

A group of rainbow trout swimming in clear blue water. The fish are positioned at various angles, with one in the center foreground looking towards the upper right. The water is bright blue with some white ripples, suggesting a shallow or clear environment. The fish have characteristic rainbow patterns with black, red, and blue spots on their silvery scales.

” FROM WORDS INTO ACTIONS...

**OUTO  
KUMPU**

Outokumpu and  
the environment 2007

# ...FROM IDEAS TO REALIZATION”

The theme that ran through our report last year was listening to our key stakeholders. This year, we've gone a step further: the ideas that emerged from our interaction have led us to take measures. We will now focus on putting ideas into practice.

The cover of the report shows fish being stocked in the Tornionjoki river. We chose to commission fish stocking instead of paying statutory fish management fees. And on this page, you can see the fruits of the group work on corporate responsibility we organized at the Olari school in Espoo, Finland. The ninth-graders thought about their responsibilities for the environment, their schoolmates and teachers, and a positive school atmosphere.



## Responsibility

- Be responsible for your tasks
- Use public transit (or walk)
- Never leave someone in trouble

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# Outokumpu and responsibility

> a reduction in the number of accidents

> eyes on the sustainability of the supply chain

> development of internal data collection processes

> performance and development dialogues for everyone

## Objective of the report

Our objective is for our stakeholders to gain a better understanding of our business operations and their implications on society. We strive to inform openly about our activities and their impacts on the natural environment that surrounds our plants and the well-being of people. In the area of corporate responsibility, we explain about the objectives we have set for ourselves and how we have achieved them. We report on matters that we consider important and essential in our business operations such as our product stainless steel – the material of sustainable development – and its life cycle.

Outokumpu has traditionally maintained a strong culture of responsible action. We also strive to constantly develop our operations and our way of working. We believe that thorough reporting on matters of corporate responsibility furthers this aim. Besides the printed Corporate Responsibility Report, we deal with matters pertaining to corporate responsibility in our Annual Report and on our website at [www.outokumpu.com](http://www.outokumpu.com) > About us > Corporate responsibility, where the report is available in electronic format.

The report is intended for our personnel, shareholders and customers as well as all parties interested in our company and its activities.

## Scope of the report

This report covers Outokumpu's entire main business area, stainless steel, in the same way

as the report for 2006. The economic and social data cover the whole business area, but environmental data only covers production plants; they have impact on the environment. The figures for Outokumpu Technology (nowadays Outotec Oyj), which became a listed company in October 2006, were not included in the figures for 2005 and 2006 in order to facilitate comparability; Outokumpu no longer has ownership for the company. Outokumpu Copper Tube and Brass, which we have announced we are divesting, is not included in the report. It has no significant effect on overall environmental impacts or emissions. In 2007, its total net sales accounted for 599 million euros and it had 882 employees.

## Compatibility of reports and statistics

This report mainly surveys business operations in 2007 from the perspective of the full scope of corporate responsibility. The report is based on the internationally recognized and widely applied Global Reporting Initiative guidelines (GRI) 2006 that direct corporate responsibility reporting, and it follows the tripartite division of the guidelines into economic, environmental and social responsibility and we deal with their impacts on our various stakeholder groups. A table showing how this report corresponds with GRI guidelines is on page 55.

Outokumpu issued its first actual environmental report in 1975. The 2000 environmental report included a review of Outokumpu as a

## GROUP KEY FIGURES

(Million €)	2007	2006	2005
Net sales	6 913	6 154	5 016
Operating profit	589	824	57
Return on capital employed, %	13.9	20.7	1.3
Earnings per share (€)	3.63	3.34	-0.14
Dividend per share (€)	1.20 <sup>1)</sup>	1.10	0.45
Investments in the environment, health and safety	12	8	12
Patent applications	3	3	29
R&D	18	17	22
R&D (%) of net sales	0.3	0.3	0.4
Personnel on Dec. 31	8 108	8 159	8 963
Personnel expenditure (salaries)	355	361	448
Debt-to-equity ratio, %	23.6	42.3	74.5
Income taxes and social security payments	281	323	124
Accidents rate (accidents/million hours worked)	11	17	18
Carbon dioxide emissions, million tons	0.93	1.05	1.02

<sup>1)</sup> The Board of Directors' proposal to the Annual General Meeting.

member of society. A brief environmental review was published in 2003. Socio-economic matters were gradually included. The report for the following year still mainly focused on environmental aspects but also dealt with cooperation with stakeholders and society, and compared our approach to reporting with the GRI guidelines. The statistical values in our reports for 2005, 2006 and 2007 were compatible. Huge changes took place in our Group structure during those years but our reporting was primarily concerned with our current main business, stainless steel. Consequently, the figures for businesses divested in 2005–2006 were not included. Our report for 2007 is our first externally verified corporate responsibility report. The data based on the financial statements has been audited.

## Only deeds matter

The theme that ran through our 2006 report was listening to personnel, customers and other key stakeholders. Listening is always very important, but it's not enough. One must go further and take action. In 2007, we devoted ourselves to putting ideas into practice.

Outokumpu took major steps forwards in 2007. We achieved our financial objectives in spite of the turmoil in the stainless steel market. Slack demand prevailed in this market due to distributor de-stocking – and it weakened further on the heels of the slump in nickel prices in the summer. However, the full-year result was good thanks to our excellent earnings in the first half. Return on capital employed was 13.9 percent exceeding our target of 13 percent and our gearing declined to 23.6 percent, far below our target of under 75 percent.

### Investments are highly significant

In autumn, we announced the next phase in our strategy and major investment decisions. We've earmarked almost 800 million euros to stepping up special grades capacity. These investments are not only highly significant to our company and our customers, but will also be a boon to the communities where capacity is raised. By increasing the share of our business accounted for by special grades, we'll get closer to the end users. Customer service will become even more important. Our new organization, aligned in terms of customer segments, was launched at the turn of 2008. This, coupled with our expanded service network, will upgrade our customer service.

That said, we still have work ahead of us before we can call ourselves the undisputed number one in stainless steel. We'll focus on further honing our operations through our internal improvement initiatives – our Excellence programs. Safety and improving both operational efficiency and quality are prioritized in our production operations. On the commercial side of things, we're upgrading delivery reliability and our services. The improvement initiatives hinge on employee participation and enthusiasm. Our measures to hone operations during the past few years

have started to bear fruit. The good results we've achieved – such as savings of 70 million euros by the end of 2007 – encouraged us to expand the excellence initiatives to supply chain management and procurements in 2008. We're also pressing ahead with the sustainable supply chain project.

### Committing to objectives

We achieved the targets we set for our operations in many important responsibility areas. Thanks to our initiatives to reduce occupational accidents, the lost-time accident frequency rate declined to 11, and no serious accidents occurred. We're getting closer to our challenging target for 2009: less than five lost-time accidents per million working hours. Our long-term target is zero accidents. The emissions of our plants were mainly within permissible limits, although a few breaches of environmental permits did occur. The target to certify the environmental management system of Meadowhall was achieved. During the next five years we aim to halve our land-fill waste. Our long-term target is to deposit no waste in landfills.

Climate change and efforts to slow it down are hot topics. Outokumpu takes these issues seriously. We want to do our part. We're paying greater attention to both energy-efficiency and the energy sources we use. I have proactively sought to present the steel industry's perspective on EU emissions trading and the rise in electricity prices that came on its heels, which has a great impact on our competitiveness. Some companies – such as Outokumpu – already operate energy efficiently and with low emissions. I hope that all the past efforts these companies have made to achieve this will be acknowledged.

As in earlier years, our responsible operations were recognized internationally. We stayed on as a member of the pan-European Dow Jones STOXX Sustainability Index and were for the first time accepted into the Dow Jones Sustainability World Index. In addition, we're included in the Carbon Disclosure Leadership Index for energy-intensive companies, in which Nordic companies are

now participating for the first time. There is still much to be done in many areas of both reporting and operations.

The Finnish press has sparked off a great deal of discussion about Finnish Customs' investigations into Outokumpu's Russian export practices. Our own investigation did not reveal any evidence that our employees or company are guilty of the crimes suspected by the agency. Finnish Customs is continuing with its investigations.

### Theme year encourages to take action

We forged ahead with the implementation of ethical principles and the corporate responsibility policy, a drive that began in 2006. To highlight the importance of responsibility, we named 2008 the year of corporate responsibility – this is an ongoing effort. We wish to raise awareness of environmental and social responsibilities among all our employees, and to encourage them to take action – not just at the plants, but also at the offices. We set concrete, measurable targets for ourselves. As in our internal improvement initiatives, our approach is very down to earth. We focus on small actions, encouraging each and every Outokumpu employee to do his or her part.

To gain more valuable information on the views and expectations of our external stakeholders, we'll carry out online dialogue at the beginning of 2008. We expect to gain useful feedback that will help us to further hone our responsible operations and meet our stakeholders' expectations. We'll face a great many challenges in our drive to be the undisputed number one in corporate responsibility, too. Not through our words, but our deeds.



Juha Rantanen  
CEO

January 31, 2008

Marimekko launched Eero Hyrkkää's JAUR collection in the fall of 2007. JAUR products are made by hand from stainless steel produced by Outokumpu.



