplaces, especially the mills, are characterised by a "blokes" jargon. Nine percent of the women experience discrimination at some time on account of their gender. The employee survey is a valuable means of discovering any problems that may exist.

Women and men also see the ability to combine work and family in different ways, with women finding it more difficult than men. Both women and men would like greater flexibility from the employer. Many would like to see more acceptance for performing some of their tasks from home. Further, there should also be more opportunities to have a career other ages than the "classic years" between 30 and 40. The departure interviews with female managers confirm this picture and indicate that Holmen needs to do more with this kind of issue.



The number of female managers at Holmen is increasing. Claudia Litzka, Iggesund Paperboard, and Emilia Liiri Brodén, Holmen Paper, together with Daniel Peltonen, Holmen Paper Madrid. They are taking part in Holmen's international leadership programme and are en route to the European Parliament in Brussels.

The purpose of Holmen's equal opportunities policy is to promote the development of both women and men within the Group. This requires local action plans and analyses of the salary structure as well as the correction of ungrounded wage differentials between men and women. Application of the policy in the organisation is monitored by means of key ratios and employee surveys.

### Still relatively few women ...

Women have always been underrepresented in the forest industry and Holmen is no exception. At present, 18 per cent of the Group's employees are women.

### ... but the proportion of women being hired is rising

Thirty per cent of Holmen's new employees were women. Holmen's goal is for this figure to rise. The proportion of women on Holmen's induction programme for newly employed graduates was 30 per cent in 2008. Most of the newly employed women have a higher education, which creates conditions to enable the proportion of women in qualified positions to rise.

### Proportion of female managers increasing

The proportion of female managers at Holmen's Swedish units doubled between 2000 and 2004. However, progress was slower during the next two years. Since 2007 the share has increased again and is now 13 per cent. However, this level is still far too low in relation to Holmen's target. An internal project group has analysed the factors behind this situation.

**IN ORDER TO REVERSE THE TREND** the Group's management decided in 2008 on an action plan. Some aspects were then developed to include also male managers:

- All new managers are to receive a local mentor
- Local networks for all managers
- Follow-up of all managerial recruitment
- Development plans for the female managers currently at Holmen.

In 2008 53 new managers were appointed at Holmen's Swedish units, of whom 17 were women, which means that every third new manager was female.

### More women in management groups

There are twelve women at management level; one in Senior management and 11 at business area or mill level. There are two women on Holmen's Board, of whom one was elected by the AGM and one is a representative of the employees. The management group at Iggesunds Bruk has a more equal balance – six men and five women.

### Trainee vacancies attract women

For the second year in a row a local trainee programme for operators started at Iggesunds Bruk. Eight women and five men were hired in 2008. The balance was the same in 2007. To qualify, applicants must have an upper-secondary education in Maths, Swedish and English. Experience from Iggesunds Bruk has shown that women are far more interested in applying for trainee vacancies than for corresponding jobs. This knowledge will also be applied at other units in the Group.

### No form of discrimination is accepted

Holmen applies the EU's anti-discrimination laws. The employee survey includes questions about sexual orientation, religion, ethnic origin, age or disability.

The results of the 2007 survey show that no one experienced discrimination on grounds of their sexual orientation although two per cent of employees felt discriminated against on account of their gender. Three per cent felt discriminated against on account of their age and one per cent on account of their ethnic origin.

Holmen does not accept discrimination in any form. Those units where some form of discrimination has been discovered are required to investigate the causes and take action.

### Ungrounded wage differentials

According to Swedish law, wages at Holmen's Swedish units must be analysed annually, and from 2009 every third year, to ensure that there are no ungrounded wage differentials between the two genders. For all positions the degree of difficulty has been determined with the aid of external consultants. The results are analysed within each position class. Only a few cases of ungrounded wage differentials have emerged and action plans have been drawn up in consultation with the unions.



It is increasingly common for women to work side by side with male colleagues in production. Trude Mathisen and Niklas Mattsson are operators at Iggesund Paperboard.

## Employee survey

Holmen carries out its *Holmen Inblick* employee survey every second year. The results are analysed and then serve as a basis for local action plans.

In January 2009 employee surveys were carried out at all Holmen units. The purpose is to "take the temperature" of the organisation and to check that managers and subordinates live up to their responsibilities as laid down in the HR policy. This year's survey was complemented with questions in the following areas:

- The view of managers on their role and situation
- Development opportunities for men and women
- Why occupational accidents occur
- Diversity issues.

**RESPONSE RATE.** 4 500 employees were asked to complete the 2009 survey. 78 per cent answered the survey, which is broadly the same as in the



previous year. The response rate at Workington, which had a very low rate in the previous survey, was 84 per cent this time. The survey did not cover employees at Wargön, which closed down in December 2008.

The response rate among those with their own computerised workstations and who could answer online was considerably higher (92 per cent) than among those who answered by letter (69 per cent). Holmen will look at the response method in time for the next survey in 2011.

The results will be available on Holmen's website as of June 2009.

### Employee survey/ Facts

Holmen has carried out its employee survey every second year in Sweden since 2001. In the Netherlands the first survey was carried out in 2003, in Spain and Great Britain in 2006, in Estonia in 2007 and at Carpa in 2009.

The questions are drawn up in consultation with the union organisations.

The survey is carried out in association with the SIFO/Research International opinion poll company.

## Attractive employer

During the coming decade many Holmen employees will be retiring. Holmen is therefore taking a range of measures to create a sound foundation to meet its future recruitment needs. There is a clear aspiration to convey a true picture of Holmen as an employer.

### Degree projects

In 2008 Holmen hosted 19 students who carried out their degree projects at the Group and provided jobs for 570 young people during their summer holidays. In addition, there were numerous interviews and surveys from university students writing their examination theses.

### Trainee programme

For many years Holmen Skog and Hallsta have annually employed a number of student trainees who are channelled into various tasks. They have all been hired after the trainee period. Experience of this programme has been good and in 2009 Holmen is expanding it to include the entire Group. During a 12-month period trainees will gain work experience at Group units.

The Universum polling firm has studied how university students rank employers. Students at the universities in Linköping, Luleå and Uppsala ranked Holmen 48th in the 2008 survey. Among the students majoring in biology, chemistry and environmental studies, and who constitute the company's most important recruitment base, Holmen is among the top 20.

The survey also confirmed that Holmen ranks highly in terms of social responsibility. It also showed that Holmen attracts women to a greater extent than the average company.

Holmen considers it to be valuable to raise the company's status among students. The low ranking is not unique to Holmen as it also applies to other companies in the forest industry. Therefore several industry-wide programmes have been underway with the aim of demonstrating what opportunities the industry offers. Society's focus on sustainable production of products and energy is helping to stimulate interest in the forest sector.

### Contact with schools and universities

**ELEMENTARY SCHOOL.** Few young people today have any natural contact with "the forest". For many reasons it is important to show young people the role that forests and the forest industry play in society and the range of job opportunities available. Not least, it is important to heighten awareness of the recreational value offered by forests and nature. Holmen therefore participates in the nationwide programme arranged by the *Forest in School* organisation. Holmen contributes by arranging study visits to forests and by taking part in the *School Days* that are held regularly.

Holmen also hosts pupils on work experience schemes at school. In the Hudiksvall region these are turning out very well within the framework of what is known as Sweden's



Hanna Triumf is a trainee and Fredrik Zethraeus joined Holmen Skog recently as a wood buyer in Norrköping.

best work experience scheme. Over a 10-day period some 60 elementary school pupils get to participate in the work in the forest and at the mills.

**UPPER SECONDARY SCHOOL.** Holmen is involved in a project known as *Journey into the Future*, together with the Swedish Forest Industries Federation. The project is aimed at young people and teachers at upper secondary schools. In 2008 theme days on the forest industry were arranged at 130 schools throughout Sweden, and more than 10 000 pupils took part. Holmen follows up these days with study visits to nearby mills.

Holmen also runs annual further education course for some 30 social science teachers from all over the country. The programme highlights various aspects such as raw materials, energy, the environment and the climate. In association with other forest companies, Holmen has provided training for some 900 teachers since the programme began in 1999.

**UNIVERSITIES.** Holmen takes part in the career days that are organised at institutes of technology and at the Royal College of Forestry. Holmen, in association with other forest companies, arranges industry evenings for students at six institutes of technology. In 2008, 400 students participated.



# Competence development



Holmen has carried out its Adept and Mentor programme every year since 2004. 21 adepts took part in the 2008-2009 programme. Course leader Ullabrith Fridell on the left and Holmen's Jenny Adolfsson, course manager, on the right.

Each year Holmen devotes substantial resources to competence development for its employees. The main purpose of this is to increase professional skills and offer employees opportunities for promotion to more qualified positions.

Competence development has by tradition been all about improving skills within a particular vocation and/or acquiring qualifications for performing new tasks. But the term also covers further competence gained from having greater responsibility, using new equipment and taking on new tasks.

All Holmen's business areas provide several training programmes each year, and the average Holmen employee receives about 40 hours of training a year. On-the-job training for new employees requires far more training days. In addition, there is the day-to-day learning that takes place on the job at each workplace.

**THE NEW HR SYSTEM** will provide better opportunities for competence development activities. In a few years, all job descriptions will be based on competence. Each employee will be able to compare the competence he/she possesses with what the position requires. This will make it more natural, in performance reviews between manager and subordinate, to discuss how to overcome any competence gap that may exist. Each employee's development plan will be more clearly related to the position's competence requirements.

## International induction programme

In addition to local induction programmes there is also an international Group-wide programme for newly hired graduates. Around 100 new employees from seven countries participated in 2008. The aim is to improve their knowledge of the Group and offer participants opportunities for networking. Holmen's CEO and other members of the Senior management participate in the programme.

## Adept and Mentor programme

Holmen's Adept and Mentor programme is carried out each year. In 2008, 21 adepts participated, each of whom had their own personal mentor. In the assessments made later, the programme scored highly from all angles. Not only the adepts but also the mentors considered that they had developed.

**COMPETENCE EXCHANGE.** For the past few years Holmen's development engineers in the first instance have been offered the opportunity, for a limited period of time, to work at another unit in the Group. The aim is to give them a chance to develop by gaining new insights into their normal tasks and, equally importantly, to exchange competence and skills between the units.

## Personnel reductions

### Support for those who lose their jobs

Holmen has engaged Trygghestrådet (Employment Security Council) and Aventus, a coaching company specialising in overmanning, to support the employees in Vargön and Hallstavig who will lose their jobs as a result of the closures. The two organisations were already at work the week after the closures were announced. All former employees have been given a personal coach to help them find new jobs. Holmen has also contributed substantial financial support in the form of company pensions, training grants, and paid time to apply for new jobs.

### New organisation at Hallsta

Following the closure of one of the paper machines at Hallsta, the mill organisation was changed. All the more than 40 management positions were advertised internally. Appointments were based on an assessment of each applicant's managerial and leadership aptitude and skills. The process was implemented in consultation with the union organisations.

In 2008 the Wargön mill closed down and production ceased on one paper machine at Hallsta. The measures taken by Holmen to alleviate the impact of the closures go further than the law requires in such situations.

Holmen's aim is to reduce the workforce in a responsible manner. Redeployment, early retirement and training will all help to minimise the number of redundancies.

**HALLSTA.** At the end of 2007 Holmen announced that the Group's production of standard newsprint was to be reduced by 150 000 tonnes per year. This decision was a consequence of the weakening demand for newsprint that had resulted in excess supply on the market, combined with the high cost of wood, recovered paper and energy. The decision was preceded by a comprehensive study, which recommended closure of the oldest of the four paper machines. The consultant engaged by the union organisations confirmed that the company's decision had been based on correct information.

The machine was shut down in November 2008. Together with a change in the organisation this resulted in manning requirements at Hallsta being reduced by 260 positions.

Holmen is by far the largest employer in Hallstavig, which means the company has a particular responsibility to manage the personnel cutbacks in a social acceptable manner.

**SINCE THE DECISION WAS ANNOUNCED** at the end of 2007, Holmen has reached agreement with 188 employees as follows:

- 62 are leaving at their own request
- 41 are leaving on severance pay corresponding to twice the period of notice
- 85 have accepted offers of a company pension from the age of 62.

**FOLLOWING NEGOTIATIONS** with the union organisations a further 70 employees will leave the company by December 2010.

**WARGÖN.** Following a decision by the Group's Board all production at Wargön ceased in December 2008. In all, 320 people will be affected by the mill closure.

The reason for the decision is that Wargön's profitability had been very low for several years. Steep increases in the cost of wood, energy, and other input materials could not be compensated for by higher selling prices. The unanimous result of the investigations carried out in recent years indicates that substantial investments would have been needed to enable the mill to survive. Given the weak profitability it was judged to be unrealistic to go ahead with these investments.

**AFTER PRODUCTION CEASED** in December the employees were given an opportunity to spend two-thirds of their working hours on short training programmes and applying for jobs.

The positions are being phased out successively. Fifty employees will keep their jobs with the company until the spring of 2010.

Mid-February 2009 the situation was:

- 62 people had accepted a company pension from 60 years of age or retirement
- 56 had found employment with other companies
- 19 are undergoing training that will lead to a job with a new employer
- 9 are planning to start their own business
- 8 intend to start a long-term training programme
- 170 are still being given support to help them find new employment.



Holmen was one of Vargön's largest employers and the closure of the mill will have a significant impact for the town.

## Union co-operation

Holmen's management and the union organisations co-operate on issues relating to health, safety, equality of opportunity and competence development.

This section mainly provides an account of the co-operation and legislation in Sweden. The situation is largely the same in the Netherlands, Great Britain and Spain.

**UNION CO-OPERATION.** The company's employees are represented on the Board by three members and three deputy members. The union organisations meet regularly in consultation groups at each unit. These teams are appointed at Group, business area and workplace level. They meet the management of the respective units on a regular basis.

Union activities and time for such activities are regulated in agreements between the company and the union organisations. The company adopts a positive approach to union activities.

**HOLMEN EUROPEAN WORKS COUNCIL (HEWC),** which is regulated by EU law in this field, is the Group's internal European union council. It has eleven members, from Sweden, Great Britain, Spain and the Netherlands. HEWC meets twice a year, and serves as a forum for co-operation and consultation across national borders. Experiences are positive and the HEWC has helped Group units in the various countries to come closer to each other.

**DISPUTES AND DISAGREEMENTS** over working conditions that cannot be resolved by the manager and the subordinate are referred to local negotiations between representatives of the company and the employee's union. If the parties still fail to agree, the matter can be referred to central negotiations between representatives at national level. The Labour Court is the court of final instance.

**OVERMANNING** arises when the company's organisation is larger than is required for the long-term running of the business in accordance with the established strategy. When it arises, the employer negotiates with the unions with a view to reaching a mutually acceptable solution. In Sweden, an impact study is made in accordance with the guidelines issued by the Occupational Health and Safety Board. In the event of overmanning, the company aims



Holmen's management and the unions meet regularly. Peter Olsson, Carina Magnusson-Fernlund and Mikael Holmberg here together with Magnus Hall, Holmen's President and CEO.

to minimise the number of redundancies by means of redeployment, early retirement etc.

Periods of notice for redundancies are regulated in national agreements between the parties.

**THE LEVEL OF UNION MEMBERSHIP** at Holmen in 2008 was 89 per cent in Sweden. The corresponding figures for Great Britain and Spain were 65 and 38 per cent respectively.

**CONDITIONS OF EMPLOYMENT** are mainly regulated by means of agreements at national level. These agreements include the conditions for annual wage reviews and general terms of employment such as pension and insurance conditions. All national agreements are binding on the company and its union organisations.

The agreements are supplemented by agreements at local level covering working hours, production bonuses, and preventive health care.

**HEALTH AND SAFETY RULES** have been drawn up at all units in association with the unions.

**UNION INFLUENCE.** For the most part the unions are involved in major development and investment projects. A current example is the Group's new HR system. All policies relating to personnel issues have been drawn up in consultation with, or have the support of the union organisations.

### The right of association

The employees' right to belong to a union is regulated by law, known as the right of association. By this is meant the right of employees and employers to form and belong to unions or employer associations.

### The Swedish Co-determination at Work Act

applies to all important changes in the business. The object of the law is to give the employees influence and a voice in important issues. In the event of major changes to the organisation, the employer is required to negotiate before a decision is made. The union organisations do not have the right of veto but do have the right to be party to the information, analyse the consequences and express their opinion before the decision is made.



# Facts



## How the facts are compiled

The facts presented on the following pages are largely the same as those that Holmen is required by law to send in to the authorities.

### Units and abbreviations

**Hectares.**  
10 000 m<sup>2</sup>, 100x100 m

**m<sup>3</sup>fub.** Cubic metres solid under bark; true volume (that is no space between the logs) of whole trunk or trunk wood excluding bark and tree tops.

**m<sup>3</sup>sk.** Forest cubic metres; volume of tree trunks, including bark, from the stump to the top.

**Electric energy and heating energy** stated in GWh; 1 GWh = 1 million kilowatt hours, 1 GWh = 3.6 TJ

**MSEK.** Million Swedish Kronor.

### Financial

The financial information provided in *Holmen and its World 2008* is identical to that presented in *Holmen Annual Report 2008*.

### Personnel

The ratios provided are more detailed for Holmen's Swedish units than for those abroad.

The definitions used are those in current use within Swedish industry. Most of the figures are collected monthly.

Each of the major units has a system for reporting industrial accidents. The information is also reported to the authorities.

In 2008, Holmen introduced a new HR system. Consequently it was not possible to provide figures for all the ratios presented on page 62.

### Production and environment

Production and environmental data are compiled monthly at Holmen's units.

- The licensing authorities' conditions for emissions into air and water require regular tests in accordance with specific rules. Holmen reports its environmental data to the supervisory authority monthly and annually.
- Consultation meetings are held with the supervisory authorities several times a year.
- Procedures for measuring and recording data within the framework of the environment, quality and energy management systems are checked by internal and external auditors.
- All reports to Swedish authorities are available to the public as a result of the freedom of information principle.
- Data from all the mills are reported to the EU annually.