## How we understand our responsibility

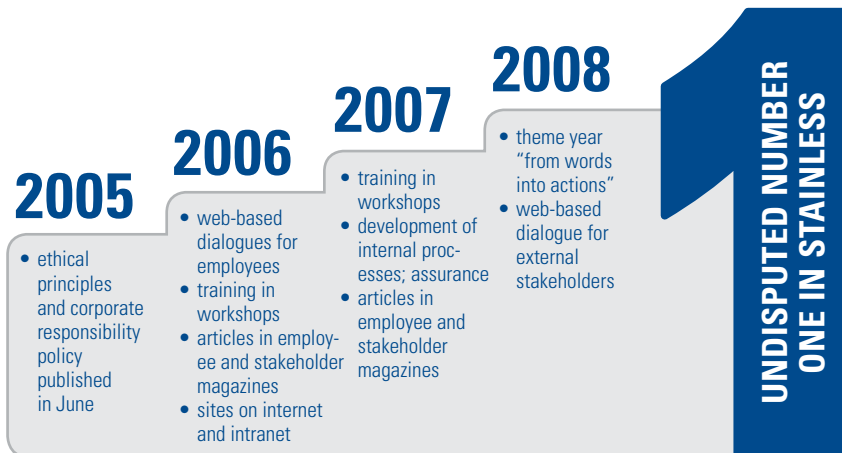
We take the view that responsible business operations, i.e. corporate responsibility, comprise economic, environmental and social responsibility and their impacts on our key stakeholders. Our major stakeholders at Group level include personnel, customers, suppliers, owners (analysts, investors, financiers), the competent people of the future as well as representatives of local communities, national and international business and industry and organizations in the sector. Our ethical principles and our corporate responsibility policy constitute the foundation of our activities and they are also incorporated in our leadership principles. They are supplemented by other more detailed policies. Our ethical principles and corporate responsibility

policy are available at [www.outokumpu.com](http://www.outokumpu.com) > About us > Corporate responsibility.

The exemplary and flawless management of environmental affairs and occupational safety and health matters are of primary importance in terms of the company's profitability and competitive edge as well as to the well-being of personnel. We make no compromises in these respects. The development of occupational safety is monitored through regular reports at corporate management meetings, and all management committees and equivalent bodies throughout the Group start their meetings with a safety review. We are particularly attentive to the well-being of our personnel and the wishes of our customers. As a listed company, Outokumpu is committed to generating profit for its shareholders.

### THE THREE MAIN OBJECTIVES OF OUR CORPORATE RESPONSIBILITY POLICY:

- 1) Corporate responsibility becomes an integral aspect of all our activities and decision-making process, from procuring materials through to production and sales. Economic, environmental and social responsibility issues are in balance. Compliance with legislation constitutes the bedrock of our operations. Continually improving our corporate responsibility performance puts us on the path towards a higher level of achievement.
- 2) Our business partners, subcontractors and suppliers become familiar with our principles and apply the same high standards in their own activities.
- 3) To enhance transparency, we aim to establish continual, systematic and open dialogue on corporate responsibility issues with our key stakeholders, such as shareholders, employees, customers, suppliers and non-governmental organizations. This co-operation contributes towards developing and dutifully reporting our corporate responsibility performance.



# Setting our sights on the number-one position in stainless steel

Outokumpu is one of the world's leading producers of stainless steel. Hot and cold rolled stainless steel products form our core competence. Outokumpu operates in around 30 countries.

Outokumpu is an international stainless steel company. Our customers include the processing and construction industries, the transport sector, the food and electronics industries, and the producers of household and industrial machinery around the world. Our main market area is Europe. We are one of the leading producers of stainless steel in the world and a globally recognized innovator in the field of technical support, research and development. According to statistics issued by international organizations in the industry, such as Eurofer and the International Stainless Steel Forum, our company holds 6 percent of the world market and 16 percent of the European market for rolled stainless steel.

## Main products

Our main products are hot and cold rolled stainless steel sheets, plates and strips that are used in numerous applications such as the construction industry, the automotive industry and equipment for the process industry. We also produce precision strips, tubes and tube components. Wide and thick individually rolled quarto plates are used in the energy sector, to extract salt from seawater, to transport chemicals and they are widely used in the process industry; in pressure cylinders, tanks, thick-walled tubes, bridge structures and process equipment. Our tubes are mainly used by the process industry, i.e. the oil refining industry and the pulp and paper industries; bars are so-called long products, from which wire and concrete iron are manufactured.

## Main production plants

Our main production plants are in Tornio (ferrochromium plant, steel melting shop, hot and cold rolling mills) and Kemi (chromium mine); Avesta (steel melting shop, hot and cold rolling mills), Nyby, Långshyttan (cold

rolling mills at both) and Degerfors (hot rolling mill) in Sweden; Sheffield (steel melting shop) in Britain and New Castle (hot rolling mill) in the USA. Long products are manufactured in Sweden, the USA and Britain, whereas welded tubes and tube components are produced in Finland, Sweden, Estonia, Canada and the USA. We currently operate 12 sales and service centers.

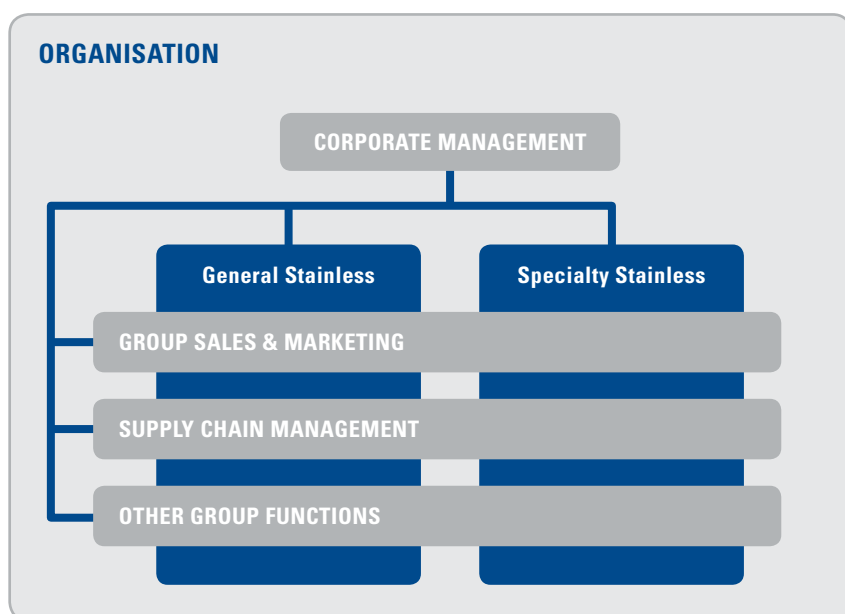
The Group also comprises Outokumpu Copper Tube and Brass, which produces copper tubes and brass bars (personnel 882; net sales of around 599 million euros), which we announced we are divesting. Information about this business is not included in this corporate responsibility report.

In 2007, Outokumpu operated in around 30 countries and it employed 8 108 people. The Group's net sales amounted to 6.9 billion euros, of which more than 95 percent

was generated outside Finland. Outokumpu's headquarters are located in Espoo. Outokumpu Oyj has been listed on the Helsinki Stock Exchange since 1988.

> **STAINLESS STEEL – SUSTAINABLE MATERIAL**

- fully recyclable
- corrosion resistant
- high-strength
- hygienic
- aesthetic
- low life-cycle costs



# Responsibility and management systems

## Outokumpu's vision

Outokumpu's vision is to be the undisputed number one in stainless steel and to base its success on operational excellence. This means that we want to be the most successful company, the most efficient producer, the most popular employer and the best customer relationship manager in our sector – and to achieve all this through responsible business practices and with the help and support of our key stakeholders.

## Outokumpu's strategic goals

Our strategic goals comprise the creation of value by establishing unparalleled production and distribution operations in all the principal global markets and then realizing the value through commercial and production excellence as well as maintaining value through constantly developing personnel and holding the customer as the focal point of all operations.

## Guidelines and policies the backbone to operations

We start out by basing our operations on compliance with local legislation in each country where we operate, but we aim to go further. International recommendations issued under the auspices of the UN, to which states are committed, also govern the way we work. Our objective is to operate as one company whose activities are guided by Group-wide operating procedures and policies such as ethical principles, a corporate responsibility policy, an environmental policy, a human resources policy and occupational health and safety policies. The plants have more detailed practical targets and guidelines, as well as environmental management systems complying with the ISO 14 001 standard as models for the actions to take. The Group-wide ethical principles, the corporate responsibility policy and the environmental policy are available on our website.

## Compliance with the principles of responsibility

Outokumpu's Board of Directors charges the CEO with formulating and implementing the necessary measures to safeguard systematic compliance with the corporate responsibility policy and ethical principles of Outokumpu. At least once a year, the Board of Directors assesses Outokumpu's corporate responsibility in the light of the CEO's report. The company's management and its employees are expected to comply with the principles of corporate responsibility. Since May 2007, a confidential help line has been up and running on the intranet and internet, which can be used to report anonymously to our internal audit any action that contravenes the principles. No such notifications were received in 2007.

## > ETHICS

The cornerstones of Outokumpu's ethical principles are human dignity, caring for the environment, good corporate citizenship and a healthy workplace.

**Human dignity:** Human beings should be treated equally and fairly irrespective of ethnic origin, nationality, religion, political views, sex, sexual orientation or age. Outokumpu honors human dignity and diversity, and condemns discrimination and intolerance of all kinds. Outokumpu complies with international labor treaties, and condemns forced and child labor. There is freedom of association at Outokumpu.

**Our planet for the future:** Our planet does not exist just for today's humanity and ecosystem. Human beings have a responsibility to safeguard the conditions for life and biodiversity for future generations as well. Outokumpu strives in all operations for sustainable human, economic, social and ecological development.

Outokumpu supports expanding international co-operation to reduce emissions and enhance global environmental protection. Outokumpu takes environmental aspects into consideration in making its business decisions.

**Good corporate citizenship:** Agreement on common rules is a precondition for the success of communities and individuals. Outokumpu observes the laws and other regulations of the countries it operates in and it complies with the agreements and commitments it has made. Outokumpu condemns corruption and bribery and it complies strictly with competition legislation.

Outokumpu recognizes its corporate responsibility towards the communities it operates in, the nations it operates in and the entire global community. As a good corporate citizen, Outokumpu participates in the lives of its communities, above all

by contributing to economic well-being through its business operations.

**A healthy workplace:** A healthy and positive workplace is a source of strength for all employees, and it also brings benefits to families, friends and colleagues. At Outokumpu, it is the responsibility of the whole workforce to foster mental well-being and to increase occupational safety. Company management in particular has to set a good example by cultivating fairness and conducting open and interactive communications.

Violations of general or internal regulations are not acceptable at Outokumpu. To prevent abuse, it is important to ensure that Outokumpu's interests on the one hand and the interests of employees on the other do not come into conflict.



## Outokumpu among the most responsible in its sector

In 2007 Outokumpu was listed on more and more corporate responsibility indexes, giving it a better competitive edge. The results, however, also indicate where the company has room for further improvements.

In 2007, Outokumpu maintained its membership in the Dow Jones Sustainability Indexes' STOXX Index, which is composed of European companies. In addition, the company was listed for the first time on the DJSI World Index. The Sustainable Asset Management Company SAM reviews annually the leading companies in sustainability from 57 sectors. In January 2008, SAM gave Outokumpu a SAM Sector Mover title in The Sustainability Year Book 2008 for our outstanding achievements and improvement in sustainability.

Outokumpu was also included for the first time on the Climate Disclosure Leadership Index. A total of 125 listed companies from the Nordic countries responded to the Carbon Disclosure Project's questionnaire. Outokumpu was ranked eighth among Carbon Intensive companies, i.e.

companies consuming great amounts of energy, topping all Nordic metals and mining companies.

Moreover, Storebrand SRI ranked Outokumpu among the most responsible companies in the metals and mining sector. Storebrand SRI compared companies on environmental and social responsibility. Outokumpu was acclaimed as "Best in Class" by Storebrand.

Being included on these indexes offers Outokumpu the opportunity to differentiate itself from its competitors as an expert in corporate responsibility. It is also a recognition of the fact that Outokumpu has succeeded in fulfilling certain criteria of responsible operations. On the other hand, the independent indexes offer the chance to see which areas of corporate responsibility still have room for improvement.

### OUTOKUMPU LISTED ON MANY INDEXES

- DJSI Indexes: in 2007, included again on the European index and for the first time on the World index
- SAM Sector Mover title in the Sustainability Year Book 2008
- Climate Disclosure Leadership Index: listed for the first time in 2007.
- Storebrand SRI: acclaimed as "Best in Class" for the first time in 2007.

**BEST IN CLASS**  
environmental and  
social performance  
STOREBRAND SRI



 **Dow Jones Sustainability Indexes**  
Member 2007/08

 **sam** | 2008  
sector mover



The Carbon Disclosure Project is an independent not-for-profit organisation which aims to create a rational response to the challenges of the climate change.

### Corporate governance

Outokumpu Oyj, the parent company of the Outokumpu Group, is a public limited company that is registered and domiciled in Finland. The company applies Finnish legislation, the company's Articles of Association and the administrative procedures approved by the company's Board of Directors to its management and leadership. Outokumpu complies with the recommendation issued by the Helsinki Stock Exchange, the Central Chamber of Commerce and the Confederation of Finnish Industry and Employers in December 2003 concerning the corporate governance of listed companies, with the provision that Outokumpu has a nomination committee to the Board of Directors and a Shareholders' Nomination Committee that was appointed by the Annual General Meeting of Outokumpu. Furthermore, Outokumpu complies with the regulations and guidelines issued by the Helsinki Stock Exchange.

The ultimate responsibility for the Group's administration and operations rests with the governing bodies of the parent company Ou-

tokumpu Oyj, which comprise the Annual General Meeting, the Board of Directors and the CEO. Outokumpu's corporate governance and the duties and responsibilities of its governing bodies are presented in detail on pages 52–56 and the control system is presented on pages 56–57 of our annual report.

### Audit of operations

The Group's internal audit function provides consultative auditing on targets and issues that have been separately identified by the Board audit committee and the Group's Executive Committee. The focus of auditing is on business risk as well as the dissemination of information. The internal audit co-operates closely with the Group's finance and risk management, financial administration and external auditors. The internal audit reports to the audit committee, which approves its operating plan.

In 2007, 21 different units or functions were audited by the internal audit working independently or in co-operation with external service providers. The internal audit together with the Group's other functions monitors

among other things compliance with Outokumpu's ethical principles and corporate responsibility policy and the way in which the principles and policies are incorporated into the general operational procedures in the Group's companies and units. No significant problems, malpractices or risks were noted during the audits. The internal audit has investigated a couple of infringements and thefts within the Group and notified the police authorities of these; an internal investigation has been initiated. However, according to current understanding, these infringements or thefts were not on a significant scale.

In March, Finnish Customs instigated a criminal investigation into Outokumpu's export practices to Russia. The enquiry related to another preliminary investigation focused on a forwarding agent from southeast Finland who was suspected of having made erroneous and/or falsified commercial invoices for stainless steel exports to Russia. The Customs' preliminary investigation ascertained the level of Outokumpu's involvement in making the erroneous and/or falsified commercial invoices with the said forwarding agent. Outokumpu initiated its own investigation into the commercial practices in stainless steel exports from Tornio to Russia. Roschier, Attorneys Ltd., which conducted the enquiry, issued a statement saying that the investigation had found no evidence that personnel or the company at Outokumpu's Tornio Works were guilty of the crimes suspected by the Customs. The Customs investigation continues.

### Stronger risk management

In 2007, corporate risk management was reinforced through the Group's safety and security procedures, with the aim of raising the level of safety with regard to personnel, materials and information. The overriding objective of the safety and security procedures is to introduce practices within the Group that can be used to reduce losses. The Group's Executive Committee approved a new safety and security policy in December. During the year, work got underway to draw up common guidelines and a working group was established to handle these matters. Safety and security within the Group comprises personnel safety,

### > OUTOKUMPU'S LEADERSHIP PRINCIPLES

Over the past years, an extensive dialogue on the subject of values has been ongoing with Outokumpu personnel on several occasions; the results of this dialogue were used to identify the fundamental values of the company. We coined the term 'The Outokumpu Way' to refer to these values. In order to come closer to concrete recommended practices, the leadership principles were identified and determined in 2006. The Group's Executive Committee and a number of key personnel from different parts of the Group participated in determining them. The principles shown below were approved by the Executive Committee and presented to the Board. One of them is explained in detail and serves as an example.

- We make well-founded decisions
- We achieve ambitious targets
- We create an unbeatable team
- We inspire increasingly enhanced performance
- We build trust and respect
  - we act consistently and we adhere to the determined ethical principles and values
  - we encourage and expect others to act according to the ethical values
  - we demonstrate honesty, loyalty and integrity in our day-to-day work

data security, physical and operational safety as well as crisis management. Accident, fire, operational error, sickness, theft, fraud, damage to property, sabotage, corruption, various infringements, bodily harm, blackmail and abduction constitute the greatest risks to the safety and security of the company.

### Rules of competition honored

Outokumpu honors the rules of competition as an intrinsic part of its business operations. The legal affairs department has actively provided training based on our ethical principles on the theme of competition legislation within the European Union for our sales and marketing people since October 2006. By the end of 2007, 300 people of a total of around 700 had attended training in line with the set objective. The training program comprised a five-hour course arranged by in-house and external legal experts. The aim was to alert the trainees to problematic situations so that they are able to seek professional advice and avoid possible unlawful arrangements or discussions with competitors. An e-learning program is to be launched in 2008 with the aim of training, overseeing competence and reminding people of the importance of competition. It will run for three years, and initially apply to 500 people. It will be emailed directly and automatic reminders will be sent until the program has been completed.

### Corporate responsibility organization

Outokumpu's corporate responsibility affairs are under the CEO's area of responsibility. A Corporate Responsibility Team comprising representatives from the different functions advises on these matters with Corporate Communications acting as the responsible unit. Corporate Communications also coordinates all corporate responsibility matters across the Group. The business units and functions are responsible for ensuring that operations within their own organizations

are conducted in a responsible manner and that monitoring, data collection and reporting are duly carried out.

At the turn of the year, five employees were engaged in environmental work at Group level. Thirteen were charged with human resources matters and three with occupational health and safety. In addition, each production plant has an environmental and a human resources officer, and the larger locations also have a person responsible for safety issues. The financial organization is Group-wide.