Data from all parts of the Group are collected in the same way, collated and quality assured. No changes have been made in the reporting principles in relation to the previous year.

The Wargön Mill was closed down and a paper machine at Hallsta ceased production at the end of the year. These events have some effect on the figures reported for raw material consumption and emissions.

As some of the information provided in this report had already been collected by the end of the year it refers to, it might differ slightly from the information finally reported to the authorities. This means that some of the data for personnel and the environment now stated for 2007 could have been revised.

# Finance

MSEK	2008	2007	2006
<b>Income statement</b>			
Net turnover	19 334	19 159	18 592
Operating costs	-16 630	-15 548	-14 954
Depreciation according to plan	-1 343	-1 337	-1 346
Interest in earnings of associated companies	50	12	11
Items affecting comparability <sup>1)</sup>	-361	557	-
<b>Operating profit</b>	<b>1 051</b>	<b>2 843</b>	<b>2 303</b>
<b>Operating profit excl. items affecting comparability<sup>1)</sup></b>	<b>1 412</b>	<b>2 286</b>	<b>2 303</b>
Net financial items	-311	-261	-247
<b>Profit before tax</b>	<b>740</b>	<b>2 582</b>	<b>2 056</b>
Tax	-98	-1 077	-597
<b>Profit for the year</b>	<b>642</b>	<b>1 505</b>	<b>1 459</b>
<b>Balance sheet</b>			
<b>Assets</b>			
Fixed assets	26 506	26 153	25 334
Current assets	8 096	7 090	6 807
<b>Total assets</b>	<b>34 602</b>	<b>33 243</b>	<b>32 141</b>
<b>Equity and liabilities</b>			
Equity	15 641	16 932	16 636
Liabilities	18 960	16 311	15 505
<b>Total equity and liabilities</b>	<b>34 602</b>	<b>33 243</b>	<b>32 141</b>
<b>Cash flow</b>			
- from current operations	1 660	2 476	2 358
- from investment activities	-1 124	-1 315	-947
- from financing activities	-289	-1 253	1 498
<b>Cash flow for the year</b>	<b>247</b>	<b>-91</b>	<b>-87</b>
<b>Key ratios</b>			
<i>Operating margin, %</i>			
Holmen Paper <sup>2)</sup>	3	6	7
Iggesund Paperboard	7	12	14
Holmen Timber <sup>2)</sup>	2	24	17
Group <sup>2)</sup>	7	12	12
<i>Return, %</i>			
Capital employed <sup>2)</sup>	6	10	10
Equity	4	9	9
<i>Debt/equity ratio</i>	<b>0.48</b>	0.35	0.36

## Net turnover and operating profit by business area, MSEK

	Net turnover			Operating profit		
	2008	2007	2006	2008	2007	2006
Holmen Paper	10 443	10 345	10 140	280	623	754
Iggesund Paperboard	4 860	5 100	5 240	320	599	752
Holmen Timber	499	589	465	13	146	80
Holmen Skog	5 443	4 775	4 042	632	702	643
Holmen Energi	1 834	1 590	1 691	327	272	197
Group central costs and other	-	-	-	-159	-56	-123
Items affecting comparability <sup>1)</sup>	-	-	-	-361	557	-
	<b>23 079</b>	<b>22 399</b>	<b>21 578</b>	<b>1 051</b>	<b>2 843</b>	<b>2 303</b>
Intra-group sales	-3 745	-3 239	-2 986	-	-	-
<b>Group</b>	<b>19 334</b>	<b>19 159</b>	<b>18 592</b>	<b>1 051</b>	<b>2 843</b>	<b>2 303</b>

1) Items affecting comparability in 2008 included closure costs of MSEK 298 at Wargön, costs of MSEK 115 associated with closing down PM 2 at Hallsta and a positive effect on the result of MSEK 52 associated with the fire at Braviken. In 2007, items affecting comparability included impairment costs of MSEK 1 603 at Holmen Paper, the MSEK 60 re-entry of earlier impairment costs at Holmen Timber, and the MSEK 2 100 revaluation of biological assets.

2) Excluding items affecting comparability.

# Production and environment

	Holmen			Holmen Paper											
	Total			Hallsta			Braviken			Madrid			Wargön		
	2008	2007	2006	2008	2007	2006	2008	2007	2006	2008	2007	2006	2008	2007	2006
<b>Production, 1 000 tonnes</b>															
Newsprint, standard	957	1 038	1 011	170	207	216	458	457	430	329	374	365	–	–	–
MF Special	714	690	744	418	391	390	269	277	332	27	22	22	–	–	–
SC paper	149	131	127	149	131	127	–	–	–	–	–	–	–	–	–
Coated printing paper	212	175	162	–	–	–	–	–	–	76	32	23	136	143	139
Paperboard, coated and laminated	34	35	38	–	–	–	–	–	–	–	–	–	–	–	–
Paperboard <sup>1)</sup>	517	563	560	–	–	–	–	–	–	–	–	–	–	–	–
Sulphate pulp, int. and ext. deliveries	62	50	60	–	–	–	–	–	–	–	–	–	–	–	–
Sawn timber, 1 000 m <sup>3</sup>	279	272	247	–	–	–	–	–	–	–	–	–	–	–	–
<b>Raw materials, 1 000 tonnes</b>															
Wood, million m <sup>3</sup> fub <sup>2)</sup>	4.79	4.66	4.75	1.36	1.30	1.31	1.01	0.99	1.04	–	–	–	0.14	0.15	0.14
Purchased pulp/paperboard	166	174	214	41.0	43.4	44.5	4.0	8.6	9.5	–	–	–	34.0	35.9	36.7
Recovered paper	999	1 040	1 025	70	105	106	370	373	372	559	562	547	–	–	–
Plastic granules/foiling material	2.4	2.5	3.1	–	–	–	–	–	–	–	–	–	–	–	–
Water consumption, million m <sup>3</sup>	93	92	95	14.5	15.0	16.0	22.9	22.5	22.8	3.9	3.8	4.3	7.0	7.0	7.1
Process effluent, million m <sup>3</sup>	64	63	63	8.5	8.5	8.3	11.3	10.6	11.0	2.7	2.8	3.4	5.0	5.0	4.6
Chemicals <sup>3)</sup>	155	178	175	30.6	25.3	25.3	31.7	31.4	35.6	13.1	12.2	14.6	11.5	16.5	16.0
Filler, pigment	265	247	268	100	91.1	101	27.0	28.1	28.5	37.2	19.1	18.4	44.4	45.8	45.1
<b>Thermal energy, GWh</b>															
Biofuels															
Recovered liquor	1 612	1 530	1 640	–	–	–	–	–	–	–	–	–	–	–	–
Bark, wood fibre-based fuels	1 347	1 299	1 314	403	401	436	348	337	328	–	–	–	106	90	94
Recovered in the TMP-process <sup>5)</sup>	952	955	952	502	538	539	450	417	413	–	–	–	–	–	–
Fossil fuels															
Oil, LPG	749	869	1 031	109	139	246	256	284	326	–	–	–	109	115	120
Natural gas	921	872	893	–	–	–	–	–	–	875 <sup>6)</sup>	843 <sup>6)</sup>	860 <sup>6)</sup>	–	–	–
Purchased <sup>7)</sup>	600	623	624	–	–	–	–	–	–	–	–	–	50 <sup>8)</sup>	73 <sup>8)</sup>	72 <sup>8)</sup>
<b>Electric energy, GWh</b>															
Company, hydro power	1 128	1 193	934	–	–	–	–	–	–	–	–	–	–	–	–
Consumption of electricity <sup>7)</sup>	5 156	5 122	5 154	2 045	1 965	1 952	1 657	1 700	1 727	472 <sup>6)</sup>	458 <sup>6)</sup>	464 <sup>6)</sup>	194	205	193
of which own back-pressure power	485	472	547	18	37	72	62	50	57	201	183	191	13	13	16
<b>Emissions into air, tonnes</b>															
Sulphur dioxide, (counted as S)	235	230	250	33	42	74	24	26	25	<1	<1	<1	34	37	36
Nitrogen oxides	1 634	1 601	1 657	122	100	117	163	181	219	668 <sup>6)</sup>	636 <sup>6)</sup>	632 <sup>6)</sup>	72	69	63
Dust	131	118	133	24	16	37	4.1	4.1	4.3	<1	<1	<1	17	14	7.0
Carbon dioxide, 1 000 tonnes															
Fossil	399	419	471	32.3	41.5	74.5	79.3	82.9	93.1	176	170	173	28.9	30.8	32.1
Biogenic	1 062	1 096	1 151	150	186	173	158	157	161	–	–	–	44.6	40.6	42.6
<b>Emissions into water, tonnes</b>															
COD, 1 000 tonnes	25.2	24.5	24.5	3.5	3.9	3.5	1.8	1.8	1.8	0.27	0.24	0.30	1.4	1.6	1.7
Suspended solids	5 358	4 672	4 079	154	300	320	329	330	300	5.0	4.0	5.0	230	248	154
Nitrogen	374	318	366	40	36	37	61	55	52	66	65	68	36	23	25
Phosphorus	27.3	20.4	24.3	1.4	1.9	2.4	3.9	3.5	3.1	1.0	1.0	0.9	1.0	1.0	0.9
<b>Waste, 1 000 tonnes</b>															
Hazardous <sup>11)</sup>	1.6	0.8	1.6	0.04	0.02	0.01	0.15	0.14	0.16	0.09	0.04	0.03	0.08	0.10	0.07
Sent to landfill, wet	35	43	55	–	1.0	13.5	7.8	10.1	14.8	17.7	18.4	16.4	–	–	0.16
Utilised or recycled <sup>12)</sup>	496	468	443	12.6	17.0	5.1	161	136	111	225	202	221	9.7	23.5	24.3
<b>Other deliveries</b>															
Thermal energy, GWh	107	106	99	16 <sup>13)</sup>	16 <sup>13)</sup>	18 <sup>13)</sup>	–	–	–	–	–	–	–	–	–
Crude tall oil <sup>15)</sup> , 1 000 tonnes	5.5	10.0	10.5	–	–	–	–	–	–	–	–	–	–	–	–

1) The figures also include produced cellulose substitute. The use of raw materials and energy as well as environmental data are stated for total production at the mills.