### > KEY EVENTS IN 2007 – THE YEAR OF COMMERCIAL

#### March

- Sale of the minority shareholding in Outotec Oyj
- Publication of Outokumpu and the environment 2006
- Launch of the procurement excellence program

#### May

- Implementation of the Helpline

#### June

- Affiliation in Fennovoima Oy
- Outokumpu Factor 1/2007: Climate change

#### September

- Membership of the Dow Jones Sustainability Indexes
- New phase in strategy; major investment decisions

#### October

- Listed in the Carbon Disclosure Leadership Index
- Ranking in Storebrand's Socially Responsible Investments "best in class"
- Sustainability reporting review: Outokumpu 8th out of a total of 29

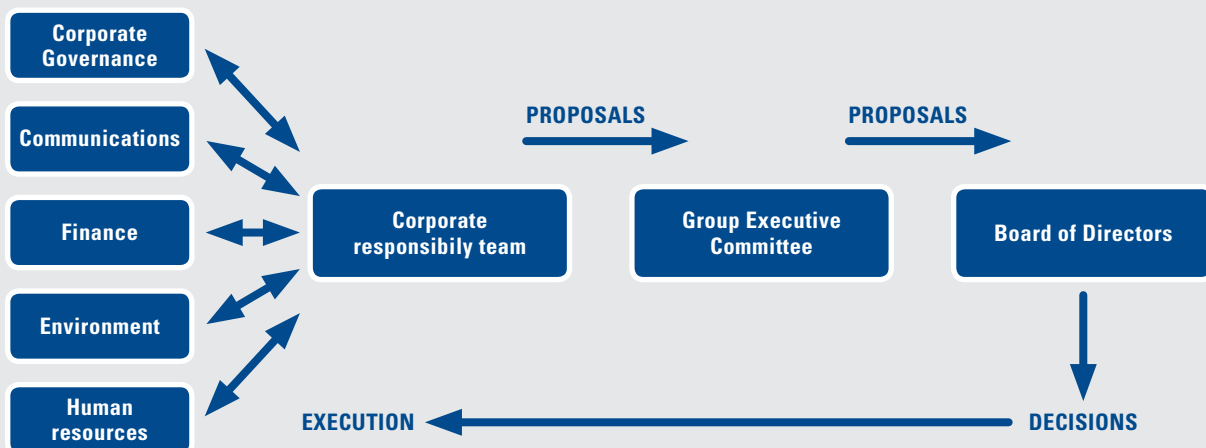
#### November

- Supply chain management – function established
- Finnish Business and Policy Forum EVA, Corporations and Climate Change Report: Outokumpu ferrochromium

#### December

- Outokumpu Factor 2/2007: Stakeholder relations

### MANAGEMENT OF CORPORATE RESPONSIBILITY ISSUES



## Dialogue with stakeholders

We strive for open and regular dialogue with our key stakeholder groups with the aim of enhancing transparency. We consider it essential to be aware of the expectations placed on us.

Alongside the actual work of sharing information, different discussions, seminars, teamwork, road shows, fairs and exhibitions, visits and open house days are the forums where we meet our stakeholders face to face. We maintain an ongoing dialogue especially with analysts, investors, employees, customers, goods suppliers and service providers. Their involvement and the trust they place in us are fundamental to our business operations. In 2006, we prioritized dialogue with our employees, both through the network and group work. The year 2007 was the Year of Commercial and we engaged in particularly active interaction with our customers. Close-knit interaction with our investors and analysts continued the trend set in previous years. Both of the 2007 issues of our stakeholder magazine, dealt with aspects of corporate responsibility – the first with climate change and the second with stakeholder relations.

### Active contacts with investors and analysts

In 2007, corporate management continued the active pace set in previous years and met with investors and analysts at various events around the world. In addition to the Annual General Meeting, 13 road shows were arranged across Europe. We also visited North America. Luncheon meetings were held with nine groups – a total of 60 people – during the road shows. During 2007, management had all together some 150 different breakfast and luncheon, as well as face-to-face meetings with investors and analysts.

The announcements of Outokumpu's results were videoed, and it was possible to watch them over the internet. For the first time, presentations at the Capital Markets Days organized for investors and analysts were also shown over the internet. The Days took place in Milan in October under the main theme of Outokumpu's customer and product strat-

egy and its related investments. According to feedback interviews, the event surpassed the participants' expectations. In addition to the few visits organized to sites, the management took part in various meetings and seminars both in Europe and in North America. In Helsinki, we participated in an annual fair that targeted private investors. Last year, we also commissioned two studies to ascertain the ownership base.

### Eyes on the supply chain

Suppliers play a vital role in our procurement chain. Of all our procurements, around 80 percent are raw material procurements and of these, 65 percent apply to recycled steel. We have altogether about 3500 goods suppliers, the largest being raw material supplier. Exchanging information and open dialogue with different goods suppliers and service providers helps all parties to achieve the best possible results. The best, most productive and most cost-saving innovations, such as improvements to transport and packaging, are often created in co-operation with suppliers. The high level of the recyclability of stainless steel makes Outokumpu's supply chain unique. In our broad-spectrum so-called 360-degree way of thinking, our products change into raw materials at the end of their life cycle. Our responsible supply chain is like a loop whose development starts out from the premise that we understand our role in the chain... and goes on to develop not only our own part but also the chain as a whole.

Our objective is to give recycled steel a new life cycle through as an eco-efficient and responsible supply chain as possible. Developing the supply chain as profitably as possible is to everyone's advantage. Consequently, an overall vision of the chain is a fundamental condition for finding the most efficient way to take development still further. In 2007, Outokumpu started to mobilize its respon-

sibility policy at the beginning and end of the chain.

In order to optimize the supply chain, we are expanding our excellence programs to supply chain management, with the initial focus on purchasing. In March 2007, we launched a program to develop a uniform 'Outokumpu Way' with regard to purchasing. Our objective is to reduce the total costs and risks involved and to improve supply relations management throughout the Group. The first concrete objectives will be achieved in 2009.

The emphasis is on high quality and responsible operations. We are committed to constantly developing our culture of responsibility. The Sustainable Supply Chain Management Tool project that we launched in 2006 in co-operation with Helsinki University of Technology is mapping out the requirements that the corporate responsibility policy places on every phase of the supply chain and drawing up guidelines for the purchasing functions. Last year, this three-year project progressed to its second phase. We piloted the internalization of the corporate responsibility policy at the beginning of the chain with experts from Helsinki University of Technology and Kuusakoski Oy, one of our recycled steel suppliers. The project is beneficial and important for all parties concerned. During 2007, we reached agreement on a bank of questions that cover all the important subareas. We conducted several bilateral meetings and held a joint meeting in November where all three parties discussed partnership as well as responsibility and the challenges it brings with it.

We also provide training for our suppliers on matters relating to quality and the environment. In 2007, we arranged with other members of Osuuskunta Teollisuuden Romu a recycling day at our Tornio works for all Finnish recycled steel and iron suppliers. During the day, we provided the suppliers with training and information concerning quality,

## Olari High School student considers a rewarding job more important than a good salary

Outokumpu aims to understand the expectations of its future professionals. Eigo Retsä, a final year student at Olari High School, hopes to strike a balance between his free time and work.

**Eigo Retsä**, 18, will be free to take a new direction in life after completing his final written high school examinations in the spring. For the time being, however, he is keeping his future plans on hold. “I’m going to begin my national service with the army in the summer and after that I’ll take a closer look at what I’m going to study”, he says. Eigo has already considered applying for university. History has been his favorite subject in high school and he may pursue an academic career in social sciences.

His life at university seems like a distant world, but it is even harder for Eigo to imagine his future career after his studies. He still does not have any indication of what he wishes to do in the future. What is already clear, however, is that his future

profession will be decided based on its content rather than the salary it offers. “Work should not feel like a tedious obligation”, Eigo explains.

In the future Eigo hopes to find a balance between free time and work. He also sees working on interesting products and with pleasant colleagues as important. On the other hand, working in an international environment does not particularly appeal to him. He would consider working abroad if his career demanded it and his circumstances were suitable.

Eigo has a confident view of his future. “Hopefully I’ll find work easily. It won’t necessarily happen straight away. But if I don’t manage to find work, I have to search more actively and study more.”

### WHAT DO FUTURE PROFESSIONALS VALUE?

- Combining free time and work
- Development opportunities, challenging work tasks and the possibility of further training
- Working on interesting products
- Responsibility and an ethical approach
- A dynamic organization
- Management that can be relied on
- Innovativeness
- Working in an international environment

Sources: Tredence Institut and Universum



Eigo Retsä, a senior at the Olari high school, would like to have an inspiring job working with intriguing products.

environmental issues and product development. The program focused on the transport of raw materials, product classification, the terms and conditions of commerce and the best performances with regard to environmental matters by comparing the practices of different suppliers and those of Outokumpu.

### Closer to the customer

Our customers constantly expect more from us. Because our ambitious and overriding objective is to become the number one in customer service in the stainless steel business, we launched a commercial excellence program in 2005. Over the past two years leading up to the end of September 2007, we arranged as part of the excellence program training for around 550 people working in sales and marketing within our Group; the number of training days was in excess of 1 700. The program has provided us with practical tools to develop our capacity to provide even better service for our key customers. The achieved results have been tremendously encouraging. Key customers now receive service based on global plans. The products of all the units come under the same plan. Pricing practices have also been standardized; the different units conform to the same pricing principles for the same customer. Interaction with key customers was extremely lively in 2007, which was named the Year of Commercial.

Interviews with our key customers constitute an important aspect of the excellence program, and about 150 such interviews have been conducted in the past two years. The objective was to gain a better understanding of customers' current and future needs as well as to gauge what our various services mean to them. Our customers took a positive view of our interest and considered it a clear sign of the degree of effort that Outokumpu is putting into the matter, and they made good use of the opportunity by giving feedback: Outokumpu produces quality products and we provide good technical support. A slightly less positive observation was that Outokumpu is often viewed as a complex organization difficult to work with. In general, customers expect us to have greater flexibility in our operations, an understanding of the customer's business activities and an open

attitude to different services. Other matters that customers have drawn to our attention are reusable packaging materials, a reduction in the waste generated by packaging and repurchasing used materials. Based on the feedback, we are making improvements to our products and services and stepping up customized solutions.

Our internet website also has a Product Tool service that presents the full range of our products and their dimensions in straightforward graphics. The Steel Professional tool on the internet is intended for designers and engineers to help them select the most suitable stainless steel for their purpose.

Last year, we introduced a new sales reporting tool providing us with even more comprehensive information specific to each product, country and customer. The earlier tool had been in use since 2001.

In order to safeguard optimal customer service, we decided to change over to a new organization that was formatted in line with customer sectors, where the emphasis is on functioning as one company in all customer relations. This move supports the new phase of our strategy announced in September, in which we are seeking to attain an increase in the proportion of end users and project customers.

### Expectations of future experts

In order to safeguard our future personnel needs, we believe it is important to attract the interest of young people in our sector. We regularly follow the studies carried out by various external research institutes and organizations into young people's values, their expectations of future employers and their image of Outokumpu as an employer. The international Universum Graduate Survey conducted in 2007 indicated that students see Outokumpu as financially sound, that it has a good reputation in the field of education and that it performs well on the market. In their opinion, Outokumpu provides career opportunities, competitive salaries, and is also a good reference. The results showed a slight improvement on the preceding year.

We also regularly engage in dialogue with school pupils and students at recruitment fairs as well as when they visit our locations.

### > SUPPLIER OF THE YEAR

Victor Reinz, our customer of eight years, awarded Thin Strip Kloster, an Outokumpu unit that produces thin steel strips, as supplier of the year for 2006. The company, which produces gaskets and heat shields for the automotive industry, assessed its suppliers on criteria including quality, leadtimes and service. The supplier had to turn in an excellent performance over a two-year period before it could be considered for the award.

Our specialists also visit schools to give presentations on various themes. Last spring, we arranged sessions for three groups of ninth-graders at the company's adopted school in Espoo, Finland, on the theme of responsibility and how pupils could promote well-being at school, energy saving and environmental protection. The next group session will take place in 2008.

### We listen to our personnel

In order for us to exert an influence on the motivation and job satisfaction of employees, it is vital to discuss matters openly. In January 2007, we published on the intranet the results of the second network dialogue concerning corporate responsibility that took place at the end of the previous year. Opinions flooded in, including observations concerning shortcomings complete with concrete suggestions. Anonymous messages presented directly to corporate management included the wish for systematic job rotation. The Group has now set the objective for 20 percent of Outokumpu employees to participate in job rotation during 2008. Matters relating to occupational well-being also rose to the fore. The staff were particularly concerned with older employees being able to cope at work, the advancement of women's careers, and diversity. Based on the results of the network dialogue, we have arranged 20 workshops since

2006 where we have jointly sought solutions to concrete shortcomings in our own places of work. Measures have been implemented to correct these shortcomings.

The O'People personnel survey, which takes place every second year, was conducted during November-December. The purpose of the survey is to understand the needs of our personnel, with the aim of developing personnel and the workplace. The results released in January 2008 are discussed on page 44 of the report.

### Networking vital

Good and effective relations with the authorities and different organizations are vital for our business operations. Outokumpu is an active and responsible actor in society. As the world's fourth largest producer of stainless steel, the ninth-largest company in Finland and the largest or a major employer in sev-

eral communities, it exerts a major influence. Corporate management and the experts from the different fields maintained their network, and they actively participated in the activities of the international and national chambers of commerce, organizations and central associations. They joined in the dialogue at various forums that dealt with such things as the challenges set by climate change as well as other topical and key issues relating to business life. Outokumpu is a member of international organizations and confederations, including the World Economic Forum and Eurofer, EuroInox, the International Iron and Steel Institute, the International Chromium Development Association, EUROALLIAGES and the FME-CWM metal industry association. At the national level, Outokumpu is a member of the Finnish Business and Policy Forum EVA, the Confederation of Finnish Industries EK, the Federation of Finnish Tech-

nology Industries, the Association of Finnish Steel and Metal Producers and Excellence Finland as well as the Confederation of Swedish Enterprise and Jernkontoret - the Swedish Steel Producers' Association.

In order to augment its expertise and enhance its performance with regard to corporate social responsibility, in 2007 Outokumpu joined Finnish Business & Society, the network that promotes corporate social responsibility. As a consequence of its membership, Outokumpu also gained membership of CSR Europe. To support the battle against corruption and bribery, Outokumpu became a member of Transparency Suomi-Finland, which is the national chapter of Transparency International, the non-governmental organization that fights against corruption and promotes transparency. Outokumpu Oyj has also signed the International Chamber of Commerce (ICC) charter.

## STAKEHOLDER EXPECTATIONS

They expect competitive benefits, challenging tasks, development opportunities, responsibility, a balance between work and leisure time

### Future employees

We'll need them to work for us in the future and expect them to be motivated, responsible and seek to improve themselves

They expect active participation, joint efforts to promote the industry's interests

### National and international industry and business associations and federations

We expect them to provide equal support to us, oversee our interests and our business opportunities

They expect us to participate, interact, provide support, be responsible, provide jobs

### Local communities

We need their approval, confidence, willingness to cooperate

They want high-quality, safe products and services at a competitive price, reliable deliveries, flexibility

### Customers

We need them to buy our products – we also need them to trust us, be responsible and willing to cooperate with us

## OUTOKUMPU

How do we meet expectations?

- ethical operations
- open and regular communications and dialogue, interaction
- a culture that stresses corporate responsibility
  - operating as one company
  - safe working environment
- personnel development, job rotation
- development of products and processes, R&D
- stainless steel is safe and sustainable material

They expect us to be responsible and give them challenging tasks, security, occupational safety and wellbeing, development opportunities, recognition for their work

### Personnel

We need their professional skills – we expect them to be responsible, motivated and committed

They expect us to be profitable, provide a return on their investment, and be responsible

### Shareholders

We hope they consider us a good, attractive investment – we hope they have confidence in us

They want to cooperate with us and expect us to be responsible, be their partners and engage in open discussion

### Suppliers of goods and services

We need raw materials, other consumables and services; we expect them to be responsible

## Economic responsibility

Our aim is to generate as much economic added value as possible for our stakeholders in a manner that is as sustainable as possible. As a listed company, we are committed to making a profit for our shareholders.

Outokumpu's ethical principles and corporate policy also guide the Group's operations in economic matters. As a listed company, Outokumpu is committed to making a profit for its shareholders. We achieve this by developing and maintaining competitive and profitable operations founded on ethical business practice. The principles of good corporate governance and transparent accounting applied by Outokumpu are guided by the rules and regulations applying to listed companies, by international accounting standards, by the declaration of competition policy and insider rules, as well as by the Group's dividend policy.

Our operations have an economic impact on the local, national and global communities within which the Group operates. Outokumpu pays taxes and employs people both directly and indirectly. Our aim is to generate as much economic added value as possible for our stakeholders in a manner that is as sustainable as possible. The Group's financial results and targets are detailed in Outokumpu's annual report and accounts. This report concentrates on the economic impact that Outokumpu has on its stakeholders.

After a very successful year in 2006, the first half of 2007 was characterized by a gradual slowing in demand for stainless steel combined with record-high prices and excellent financial performance. After the summer, the market situation turned downwards in a dramatic fashion due to de-stocking and only started to recover as the year-end approached. One result was that the second half resulted in a loss. For the whole of 2007, Outokumpu achieved its target of a 13 percent return on capital employed by a small margin. Good cash flow and income from divestments resulted in the debt-to-equity ratio shrinking further to a level well below our target maximum.

In September 2007, Outokumpu declared that the first phase in the Group's strategy to become the undisputed number one in stainless had been completed. In the next phase, we aim to deliver a more stable and profitable business model while also addressing the most attractive growth opportunities. The target of a more stable and profitable business model will be reached by increasing the proportion of direct end-user and project sales customers and by expanding our production capacity in special products to half of total capacity. During 2007, several investment decisions that implement the new strategy were made. End-user and project sales will be supported by a number of investments in Outokumpu's network of service centers. Special products capacity will be expanded at Avesta, Sweden and in quarto plate products in Degerfors, Sweden and in New Castle in the US. When combined, investment decisions made in 2007 will total 1 300 million euros over the coming 3 years, a considerable change compared to the low levels of investment prevailing in the last few years. In 2007, investments totaled 190 million euros (2006: 187 million euros). In addition, in January 2008 an investment decision of over 300 million euros was made to step up ferritic and bright annealed stainless steel capability in Tornio.