2) At Group level, consumption is computed net taking into account internal deliveries of chips from the Iggesund Sawmill to Iggesunds Bruk.

3) Stated as 100 % active substance.

4) Thermal energy from Iggesunds Bruk. Emissions into air from the production of thermal energy are included in the table.

5) Thermal energy is produced from the electricity used in the production of thermo-mechanical pulp; this is recovered and used in production.

6) The report includes data for gas consumption and related emissions associated with Holmen's share of the electricity production at the 50 %-owned gas turbine facility (Cogen) adjacent to the mill. In the past corresponding figures were included for the electric energy that the facility delivered to the mill. Since the end of 2007, Cogen has sold all the electricity produced to the grid. The change in reporting practice provides a more accurate reflection of the mill's situation. Deliveries of heat from the gas turbine facility to the mill are also included, as in the past, in the figures for the mill's gas consumption and related emissions. However the model for allocating emissions of nitrogen oxides from the Cogen facility to electricity and thermal energy production is adjusted on the basis of the emissions the thermal energy would have given rise to if it had been produced in a steam boiler. To be able to compare data for energy use and related emissions, the data for 2006 and 2007 have been corrected in accordance with the conditions in 2008.

7) In 2008, emissions of carbon dioxide from production of purchased thermal energy and electricity amounted to approximately 350 000 tonnes.

8) Surplus heat from Vargön Alloys (smelter).



## Iggesund Paperboard

## Holmen Timber

## Holmen Skog

Iggesunds Bruk			Workington			Iggesunds Sawmill		
2008	2007	2006	2008	2007	2006	2008	2007	2006
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
34	35	38	-	-	-	-	-	-
286	308	308	231	255	252	-	-	-
62	50	60	-	-	-	-	-	-
-	-	-	-	-	-	279	272	247
1.46	1.42	1.47	0.43	0.42	0.41	0.65	0.62	0.56
-	-	39.8	87.0	86.4	83.7	-	-	-
-	-	-	-	-	-	-	-	-
2.4	2.5	3.1	-	-	-	-	-	-
35.8	34.9	35.3	9.2	9.0	9.0	-	-	<0.02
29.6	29.5	28.7	6.9	6.9	6.9	-	-	<0.01
43.9	68.1	58.1	24.0	24.3	24.9	-	-	<0.01
27.1	32.5	44.6	29.4	30.6	29.9	-	-	-
1 612	1 530	1 640	-	-	-	-	-	-
403	385	378	-	-	-	87 <sup>4)</sup>	86 <sup>4)</sup>	78 <sup>4)</sup>
-	-	-	-	-	-	-	-	-
271	327	335	-	-	-	4.2	4.0	4.3
-	-	-	46	29	33	-	-	-
2.0 <sup>9)</sup>	1.8 <sup>9)</sup>	1.8 <sup>9)</sup>	546 <sup>10)</sup>	548 <sup>10)</sup>	550 <sup>10)</sup>	2.0	-	-
-	-	-	-	-	-	-	-	-
433	429	456	337	348	345	18	17	17
191	189	211	-	-	-	-	-	-
143	125	115	<0.05	<0.05	<0.05	0.7	0.4	0.4
577	588	601	14	7.0	8.0	18	20	17
84	82	81	<0.05	<0.05	<0.05	2.0	2.0	3.4
73.3	87.8	91.6	8.5	4.8	5.4	1.1	1.0	1.0
684	688	751	-	-	-	25.0	24.1	23.2
8.8	7.6	7.7	9.4	9.4	9.5	-	-	-
1 920	1 030	1 010	2 720	2 760	2 290	-	-	-
136	89	105	35	50	79	-	-	-
15	10	12	5.0	3.0	5.0	-	-	-
1.23	0.46	1.3	0.03	0.03	0.01	<0.01	<0.01	0.01
8.8	13.3	9.7	0.45	0.21	0.25	-	-	-
40.6	51.5	40.3	47.2	37.8	41.3	<0.01	-	-
91 <sup>14)</sup>	90 <sup>14)</sup>	81 <sup>14)</sup>	-	-	-	-	-	-
5.5	10.0	10.5	-	-	-	-	-	-

<b>Total land holdings</b>	<b>1 263 000 hectares</b>
Productive forestland	1 032 000 hectares
– of which protected forests	67 000 hectares
Productive forestland excl. protected forests	965 000 hectares
Barren land	231 000 hectares
– of which forest land	130 000 hectares
Protected forests and forested impediments that are not managed	197 000 hectares
Timber volume, per hectare	115 m <sup>3</sup> /sk
Timber volume, total	118 120 000 m <sup>3</sup> /sk
Standing timber excl. uncultivated areas	106 240 000 m <sup>3</sup> /sk

## Types of tree

Pine 50 %, spruce 34 %, hardwood 12 %, Contorta pine 4 %

## Age class distribution

0–30 years 38 %, 31–60 years 26 %, 61–90 years 14 %, 91 years– 22 %

<b>Wood procurement</b>	<b>2008</b>	2007	2006
<b>million m<sup>3</sup>/ub</b>			
Total, gross	10.4	10.6	10.1
of which from			
– company forest	2.6	2.6	2.6
– other Swedish forest owners	7.5	7.6	6.9
– import	0.3	0.4	0.6

## Wood deliveries

<b>million m<sup>3</sup>/ub</b>			
To Holmen mills	4.7	4.5	4.6
External sales	5.7	6.0	5.5

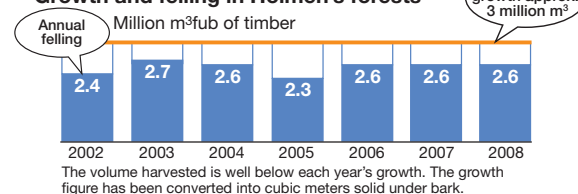
## Silviculture, hectares

Reforestation	10 900	9 100	12 600
of which, %			
Planting	72	75	74
Seeding	23	22	19
Natural regeneration			
– under seed trees	5	3	6
Controlled burning incl. forest fires	1 550	390	662

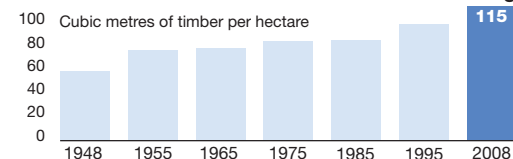
## Plant production

Millions of plants	30	30	31
--------------------	----	----	----

## Growth and felling in Holmen's forests



## Volume of timber in Holmen's forests is increasing



## Iggesund Paperboard – sheeting units

Valence, France and Utrecht, the Netherlands. Production in 2008 amounted to 49 800 (62 100) tonnes. The raw material consisted of 55 000 (67 700) tonnes of paperboard from Iggesunds Bruk and Workington, and 82 (100) tonnes of plastic. Energy consumption amounted to 0.5 (0.7) GWh (natural gas) and 2.2 (2.3) GWh (electricity). Emissions of fossil carbon dioxide into air totalled 100 (140) tonnes. In total 23 (23) tonnes of waste were sent for incineration.

9) From Nordanstigs Bostäder's district heating plant in Strömsbruk.

10) Thermal energy and electricity are produced using natural gas by another company (Powergen CHP) at a facility adjacent to the mill.

11) Hazardous waste is dealt with by an authorised collection and recovery contractor. Braviken, Hallsta and Skärnäs harbour terminals have an obligation to deal with oil-containing waste from the ships calling at the harbours. In 2008, the volume of such waste amounted to 1 329 tonnes at the three harbours together.

12) Waste used, for example, as filling material, construction material or for the production of agricultural products. In 2008, an additional amount of approximately 760 000 tonnes of waste was utilised for internal and external production of energy.

13) Surplus heat for delivery to the district heating network in Hallstavik.

14) 87 GWh for a delivery to the Iggesund Sawmill. Corresponding fuel energy to produce the heat and related emissions into air are reported under Iggesund Sawmill. 4 GWh as surplus heat for delivery to the district heating network in Iggesund.