An important part of Outokumpu's strategy is maintaining the Group's cost leadership in standard-grade volume production, which mainly takes place in Tornio, Finland. To ensure that improvements in both efficiency and productivity continue, our excellence programs were expanded to include supply chain management. The on-going Commercial and Production Excellence programs, which were started in 2005, progressed very well during 2007. In total benefits totaling some 70 million euros have been achieved. The aim is to achieve benefits of 120 million euros by the end of 2008. After including the new Supply

### > ECONOMIC TARGETS

Outokumpu has set the following economic targets for its operation to support its ongoing objective of being the number one in stainless:

- Continuing to grow at a more rapid rate than the markets
- Return on capital employed to exceed 13 percent and remain better than that of competitors
- Debt to equity ratio less than 75 percent

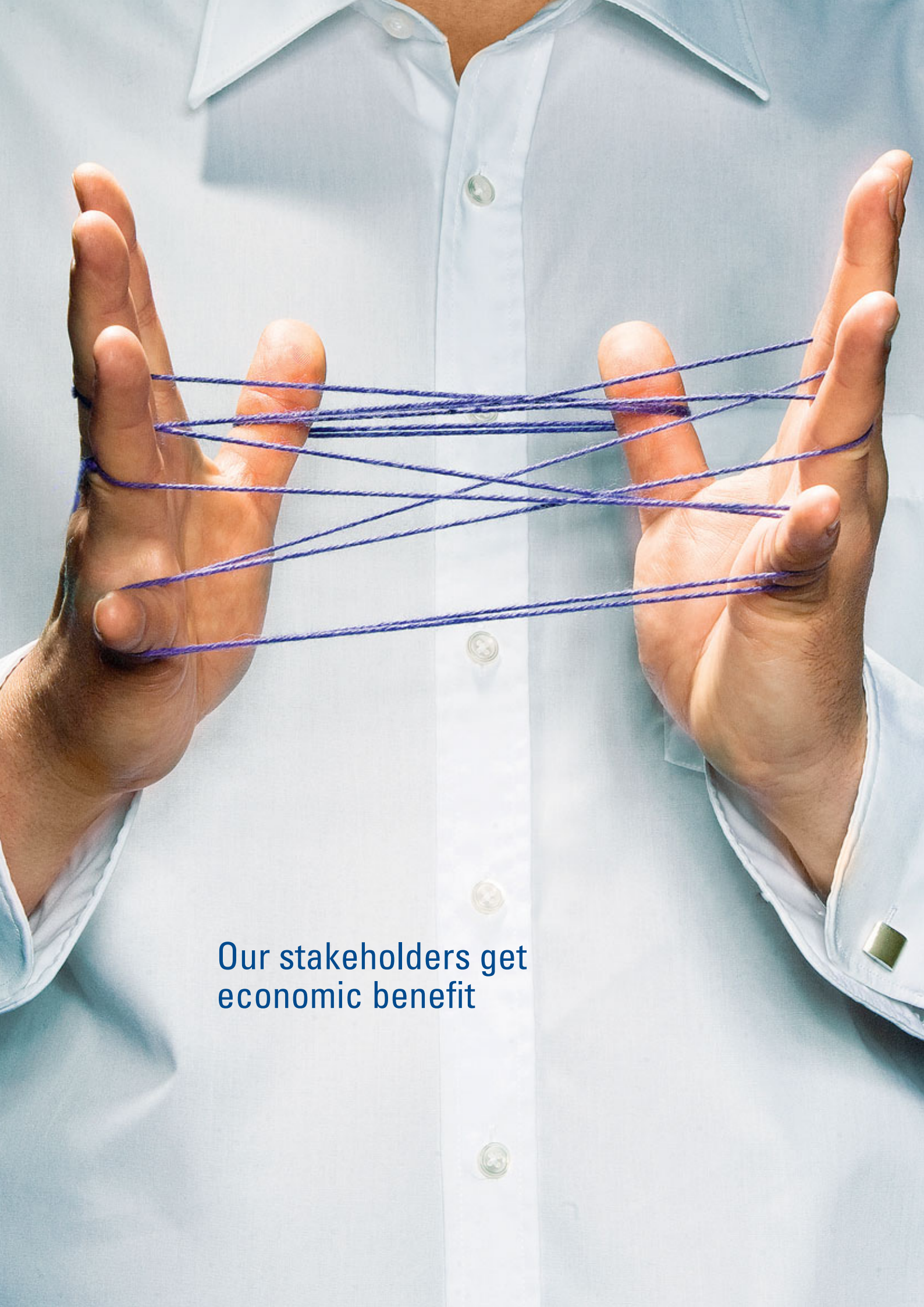
Chain Excellence program, targets for total benefits from all programs have risen to 200 million euros in 2009 and 300 million euros from 2010 onwards.

### **New investments will increase the number of personnel**

At the end of 2007, the Group employed 8 108 people in some 30 countries. The number of employees was at much the same level as at the end of 2006 (2006: 8 159 people).

Investment decisions taken in the latter part of 2007 will lead to active recruiting in the next 2–3 years. As most of the new operations and those being expanded are located outside major urban centers, Outokumpu's investment decisions will have a significant positive impact – both directly and indirectly – on employment levels in those locations, i.e. Avesta and Degerfors. Finding and attracting the right type of personnel could be a challenge and Outokumpu is therefore working with several communities, including Avesta,





**Our stakeholders get  
economic benefit**

Degerfors and Fagersta, to offer both retraining and relocation possibilities.

A decision to close the Stockbridge site in Sheffield, UK, in 2008 has been made. Part of the operations carried out there will cease and part will be moved to the nearby Meadowhall site. This reorganization will be completed during the spring of 2008 and will result in the loss of 50 jobs.

Ninety-four percent of the Group's employees are located in Europe. The principal countries in which Group operations are carried out are Sweden (38 percent of Group personnel), Finland (34 percent) and Britain (11 percent). Compared to 2006, no major changes have occurred in the numbers of people employed by Outokumpu in each country.

Outokumpu paid 355 million euros in salaries in 2007, a reduction compared to the figure for 2006 (2006: 361 million euros). In 2007, Group staff received bonuses on the basis of the financial result of 2006. 4 million euros was transferred to the personnel fund in Finland.

### New organization will improve service to end-user and project customers

Outokumpu's key customers are in process industries such as pulp and paper and chemicals, as well as in offshore oil drilling, the restaurant and domestic sector, the transport equipment industry and the construction industry.

Group sales rose by 12 percent to 6 913 million euros in 2007. On a geographical ba-

sis, sales were as follows: Europe 73 percent, Asia 12 percent, North and South America 12 percent and other countries 3 percent. Outokumpu's European market share in the Group's principal product, hot and cold rolled stainless steel, totaled 16 percent in 2007, while its global share was 6 percent.

To implement the new phase of the strategy, Outokumpu's organization was redesigned during 2007 and the changes will be in effect from April 2008. To achieve the targeted increase in end-user and project customers, a Group Sales and Marketing function staffed with customer industry-based teams is being established. By combining industry knowledge, an understanding of our customers' business and product know-how, Outokumpu's sales

#### WAGES AND SALARIES BY COUNTRY

€ million	2007	2006	2005
Finland	125	125	154
Sweden	124	125	131
Britain	39	44	95
Other Europe	39	41	44
Other countries	29	26	24
Total	355	361	448

#### TAXES AND SOCIAL DUES BY COUNTRY

€ million	2007	2006	2005
Finland	86	136	21
Sweden	127	126	91
Other Europe	34	60	-1
Other countries	34	1	14
Total	281	323	124

#### VALUE ADDED DISTRIBUTED TO OUTOKUMPU'S STAKEHOLDERS

Generation of value added	€ million	2007	%	2006	%	2005	%
+ Customers	Sales	6 913		6 154		5 016	
- Suppliers	Cost of goods and services	5 623	81	4 604	75	4 194	84
= Value added		1 290		1 550		822	
<b>Distribution of value added</b>							
- Employees	Wages and salaries	355	5	361	6	448	9
- Public sector	Taxes and social dues	281	4	323	5	124	2
- Creditors	Interest on debt and borrowings	-209 <sup>1)</sup>	-3	39	1	67	1
- Shareholders	Dividends	216	3	199	3	82	2
= Distributed to stakeholders		643		922		721	
<b>Retained in business</b>		<b>647</b>	<b>9</b>	<b>628</b>	<b>10</b>	<b>101</b>	<b>2</b>

<sup>1)</sup> The figure includes gain from the sale of Outotec Oyj shares, EUR 142 million, and gain from the Talvivaara transaction, EUR 110 million.

## Public Capital Market Days increase transparency

For the first time ever, Outokumpu's Capital Market Days were opened to all interested parties via a live webcast. The event was held in Milan in September 2007.

"By making this event public, we wanted to emphasize our determination to achieve transparency in communication," says **In-gela Ulfves**, Outokumpu's Vice President for Investor Relations and a key organizer of Capital Market Days.

These annual events offer good opportunities for financial analysts to meet members of the Outokumpu management team. This year, the company's Executive Committee informed participants about Outokumpu's new strategy phase and related investments announced just a few days prior to the event.

Four presentations by members of the Executive Committee outlined Outokumpu's position in the stainless steel market, market trends, the implications of these trends for Outokumpu, and how the Group will

respond by relying on four pillars: a new commercial strategy, changes in the product range, expansion in growth markets, and broadening of Outokumpu's operational excellence programs.

All presentations and the question and answer session were broadcast via Outokumpu's Internet site. The audience for the live webcast totaled about a hundred people.

Webcasts are useful to analysts, investors, journalists and members of other stakeholder groups who do not have time to travel but need access to information as soon as it becomes available. Avoiding excessive or unnecessary traveling is also good for the environment.

The Group's plans include producing live webcasts in the future.

### CAPITAL MARKET DAYS

- First organized in the mid 1990s
- Annual event since 2001
- **Recent locations:**  
Milan, Italy (2007)  
Tornio, Finland (2006)  
Avesta, Sweden (2005)  
Sheffield, Britain (2004)
- **Participants in 2007:** 35
- **Audience for the live webcast:** about 100



Bo Annvik, who joined Outokumpu's Group Executive Committee in 2007, presented the great features of Outokumpu's duplex steel grades in Milan.

teams will be able to create and offer customized value-adding solutions.

### Dramatic variations in the nickel price

In financial terms, a major proportion of Outokumpu purchases are made from suppliers of raw materials. The principal raw materials used in the manufacture of stainless are recycled steel (both stainless and carbon steel), ferrochromium and nickel. The Group has its own chromium mine in Kemi, Finland, and a ferrochrome refinery in Tornio, Finland. The recycled steel, nickel and some ferrochromium are purchased on the open market. Depending on the location recycled steel accounts for some 70 percent of the total amount of raw material used.

Raw material prices continued to increase in 2007. By mid-May, the price of nickel – the most expensive raw material – had risen to a record high, an increase of 58 percent from the beginning of the year. The price then collapsed in a dramatic manner to less than half of its highest level in just a couple of months. On average, the nickel price was 54 percent higher in 2007 than it was in 2006.

As a proportion of the total cost of raw materials, nickel's share increased to 76 percent in 2007 (2006: 69 percent).

Fluctuating raw material prices resulted in substantial inventory losses.

As a result of lower production volumes, energy costs fell by 21 percent in 2007 to a total of 189 million euros, and energy accounted for some 3 percent of the Group's total costs.

### No supplier should be too dependent on Outokumpu

We have a limited number of raw material suppliers, only a few of whom are located near our production sites. This is particularly true of the Tornio site in Finland. As a consequence, our primary emphasis is on global rather than local sourcing. The proportion spent on locally-based suppliers is not currently monitored. On the other hand, our units attempt to purchase raw materials on home markets whenever possible to reduce any costs that will be incurred by additional transportation. While total cost is usually a major factor when making purchase deci-

sions, quality and environmental issues also influence our selection of suppliers.

In addition to raw materials, a large share of Group costs consist of purchased services such as maintenance, which are in the main sourced locally. Doing this includes the risk that Outokumpu purchases make up the majority of net sales by these often small, local service suppliers. The Group recognizes its responsibility towards local economies and our future objective is that no supplier should be too dependent on business done with Outokumpu.

### Balance sheet very strong

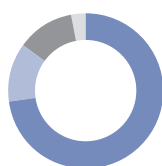
In 2007, assisted by good cash flow from operations and divestment of the remaining shares in Outotec Oyj, interest-bearing debt was further reduced. The resulting strong balance sheet offers excellent opportunities for investing in both future growth and the new phase in Outokumpu's strategy.

Net financial costs in 2007 totaled 206 million euros (2006: -48 million euros) and net interest costs totaled 58 million euros (2006: 62 million euros). At the end of 2007,

### COST OF GOODS AND SERVICES

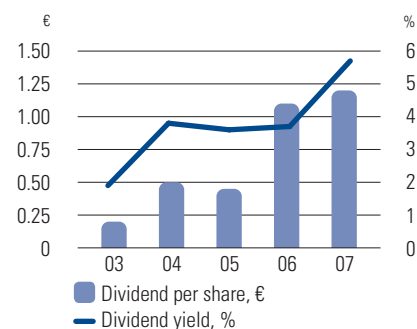
€ million	2007	2006	2005
Raw materials and merchandise	4 556	3 466	2 935
Fuels and supplies	325	325	330
Energy expenses	189	239	221
Freights	187	227	214
Maintenance	106	111	138
Hire processing	48	44	43
Rents and leases	24	26	30
Other expenses	229	199	273
<b>Total</b>	<b>5 662</b>	<b>4 637</b>	<b>4 184</b>

### SALES BY REGION AND COUNTRY



- Europe 73%  
Germany 19%, Italy 10%,  
Sweden 7%, Britain 5%,  
Finland 5%, France 5%,  
Spain 4%, Others 18%
- North and South America 12%
- Asia 12%  
China 2%, Others 10%
- Other countries 3%

### DIVIDEND AND DIVIDEND YIELD



Outokumpu's net interest bearing debt totaled 788 million euros (2006: 1 300 million euros) and the debt-to-equity ratio was 23.6 percent (2006: 42.3 percent), clearly below the target figure of 75 percent.

The majority of the Group's interest-bearing current liabilities are acquired by the Group's treasury function. Methods used to minimize risks relating to liquidity and refinancing include balancing loan installment schedules and maintaining adequate financial reserves. At the end of 2007, the Group's unused and negotiated loan facilities and undrawn loans, together with binding credit promises, totaled 1 000 million euros.

#### **Dividend level maintained, dividend policy adjusted**

Outokumpu's two largest shareholders are the Finnish government with a 31.1 percent shareholding and the Finnish Social Insurance Institution with a 8.6 percent stake. In late 2007, Finland's Parliament passed legislation that allows the Finnish government to sell the whole of its stake in the Group.

In January 2008, Outokumpu's Board of Directors adjusted the company's dividend policy, which now states that a minimum of one-third of the accounting period's profit is to be paid out as dividends over the economic cycle with the aim to have stable annual payments to shareholders. When drafting its annual dividend proposal, the Board of Directors takes into account not only the Group's performance trend, but also its investment and development needs.

The proposed dividend payment for 2007 is 1.20 euros per share (2006: 1.10 euros per share), representing a payout ratio of 33.9 percent. The effective dividend yield for 2007 is 5.7 percent. Over the last five years, dividends distributed by Outokumpu have averaged 36 percent of the Group's result.

#### **Lower profit led to lower taxes**

Outokumpu's operations have an economic impact on the local, national and global communities in which the company operates. Outokumpu contributes to these communities' well-being through the payment of taxes, through direct and indirect employment and by participating in social activities in other ways.

In 2007, Group taxes and social security payments fell to 281 million euros (2006: 323 million euros). As the profit reported by Outokumpu in 2007 was lower than in 2006, the amount of income tax also fell to 138 million euros (2006: 178 million euros).

#### **Grants and support**

Wherever they operate, Group companies participate actively and openly in community development by making charitable donations and providing financial assistance in line with the company's ethical principles and its sponsorship and donation policy. In 2007, the company's support for events, sports (especially sports for young and disabled) and culture at its largest locations in Avesta, Espoo, Tornio and Sheffield totaled about 390 000 euros. Many of Outokumpu's plants such as those in Tornio in Finland, Avesta in Sweden and Sheffield in Britain are significant local employers. Outokumpu also supports research and development related to its field of operation and engages in close co-operation with local educational institutions. Several Outokumpu units support technological research, technology students and young people who are financially disadvantaged.

In 2007, instead of sending Christmas cards and giving Christmas presents to its stakeholders, Outokumpu donated money to Médecins sans Frontières.

To contribute to the implementation of environmentally-beneficial projects with transboundary effects of interest to the Nordic region, Outokumpu joined the Testing Ground Facility (TGF), a carbon fund. TGF finances projects through the purchase of carbon credits and is managed by the Nordic Environmental Finance Corporation. In 2007, Outokumpu's contribution to TGF totaled 0.5 million euros (2006: 1 million euros).

Outokumpu receives assistance from the public sector. In 2007, this assistance totaled 603 000 euros. Grants are linked to research and to the development of new technologies, products and applications.

In 2007, the Outokumpu Oyj Foundation distributed grants and diploma awards totaling 278 500 euros. The Foundation is charged with promoting research into the manufacture and refining of metals in Finland,

**Outokumpu recognizes its corporate responsibility towards the local communities it operates in**

metal and mining technology, ore geology and related business activities, and the teaching of these subjects in universities. It also offers support to students and researchers working in these fields. An independent organization, the foundation's Board of Directors is made up of representatives of different universities. Outokumpu's CEO is the organization's Deputy Chairman.

# Environmental responsibility

Production of stainless steel has an impact on the environment. Within defined financial and technical parameters, Outokumpu makes every effort to minimize environmental impacts.

Stainless steel is 100 percent recyclable, corrosion-resistant and hygienic, and the environmental impacts resulting from its use are negligible. Almost all environmental impacts therefore arise during the production, manufacturing and reprocessing stages of the material's lifecycle.

The major environmental issues connected with stainless steel production are: dust and particulate emissions into the air; soil contamination as a result of metals settling out of dust emissions or spills of metals, solvents and oil-containing liquids onto the ground; the intake of cooling water; contamination of waters by discharges from plant; and high levels of direct and indirect energy consumption during production which contribute to global warming. In particular, the use of primary raw materials consisting of natural ores requires the consumption of a lot of energy. Production techniques also create large amounts of landfill waste if determined action to prevent this happening is not taken.

Outokumpu has always sought to find environmentally friendly solutions and has consciously developed its production methods to minimize their environmental load.

### Management of the environmental issues

As a stainless steel producer, Outokumpu is committed to responsible production. In line with the Group's corporate responsibility policy, ethical principles and environmental policy, Outokumpu aims to minimize the negative impact of its operations on the environment as much as economically and technically possible while achieving continual improvements in overall performance. Local guidelines and environmental management systems that comply with the ISO 14001 standard provide more detailed models for the actions we take.