15) For delivery to the chemical industry.

# Personnel

	Sweden			Group		
	2008	2007	2006	2008	2007	2006
<b>Employees</b>						
Average number	3 511	3 628	3 667	4 829	4 931	4 958
of whom female, %	17.5	16.8	16.9	17.9	16.4	17.2
of whom temps, % <sup>1,2)</sup>	–	7.5	–	–	5.9	–
Average age	46.5	46.6	46.5	45.0	45.5	45.7
Retirement age (average of different types of retirement)	62.7	62.3	61.9	62.3	–	–
<b>Sick leave, %</b>						
Total	4.6	4.7	4.8	4.3	4.5	4.4
Of which longer than 60 days	2.7	2.7	2.8	–	–	–
Employees: 29 years of age and below	2.5	2.3	2.3	–	–	–
30–49 years of age	4.0	4.4	4.7	–	–	–
50 years of age and above	5.7	5.7	5.6	–	–	–
male	4.5	4.2	4.4	–	–	–
female	5.3	7.0	6.9	–	–	–
Health index (share of employees with no days of sick leave during the year)	41.7	44.7	43.5	43.5	–	–
<b>Equality of opportunity, %</b>						
Female managers of total number of managers	13.0	10.8	9.0	12.9	8.9	7.6
Female share of managerial positions <sup>2)</sup>	–	14	14	–	–	–
Female joining the company of total new employees	33	23	23	31	–	23
<b>Education, %</b>						
Elementary school	19	21	23	21	21	23
Upper secondary school	65	64	63	61	61	60
University, at least 2 years	16	15	14	18	18	17
Graduates of new employees <sup>2)</sup>	–	37	37	–	34	37
Female graduates of all new female employees	89	58	57	–	–	–
<b>Competence development, hours</b>						
Traditional training per employee and year <sup>2)</sup>	–	39	–	–	37	–
<b>Labour turnover rate, %</b>						
Labour turnover	8.5	5.4	5.5	9.2	6.0	5.8
Of which						
given notice	0.6	0.6	0.6	1.3	–	0.6
retirement	4.4	2.7	3.3	3.7	–	3.1
at own request	3.5	2.1	1.6	4.2	–	2.2
New employees	3.2	5.0	4.7	6.5	5.9	5.6
<b>Accidents and incidents, number per 1 000 employees</b>						
Incidents	267	236	216	296	256	257
Occupational accidents, less than 8 hours of absence	122	121	106	130	133	118
Occupational accidents, more than 8 hours of absence	23.0	18.0	20.9	38.4	23.3	26.3
<b>Unionisation, %</b>						
Units with independent trade unions	100	100	100	100	100	100
Units with safety committee	100	100	100	100	100	100
Rate of union membership	89	94	97	76	83	87
<b>Employee surveys<sup>3)</sup></b>						
Human capital (0–1000)	–	616	604	–	602	587
Leadership index (0–100)	–	56	55	–	56	55

1) Fewer than 5 per cent of the employees are employed on a part-time basis.

2) Holmen introduced a new HR system in 2008, which made it impossible to produce certain ratios.

3) The employee survey is carried out every second year. The next one will be in 2009.

# Holmen complies with GRI's reporting level A



GRI – Global Reporting Initiative – is an international organisation under whose auspices a number of interest groups in society have drawn up global guidelines for how companies are to report on parameters covered by the concept of sustainable development.

**THE PURPOSE IS TO CREATE** uniformity in sustainability reporting and to make it easier to assess and compare companies from the social, environmental and economic perspectives. The application of GRI's guidelines is voluntary.

**HOLMEN LOOKS FAVOURABLY ON GRI** and has chosen to harmonise its reporting principles with the GRI criteria that are relevant to the Group.

**HOLMEN IS OF THE OPINION** that the reporting of social, environmental and economic facts/ aspects in *Holmen and its World 2008* satisfy reporting level A of GRI's Reporting Guidelines, that is to say the highest level.

**KPMG, AN AUDIT COMPANY**, made in February 2009 a general review on Holmen's behalf of the content of Holmen's GRI report in relation to the information requirements in the GRI's

Guidelines for Sustainability Reporting, G3. Holmen's GRI report consists of *Holmen and its World 2008*, *Holmen Annual Report 2008*, and the GRI Register on Holmen's website. The purpose was to issue a statement as to whether KPMG shares Holmen's opinion that the report satisfies GRI's reporting level A.

KPMG is of the opinion that the information Holmen has provided in the above mentioned documents satisfies GRI reporting level A.

## For more information:

**GRI REGISTER.** A complete GRI register is provided on Holmen's website, where KPMG's opinion can also be found.

**GLOBAL REPORTING INITIATIVE.** The organisation's website provides a comprehensive picture of GRI and its regulatory framework.

[www.globalreporting.org](http://www.globalreporting.org)





# Holmen and GRI

Holmen has been following the Global Reporting Initiative's (GRI) recommendations for sustainability reporting in five years. The list below shows where GRI indicators for application principles and core indicators are presented. GRI's additional indicators are shown in the GRI register on Holmen's website where also deviations from the guidelines are reported with comments. Holmen has taken the ten GRI's reporting principles into

account in the preparation of Holmen and its World 2008. The purpose of these principles is to ensure that information describing the business in terms of its sustainability is included, and that the quality of the information provided satisfies the GRI's criteria.

SR = Sustainability report  
AR = Annual report  
www = Holmen's website  
(www.holmen.com)

1. Vision and Strategy	
1.1 Statement from the CEO and chair of sustainability to the organisation	SR 4-5
1.2 Description of key impacts, risks and opportunities	SR cover, 4-7, 16-17, 20-21, AR 42-48, 58-59
2. Organisation Profile	
2.1 Name of the reporting organisation	SR cover, 2, www
2.2 Primary brands, products and/or services	SR 6-11
2.3 Operational structure of the organisation	SR 6-11, 16-17
2.4 Location of organisation's headquarters	SR 10
2.5 Number of countries where the organisation operates	SR 10-11
2.6 Nature of ownership and legal form	SR 6, AR 26-27, 45-47, 55, www
2.7 Markets served	SR 6-11, AR cover, 10-13
2.8 Scale of the reporting organisation	SR 6-11, 38-39, 59-62, AR cover, 26-27, 60-61
2.9 Significant changes during the reporting period regarding size, structure and ownership	SR 2, 56, 58, AR 42-48, www
2.10 Awards received	SR 68
3. Report Scope	
Report Profile	
3.1 Reporting period	SR 2
3.2 Date of most previous report	SR 2
3.3 Reporting cycle (annual, biennial etc.)	SR 2
3.4 Contact point for questions regarding the report or its content	SR 2, 69
Report Scope and Boundary	
3.5 Process for defining report content	SR 2-5
3.6 Boundary of the report	SR 2-5
3.7 Specific limitations on scope of the report	SR 2-5, 60-61
3.8 Basis for reporting on joint ventures, subsidiaries etc.	SR 2, 58, AR 54-56, www
3.9 Data measurement techniques and assumptions applied	SR 56-62, AR 54-56, www
3.10 Explanation of restatements provided in earlier reports	SR 58-62
3.11 Significant changes from previous reports (regarding measurement methods etc.)	SR 2, 58-62
GRI Content Index	
3.12 GRI disclosure table	SR 2, 64-65, www
Assurance	
3.13 Policy and current practice with regard to seeking external assurance for the report	SR 2, 58, 63, AR 83, www
4. Governance, Commitments and Engagement	
Governance	
4.1 Governance structure including board committees	SR 16-17, AR 32-36
4.2 Status of the CEO	SR 16-17, AR 34, www
4.3 Number of independent board members (if unitary board)	AR 34, www
4.4 Mechanisms for shareholder and employee feedback	SR 16, 20-21, 57, AR 33, 36
4.5 Executive compensation	SR 48-49, AR 34-35, 62-63
4.6 Process of board to ensure avoidance of conflicts of interest	SR 16, AR 34
5. Performance Indicators	
ECONOMIC INDICATORS	
Disclosure on Management Approach	
Goals and Performance	SR 7, 16-17, 38-39, 59, AR cover, 2-8
Policy	SR 7, 18
Additional Contextual Information	SR 2-5, 16, 68, AR cover, 2-8, 42-47
Economic Performance	
EC1 Direct economic value, generated and distributed	SR 3, 38-39, 59
EC2 Risks and opportunities due to climate change	SR 4-5, 14-15, 24-25, 34-37
EC3 Coverage of defined benefit pension plan obligations	AR 62, 67
EC4 Significant financial assistance from government	SR 31, AR 62
Market Presence	
EC6 Policy, practices and proportions of spending on locally-based suppliers	SR 22-23, 26-27
EC7 Procedures for hiring locals (including proportion of local managers)	SR 22-23, www
EC8 Description of infrastructure investments that provide public benefit	SR 22-23
ENVIRONMENTAL INDICATORS	
Disclosure on Management Approach	
Goals and Performance	SR 4-5, 7, 36-37, 40-43
Policy	SR 18
Organisational Responsibility	SR 16-17, 40
Training and Awareness	SR 40
Monitoring and Follow-up	SR 16-17, 40-43
Additional Contextual Information	SR 24-31, 58, 60-61, AR 8-9, 47-48
Materials	
EN1 Weight of materials used	SR 60-61
EN2 Percentage of materials used that are recycled	SR 28, 46, 60-61

<p><b>Energy</b></p> <p>EN3 Direct energy consumption</p> <p>EN4 Indirect energy consumption</p> <p><b>Water</b></p> <p>EN8 Total water withdrawal by source</p> <p><b>Biodiversity</b></p> <p>EN11 Location and size of land owned, leased or managed for product activities</p> <p>EN12 Description of significant impacts of activities on protected areas</p> <p><b>Emissions, Effluents and Waste</b></p> <p>EN16 Total direct and indirect greenhouse gas emissions</p> <p>EN17 Other relevant indirect greenhouse gas emissions</p> <p>EN19 Emissions of ozone-depleting substances</p> <p>EN20 NO<sub>x</sub>, SO<sub>x</sub> and other significant air emissions</p> <p>EN21 Total water discharge (quality and impact)</p> <p>EN22 Total weight of waste</p> <p>EN23 Total number and volume of significant spills</p> <p><b>Products and Services</b></p> <p>EN26 Initiatives to mitigate environmental impacts of products and services</p> <p>EN27 Percentage of products sold reclaimed at end of product life cycle (by category)</p> <p><b>Compliance</b></p> <p>EN28 Value of fines and numbers of non-monetary sanctions for non-compliance</p>	<p>SR 30–31, 41, 60–61</p> <p>SR 60–61, www</p> <p>SR 29, 60–61</p> <p>SR 10, 24–25, 29, 61, www</p> <p>SR 24–25, 29, 44, www</p> <p>SR 42–43, 60–61, www</p> <p>SR 60–61, www</p> <p>SR 42, 60–61</p> <p>SR 29, 42, 60–61, www</p> <p>SR 42, 46, 60–61</p> <p>SR 41, 47, www</p> <p>SR 12–15, 17, 24–33, 36–37, 41, 44–47, 68</p> <p>SR 28–31, 46, 60–61</p> <p>SR 41, 44, AR 48</p>	<p><b>Investments and Procurement</b></p> <p>HR1 Percentage of significant investments agreements screened for HR issues</p> <p>HR2 Major suppliers screened for HR issues</p> <p><b>Non-discrimination</b></p> <p>HR4 Incidents of discrimination</p> <p><b>Freedom of Association</b></p> <p>HR5 Operations where freedom of association and collective bargaining may be at significant risk</p> <p><b>Child Labour</b></p> <p>HR6 Operations where there is a risk for incidents of child labour</p> <p><b>Forced and Compulsory Labour</b></p> <p>HR7 Operations identified as having significant risk for incidents of forced or compulsory labour</p> <p><b>SO, Society</b></p> <p><b>Disclosure on Management Approach</b></p> <p>Goals and Performance</p> <p>Policy</p> <p>Organisational Responsibility</p> <p>Training and Awareness</p> <p>Monitoring and Follow-up</p> <p>Additional Contextual Information</p> <p><b>Community</b></p> <p>SO1 Nature, scope and effectiveness of any programs and practices that assess and manage the impact of operations</p> <p><b>Corruption</b></p> <p>SO2 Percentage and total number of business units analyzed for risks related to corruption</p> <p>SO3 Percentage of employees trained in organisation's anti-corruption policies and procedures</p> <p>SO4 Actions taken in response to incidents of corruption</p> <p><b>Public Policy</b></p> <p>SO5 Public policy positions and participation in public policy development and lobbying</p> <p><b>Compliance</b></p> <p>SO8 Value of significant fines and numbers of non-monetary sanctions for non-compliance with laws and regulations</p>	<p>www</p> <p>SR 19, www</p> <p>SR 53</p> <p>SR 19, 57, www</p> <p>SR 19, www</p> <p>SR 19, www</p> <p>SR 18–19</p> <p>SR 18</p> <p>SR 16–17, 20–23, www</p> <p>SR 18–19</p> <p>SR 20–21</p> <p>SR 16–23, 47, 54, 57</p> <p>SR 18–19</p> <p>SR 18–19, www</p> <p>SR 18–19, www</p> <p>www</p> <p>www</p>
<p><b>SOCIAL INDICATORS</b></p> <p><b>LA, Labour Practices and Decent Work</b></p> <p><b>Disclosure on Management Approach</b></p> <p>Goals and Performance</p> <p>Policy</p> <p>Organisational Responsibility</p> <p>Training and Awareness</p> <p>Monitoring and Follow-up</p> <p>Additional Contextual Information</p> <p><b>Employment</b></p> <p>LA1 Breakdown of total workforce</p> <p>LA2 Total number and rate of employee turnover</p> <p><b>Labour/Management Relations</b></p> <p>LA4 Percentage of employees covered by collective bargaining agreements</p> <p>LA5 Minimum notice period(s) regarding operational changes</p> <p><b>Occupational Health and Safety</b></p> <p>LA7 Rates of injury, disease, lost days, absenteeism and fatalities</p> <p>LA8 Education, training etc. regarding serious diseases</p> <p><b>Training and Education</b></p> <p>LA10 Average hours of training (per year per employee)</p> <p><b>Diversity and Equal Opportunity</b></p> <p>LA13 Composition of governance bodies and breakdown of employees (for example regarding gender and minority group memberships)</p> <p>LA14 Ratio of basic salary (by men/women)</p> <p><b>HR, Human Rights</b></p> <p><b>Disclosure on Management Approach</b></p> <p>Goals and Performance</p> <p>Policy</p> <p>Organisational Responsibility</p> <p>Training and Awareness</p> <p>Monitoring and Follow-up</p> <p>Additional Contextual Information</p>	<p>SR 3, 7, 48–49, 52</p> <p>SR 18–19, 48, 52</p> <p>SR 16–17, 48–49</p> <p>SR 51, 53, 55</p> <p>SR 48–49, 53</p> <p>SR 55–57, 66, 68</p> <p>SR 10–11, 62, www</p> <p>SR 62, www</p> <p>SR 57, 62</p> <p>SR 18, 56–57</p> <p>SR 49, 51, 62, www</p> <p>SR 51</p> <p>SR 55, 62</p> <p>SR 16, 52–54, 62, AR 28–31</p> <p>SR 18, 53, www</p> <p>SR 2, 7, 19, 48–49</p> <p>SR 18–19</p> <p>SR 16–17, 52–53, 57, www</p> <p>SR 52–53, 55</p> <p>SR 19, 57</p> <p>SR 18–19</p>	<p><b>PR, Product Responsibility</b></p> <p><b>Disclosure on Management Approach</b></p> <p>Goals and Performance</p> <p>Policy</p> <p>Organisational Responsibility</p> <p>Training and Awareness</p> <p>Monitoring and Follow-up</p> <p>Additional Contextual Information</p> <p><b>Customer Health and Safety</b></p> <p>PR1 Life cycle stages in which health and safety of products and services are assessed</p> <p><b>Product and Service Labeling</b></p> <p>PR3 Product information required by procedures</p> <p><b>Marketing Communications</b></p> <p>PR6 Programs for adherence of laws, standards and voluntary codes related to marketing communications</p> <p><b>Compliance</b></p> <p>PR9 Value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services</p>	<p>SR 7–9, 28</p> <p>SR 18, 26–27</p> <p>SR 16–17, www</p> <p>SR 12–13</p> <p>SR 17</p> <p>SR 12–13, www</p> <p>SR 8–9, 26–27, 43, www</p> <p>www</p> <p>www</p>

# Glossary

## Biofuel/bioenergy

Renewable fuel originating from plant life, such as wood (including liquors, bark and crude tall oil). Biogenic = deriving from biofuels.

## Biological treatment

The cleaning of effluent with the aid of micro-organisms. The principle is the same as that found in nature, but the process of degradation goes faster.

## Carbon dioxide (CO<sub>2</sub>)

Carbon is the building block of life and is found in every living thing. Biogenic carbon dioxide is released when biological matter decomposes or when wood is burnt. Fossil carbon dioxide is released when coal, oil or fossil gas is burnt.

## Cash flow

The actual payments received or made by the Group in the form, for example, of payments received from customers and to suppliers, creditors and shareholders.

## Certification

An examination carried out by a third party. A certificate is a document showing that the conditions for certification have been satisfied.

## COD

Chemical oxygen demanding substance. A measure of the amount of oxygen needed for the complete decomposition of organic material in water.

## Crude tall oil/pitch oil

Extracted from black liquor and used as a raw material in the production of soaps and paints. It can also be used in the lime kiln instead of oil.

## Debt/equity ratio

The ratio between the Group's net financial liabilities (mainly borrowed capital) and its equity.

## DIP

Pulp that has been produced from de-inked recovered paper (De-Inked Pulp).

## Dust

Ash particles which are formed during the incineration of materials such as bark and liquor.

## EI-Forest

A combined harvester and forwarder that runs on diesel fuel and/or electricity.

## Environmental audit

An audit evaluating the functioning of a company's environmental protection organisation, management procedures and environmental equipment.

## FBB

Multi-layered paperboard made from mechanical and chemical pulp (FBB, Folding Box Board).

## Filler

Filler is used to add bulk to paper and to make it more uniform in structure and brighter. Various types of pigment are used, including ground marble and china clay (kaolin).

## Financial items

Largely, the difference between the Group's interest income on placements with banks and other credit institutions and its interest costs on loans raised from such institutions.

## Fossil fuels

Fuels based on carbon and hydrogen compounds – mainly coal, oil and fossil gas.

## FSC

FSC – Forest Stewardship Council – seeks to promote use of the world's forests in ways that are acceptable according to three sets of criteria: environmental, social and financial.

## IPPC

Integrated Pollution Prevention and Control. EU directive to integrate, application procedures and supervision of major industrial companies.

## ISO 14001

International environmental management standard that has been drawn up by the International Organisation for Standardisation (ISO). Two important principles laid down by ISO 14001 stress the need for regular environmental audits and that the requirements intended to result in continuous improvements should be gradually raised.

## MF paper

Includes standard and coloured newsprint (MF, Machine Finished).

## Net turnover

Invoiced sales of products, wood and energy after deduction of value added tax (VAT, "moms").

## Nitrogen (N)

A chemical element found in wood. Emissions of nitrogen into water can cause eutrophication.

## Nitrogen oxides (NO<sub>x</sub>)

Gases composed of nitrogen and oxygen that are produced during combustion. In moist air, nitrogen oxides can form nitric acid, which is then precipitated as acid rain. Since the gas contains nitrogen, the emission of nitrogen oxides can also have a fertilising effect.

## Operating profit/loss

The Group's income from the sale of products, wood and energy less; cost of production; cost of delivery to customers; depreciation in value of machinery, buildings etc.

## PEFC

Programme for the Endorsement of Forest Certification schemes. Originally a European forest certification, which is now gaining greater global acceptance. In Sweden the PEFC and FSC standards are broadly identical.

## Phosphorus (P)

A chemical element found in wood. Excess phosphorus in water can cause eutrophication and oxygen deficiency.

## Productive forestland

Forestland that is able to produce an average of at least 1 m<sup>3</sup> of wood total volume over bark per hectare per year over the lifetime of the stand.

## REACH

Registration, Evaluation and Authorisation of Chemicals. A chemicals law that will require many of the chemicals that are available on the market in the EU to undergo tests in order to assess their effects on health and the environment.

## RMP – Refiner-Mechanical Pulp

Pulp produced by refining wood chips, with or without chemical or heat treatment.

## SBB

Multi-layered board made of bleached chemical pulp (SBB, Solid Bleached Board).

## SC paper

Super-calendered paper. Uncoated, glazed magazine paper in grammages between 50 and 65 gsm (SC, Super Calender).

## SDC

SDC (data centre for the forest industry). Co-operative with responsibility for all reporting on wood in Sweden.

## Softwood

Pine or spruce wood.

## Sulphate pulp

A chemical pulp that is made by cooking wood at high temperature with white liquor (sodium hydroxide and sodium sulphide).

## Sulphur dioxide (SO<sub>2</sub>)

A gas consisting of sulphur and oxygen that is formed during the combustion of sulphur-containing fuels such oil. On contact with moist air, sulphur dioxide forms sulphuric acid, which contributes to the acidification of rain.

## Suspended solids (SS)

Water-borne substances comprising fibres and particles, most of which can be separated out using a fine mesh filter.

## Tax cost

Computed tax on the year's result. The Group's normal tax rate is approximately 29 per cent.

## TMP – Thermo-Mechanical Pulp

A high-yield pulp (94–96 per cent yield from the wood). Obtained by heating spruce chips and then grinding them in refiners.

## Transportation (tonne-km)

Describes extent of transport and logistics activities. Defined in terms of tonne-km, which is obtained by multiplying the weight of the goods (in tonnes) by the distance covered (kilometres).

## Links

BasEI	<a href="http://www.basel.se">www.basel.se</a>
FSC	<a href="http://www.fsc.org">www.fsc.org</a>
Global Compact	<a href="http://www.unglobalcompact.org">www.unglobalcompact.org</a>
GRI	<a href="http://www.globalreporting.org">www.globalreporting.org</a>
Holmen	<a href="http://www.holmen.com">www.holmen.com</a>
ILO	<a href="http://www.ilo.org">www.ilo.org</a>
IPPC	<a href="http://www.ec.europa.eu/environment/air/pollutants/stationary/ippc/">www.ec.europa.eu/environment/air/pollutants/stationary/ippc/</a>
ISO	<a href="http://www.iso.org">www.iso.org</a>
Karl Erik Önnestjö Foundation	<a href="http://www.onnesjostiftelsen.se">www.onnesjostiftelsen.se</a>
LUSTRA	<a href="http://www.mistra.org/lustra">www.mistra.org/lustra</a>
OECD	<a href="http://www.oecd.org">www.oecd.org</a>
PEFC	<a href="http://www.pefc.org">www.pefc.org</a>
REACH	<a href="http://www.ec.europa.eu/enterprise/reach">www.ec.europa.eu/enterprise/reach</a>
SDC	<a href="http://www.sdc.se">www.sdc.se</a>
The Kempe Foundations	<a href="http://www.kempe.com">www.kempe.com</a>
UN Human rights	<a href="http://www.un.org/rights">www.un.org/rights</a>



# Subject index

Subject	Page	Subject	Page	Subject	Page
Accidents	49, 51	Exceeded limits	41	Overmanning	56
Acknowledgements	68	External audit	63	Paperboard	8, 11–12, 14
Adept and Mentor programme	55	Extortion	18–19	Peat harvesting	13, 15
Audit	2, 63	Female managers	52, 54	PEFC	26, 43
Bioenergy	30–31	Fertilisation	25–35	Performance review	49, 53
Biofuel	30–31	Finance, facts	59	Permits	43
Biorefining	15	Finance, working practices	17	Personnel, facts	62
Board	14	Financial development	38–39	Personnel policy	18, 48
Bribes	18–19	Financial targets	7	Personnel reductions/cuts	56
Business partners	20	Forestry	12, 15	Policies	18
Carbon analysis	34–35	Forestry certification	25, 43	Printing paper	8, 11–12
Carbon cycle	33	Forest growth	24–25	Production, facts	60–61
Carbon dioxide	32–35	FSC	26, 43	Production units	10
Carbon sink	34–35	Geographical presence	10–11	Products	8–11
Certifications	26, 43	Global Compact	2, 19, 68	REACH	47
Chemicals	47	Government engagement	22	Recognitions	68
Child labour	19	GRI	2, 63–65	Recovered paper	9, 28
Climate	32–35, 37	Ground contamination	47	Recruitment	54
Climate target	7, 41	Growth	7, 25	Research and development	14–15
Competence development	55	Guidelines for sustainable forestry	25	Right of association	57
Contacts with the society	20–21	Health	51	Sawn timber	9, 12–13, 15, 39
Corporate governance	2	HR	48	Schools, contacts with/activities for	54
Discontinued businesses	47	HR system	49, 55	Self-sufficiency	24
Discrimination	19, 53	HR targets	7, 49	Senior management	15
Electricity certificates	37	Human capital	7, 49	Shareholders	21
Electricity production	30–31	Human rights	19	Sick leave	51
Emission rights	35	ILO	19	Social responsibility	7, 48
Emissions into air	42	Induction programme	55	Sponsoring	23
Emissions into water	29, 42	Insurance	17	Stakeholders	20–21
Employee surveys	53	Internal mobility	19, 48	Strategy	7
Employment conditions	57	Joint action groups	16–17	Sustainable development	4–7, 12–13
Energy efficiency	31	Landfill	46	Sustainability targets	7
Energy management system	31, 40, 43	Leadership index	7, 49, 50	Traceability, wood	20, 27
Energy supply	30	Management development	50	Transportation	45
Energy targets	7	Management system	31, 43	Union membership, rate of	57
Environment, concern for	7, 40	Manager works	50	Unions, relations with	57
Environmental aspects	41	Managerial duties	50	Wages, policy	48
Environmental certification	26, 43	Market conditions	38–39	Waste	42, 46
Environmental costs	44	Nature conservation	23, 25	Water treatment	29
Environmental facts	60–61	Net turnover	59	Water use	29
Environmental management system	43	Noise	47	Wind power	13, 15, 37, 39
Environmental permit	43	OECD	19	Wood harvesting	15, 25
Environmental policy	18, 40	Official bodies	21	Wood procurement	26–27
Environmental targets	7, 41	Operating result/profit/loss	38–39, 59	Work environment	51
Equal opportunity	18, 52	Organisation	16–17		

# Acknowledgements and assessments

Holmen is attracting growing attention for its sustainability process. The Group is included in several banks' environmental and ethical funds, as well as in a number of international corporate indices.

**HOLMEN VIEWS** active sustainability measures and clear communication on this subject as a means of strengthening its brand name. It has also positive internal effects by raising the employees' competence and their commitment to sustainability. Holmen regards the values of its stakeholders with regard to sustainability work as important for identifying strengths and weaknesses.

Banks now offer environmental and ethical funds that invest in companies

that recognise the commercial potential for integrating environmental and social factors into their business. Holmen is now included in several such funds.

Holmen is also listed in several corporate indices. The purpose is to make it easier for investors to identify companies that have a sound approach to sustainability. Being included on an index confirms that a company adopts a responsible approach to financial, environmental and social aspects.



## Company Indices

### NASDAQ OMX

#### OMX GES Nordic Sustainability Index.

This index was set up in 2008 and ranks the 50 leading companies in the Nordic region in terms of environmental responsibility, social responsibility and corporate governance.

[indexes.nasdaqomx.com](http://indexes.nasdaqomx.com)



**FTSE4Good Index Series.** Companies in this index are distinguished by having a well-developed environmental policy, good relationship with stakeholders and paying regard to human rights.

[www.ftse.com/ftse4good](http://www.ftse.com/ftse4good)



**Storebrand SRI.** The companies that are world leaders within the areas of environmental and social responsibility qualify for Storebrand's

*Best in class list.* [www.storebrand.com](http://www.storebrand.com)



**VIGEO Rating** rates companies on the basis of their activities in the field of sustainable development. *VIGEO Ethibel Register* is an index of companies that are judged to be better than average in terms of social responsibility and environmental sustainability. [www.vigeo.com/csr-rating-agency](http://www.vigeo.com/csr-rating-agency)

## Environmental Funds

### Swedbank



Robur

#### Swedbank Roburs Ethica Fund.

Holmen is recognised for inclusion in this fund. Holmen belongs to the *Good Example* category.

[www.swedbankroburs.se](http://www.swedbankroburs.se)

### BANCO

**Banco.** Holmen is in several of Banco's ethical and environmentally-focused funds.

[www.banco.se](http://www.banco.se)



**Global Compact.** Holmen is a member of the UN's Global Compact, thereby expressing its support for the UN's ten principles for human rights, corruption and the environment. Holmen participates in the *Swedish Global Responsibility Network* and as of 2009 also in the *Global Compact Nordic Network*. [www.unglobalcompact.org](http://www.unglobalcompact.org)

**ICC.** Holmen has been affiliated to the International Chamber of Commerce's Business Commission on Sustainable Development for more than 10 years. This sets up 16 principles for environmentally-aware leadership. [www.icc.org](http://www.icc.org)

## Assessments

**Carbon Disclosure Project (CDP)** is a non-profit organisation that aims to promote a better dialogue between the parties whose common denominator is their impact on the climate. In CDP's 2008 ranking of companies in the CO<sub>2</sub>-intensive category (total of 110 companies) Holmen was ranked as 8th best for its reporting on its impact on the climate. In the Materials section Holmen ranked 4th.

[www.cdproject.net](http://www.cdproject.net)

**Enterprise.com (e.com)** is an organisation that primarily ranks annual reports. Holmen was selected as a good example for the reporting and discussion of its sustainability process in Holmen and its World 2007.

[www.reportwatch.net](http://www.reportwatch.net)

**Deloitte** has judged Swedish companies' information about the environment and ethical and social responsibility since 1993. Holmen was ranked as one of the four best companies in the group *Best auditing practice* for the sustainability report Holmen and its World 2007. [www.deloitte.com](http://www.deloitte.com)

# We welcome your views and comments

*Holmen and its World* provides answers to many questions about Holmen's approach to sustainability – but it's a large subject and there are certainly many more. So, we welcome further questions and comments on the topics that are covered in this report.

## Concern for the environment

Lars Strömberg, Director of Sustainable and Environmental Affairs  
+46 (0) 8 666 21 54 · [lars.stromberg@holmen.com](mailto:lars.stromberg@holmen.com)

## Social responsibility

Thommy Haglund, Senior VP, Group Human Resources  
+46 (0) 8 666 21 38 · [thommy.haglund@holmen.com](mailto:thommy.haglund@holmen.com)

## Financial development

Anders Almgren, CFO, Group Finance  
+46 (0) 8 666 21 16 · [anders.almgren@holmen.com](mailto:anders.almgren@holmen.com)

## Addresses

### Holmen AB

#### Head office

P.O. Box 5407  
SE-114 84 STOCKHOLM  
+46 (0) 8 666 21 00  
[info@holmen.com](mailto:info@holmen.com)  
[www.holmen.com](http://www.holmen.com)

A complete list of addresses is available on Holmen's website:  
[www.holmen.com](http://www.holmen.com)

### Holmen Paper AB

SE-601 88 NORRKÖPING  
Sweden  
+46 (0) 11 23 50 00  
[info@holmenpaper.com](mailto:info@holmenpaper.com)  
[www.holmenpaper.com](http://www.holmenpaper.com)

### Holmen Skog AB

SE-891 80 ÖRNSKÖLDSVIK  
Sweden  
+46 (0) 660 754 00  
[info@holmenskog.com](mailto:info@holmenskog.com)  
[www.holmenskog.com](http://www.holmenskog.com)

### Iggesund Paperboard AB

SE-825 80 IGGESUND  
Sweden  
+46 (0) 650 280 00  
[info@iggesund.com](mailto:info@iggesund.com)  
[www.iggesund.com](http://www.iggesund.com)

### Holmen Energi AB

SE-891 80 ÖRNSKÖLDSVIK  
Sweden  
+46 (0) 660 754 00  
[info@holmenenergi.com](mailto:info@holmenenergi.com)  
[www.holmenenergi.com](http://www.holmenenergi.com)

### Holmen Timber AB

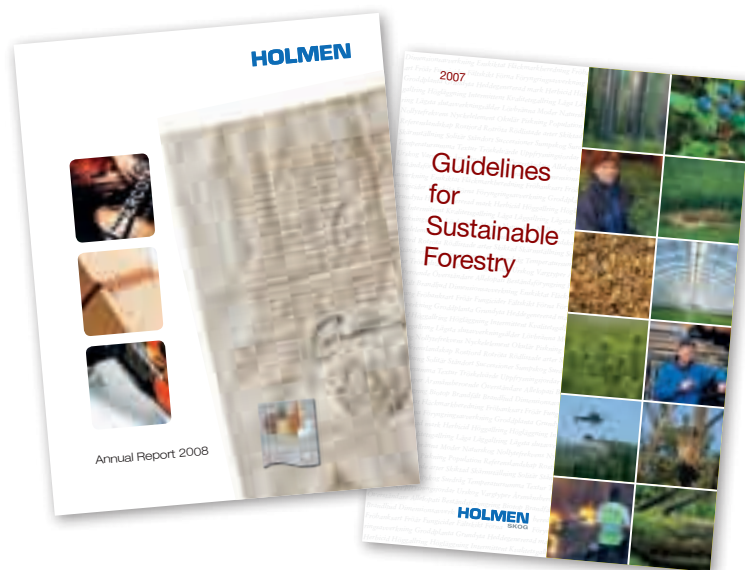
Box 45  
825 21 IGGESUND  
Tel 0650-280 00  
[info@holmentimber.com](mailto:info@holmentimber.com)  
[www.holmentimber.com](http://www.holmentimber.com)

## More about Holmen

*Holmen Annual Report 2008* provides detailed information about the Group's financial performance and conditions on its markets during the year.

*Guidelines for Sustainable Forestry* contains detailed instructions for the management of Holmen's forests. It includes the requirements laid down in the PEFC and FSC standards.

You may order these publications from Holmen.



## Holmen and its World 2008

**SUSTAINABILITY REPORT.** *Holmen and its World* describes the Holmen Group from three perspectives: financial development, concern for the environment and social responsibility.

**AVAILABLE IN THREE LANGUAGES.** *Holmen and its World* is available in Swedish, English and Spanish.

**The cover is printed on** Iggesund Paperboard's Invercote® Creato matt 280 gsm solid bleached board, which has been embossed and UV coated  
**Production:** Holmen, sustainability task force  
**Editor:** Lars Klingström

### MORE INFORMATION ON THE INTERNET.

More information is available on Holmen's website concerning the environmental activities at the Group's units in 2008. There is also a GRI register.

[www.holmen.com](http://www.holmen.com)

**Layout, graphic production:** Energi Reklambyrå, Linköping  
**Photographs:** Rolf Andersson, Bildbolaget, Västervik, et al  
**Graphic illustrations:** Bo Persson, Designmakarna, Stockholm  
**Print:** Trosa Tryckeri

**FURTHER COPIES** may be ordered via Holmen's website or from:

**Holmen**  
**Group Public Relations**  
**P.O. Box 5407**  
**SE-114 84 STOCKHOLM**  
**Sweden**  
**+46 (0) 8 666 21 00**  
[info@holmen.com](mailto:info@holmen.com)  
[www.holmen.com](http://www.holmen.com)



## **HOLMEN**

Holmen AB (publ)  
P.O. Box 5407  
SE-114 84 STOCKHOLM  
SWEDEN

Tel +46 8 666 21 00  
E-mail [info@holmen.com](mailto:info@holmen.com)  
[www.holmen.com](http://www.holmen.com)

Registration number 556001-3301  
Registered office Stockholm