Environmental issues are an essential part of the management systems employed in Outokumpu's plants and units, and the functioning of these systems is monitored by both internal

### > KEY ENVIRONMENTAL OBJECTIVES:

- Preventing soil contamination
- Reducing emissions into water and air
- Improving energy efficiency and enhancing the use of renewable energy
- Optimizing the use of water
- Optimizing the use of recycled steel as raw material
- Reducing the generation of waste

and external audits. The relevant authorities also receive regular reports on our operations.

At Group level, operations are managed and best practices are applied through our environment network, whose working groups and environment committee meet once during each quarter.

### > KEY ENVIRONMENTAL EVENTS IN 2007

#### REACH

Registration required for all substances manufactured/imported in more than 1 ton/year. Internal organization was built for pre-registration, which will be done during 2008.

#### Recycling and Lifecycles

Important new data achieved for evaluating social and ecological benefits of steel's multiple lifecycles. Study on steel in Finnish national economy: average recycling rate more than 90% and lifespan 42 years.

#### Permits

Investment decisions (Sweden, US): imminent need for environmental permits. New permit applied for whole Tornio site, as well.

#### Flooding

Meadowhall and Stockbridge operations affected in Sheffield. Local review to assess impact to environment: e.g. 65 thousand liters of oil to the environment. Authorities' took a pragmatic approach. First action: oil storage to be resituated to reduce risks caused by possible future flooding.

#### Radioactive incident

Excellent progress was made to transfer the four slag pots contaminated with Pu 238 from Sheffield melt shop area to proper repository. Three slag pots transported; regulatory approval sought for fourth and highest activity slag pot.

#### Material efficiency

Tornio Works developed with Tapojärvi Oy two processes: new spiral classifier unit for fine ferrochrome slag to facilitate metal recovery and production of new rock material for utilizing purposes; previously material dumped as waste, and processing line for reuse of melt shop refractory bricks: 10 000 tons of material redirected from landfill to utilization.

The Hydroflux project continued: three year agreement signed with Minpro AB to keep developing and producing minimum of 1000 ton/year until permit granted for treatment in higher volumes.

Outokumpu is  
committed to  
responsible  
production



## Achieving site specific targets set for 2007

### AIR PROTECTION

#### Avesta

> **Goal:** To decrease the carbon dioxide emissions by 2% to 375 kg/ton.

> **Result:** Specific carbon dioxide emissions increased by 7% due to the changes in product mix and mill activity. The increase was particularly caused by higher fuel consumptions in the rolling mills.

#### Nyby

> **Goal:** To reduce nitrogen oxide emission from the furnace in line 55 to max. 100 mg/MJ power input.

> **Result:** Flameless Oxy-fuel burners were installed into the furnaces. Improvement will be fully capitalized during 2008.

#### Tornio

> **Goal:** To raise utilization rate of dust reduction units to over 97% per month.

> **Result:** Achieved, except during 3 months: malfunctions in November and December and fire in April.

**Goal:** Implementing new dust treatment unit by 1 September at the cooling section of AP1-line.

> **Result:** Achieved.

### WASTE MANAGEMENT

#### Kemi

> **Goal:** To reuse 70 000 tons of lumpy rock from the concentrating plant to backfill the stopes of underground mine.

> **Result:** Achieved, 72 946 tons used.

#### Sheffield, melting shop

> **Goal:** To introduce further improvements to the waste segregation and disposal systems, increasing recycling by 10%.

> **Result:** Achieved.

#### Sheffield, rod mill

> **Goal:** To improve site waste management and find alternatives for reducing the quantity of waste sent to landfill.

> **Result:** Stirrers installed on two of five waste acid neutralization tanks. Waste management improved.

### WATER PROTECTION

#### Avesta

> **Goal:** To decrease the nitrate discharges to water by 10% to 1 kg/ton as monthly average.

> **Result:** Not achieved due to increased share of special grade products.

#### Sheffield, melting shop

> **Goal:** To reduce water consumption by 5%, against 2006 usage.

> **Result:** Not achieved due to the incoming hardness in the town's water supply. This target continues for 2008.

#### Tornio

> **Goal:** To implement new treatment system for landfill water before end October 2007.

> **Result:** Construction was finalized and test use is ongoing.

### SOIL PROTECTION

#### Sheffield, melting shop

> **Goal:** To improve ground protection by sealing protective bunds on site. To investigate sealing grinder cellars to prevent releases of hydraulic fluids to ground water and implement solution.

> **Result:** Not completed. Grinder cellars have not been sealed.

### USE OF MATERIALS

#### Tornio

> **Goal:** To produce more than 120 000 tons steel slag products.

> **Result:** Target was not met due to reduced steel production. Production of steel slag products was 60 200 tons.

> **Goal:** To replace oil as heating fuel by peat, biomass and recycled fuel before end December 2007.

> **Result:** The commissioning of the new power plant using these fuels started in August 2007. The commercial production of this plant started on 28th of December 2007.

#### Sheffield, rod mill

> **Goal:** To install acid recovery system to control tank iron levels and recover over 80% of the pickling acid.

> **Result:** Not achieved, investment decision is still pending.

### ENERGY EFFICIENCY

#### Avesta

> **Goal:** To improve energy efficiency – decrease electricity consumption by 3% by December 2007 from 980 to 950 kWh per ton.

> **Result:** Not achieved due to changes in product mix.

> **Goal:** To improve fuel efficiency – decrease the liquid petroleum gas consumption by 2% by December 2007 from 608 to 596 kWh per ton.

> **Result:** Specific target per ton not achieved, but total liquid petroleum gas consumption reduced by 2%.

#### Degerfors

> **Goal:** To reduce energy use for heating in the terminal dispatching area by 40% from 2005 as reference year.

> **Result:** The goal was achieved: the energy use was reduced by 58%.

#### Sheffield, melting shop

> **Goal:** To implement an energy management system, including the formation of an energy group and energy champion. To aim for a reduction in non-production energy use of 10%, against 2006 usage.

> **Result:** This target is to be continued into 2008 as part of a group target to reduce energy consumption.

> **Goal:** To reduce hydraulic oil consumption by 10% compared with 2006 through a programme of leakage reduction measures.

> **Result:** This target was completed, but further improvements have been identified and the target continues for 2008.

### CERTIFICATIONS

#### Tubular products sites in Sweden and Finland

> **Goal:** The sites are in process to combine the quality and environmental management system in one system, which covers the requirements of ISO 9001, ISO 14001 and PED 97/23/EC. The target is to have the system ready for multi-site certification in the end of 2007.

> **Result:** Achieved, first audit of multi-site certification was carried out April 2007.

#### Meadowhall

> **Goal:** To get the Environmental management system certified by May 2007.

> **Result:** Achieved in August 2007.



# Site-specific targets for 2008

## WATER PROTECTION

### Avesta

Reduce nitrate discharges to water by 10% and achieve 1kg/ton as a monthly average.

### Sheffield melting shop

Reduce specific water consumption by 5% with 2007 as the reference year.

### Degerfors

Increase water filter capacity in the hot rolling mill to minimize the risk of accidental discharges.

## ENERGY EFFICIENCY

### Avesta

Reduce electricity consumption by 3% from 980 to 950 kWh per ton.  
Reduce consumption of liquid petroleum gas (LPG) by 3% from 66 to 64 kg per ton.

### Sheffield, melting shop

Reduce specific energy consumption by 2%.

### Nyby, tube mill

Reduce total energy consumption by 2%.

## MANAGEMENT SYSTEMS

The process of integrating management systems that comply with the EN-14001, EN-9001 and BS-18001 standards and relevant energy management systems into a single environment, health and safety quality system has been initiated. The target is for at least one business unit to be ready for implementation by the end of 2008.

## AIR PROTECTION

### Tornio

Increase usage of dust reduction units to more than 98% per month.

### Newcastle

Add a new scrubber to one of the production lines.

## SOIL PROTECTION

### Sheffield melting shop

Improve ground protection by installing storage tanks and bunds for grinder cellar water.

## GROUP-WIDE ENVIRONMENTAL TARGETS FOR CORPORATE RESPONSIBILITY THEME YEAR 2008

- To reduce waste: landfill from plant operations by 10 percent per ton processed, and non-classified (e.g. plastic cups and other non-recyclable material) from offices by 5 percent
- To reduce energy consumption: at plants by 2 percent per ton processed, and in offices by 5 percent (e.g. using energy saving lamps, turning off lights and computers when not in use, not leaving in stand-by position)
- To contribute to reducing global carbon dioxide (CO<sub>2</sub>) emissions
  - New company cars to be low emission cars (below 200g CO<sub>2</sub>/km); company car policy to be revised
  - Outokumpu promotes tele/video-conferences vs. flying; travel policy to be revised
  - Outokumpu invests 5 million euros in an environmental target to be identified through a group wide competition

## WASTE MANAGEMENT

### Tornio

Reduce quantity of landfill waste by 10% per final product ton.

### Sheffield melting shop

Increase the quantity of waste being recycled so that the amount of waste sent to landfill is reduced by 10%.

### Örnsköldsvik tube mill

Reduce deposited material by 10%.

### Sheffield rod mill

Reduce the quantity of general waste being sent to landfill by 10% by identifying additional opportunities to reduce, reuse or recycle material that is currently being disposed of in this way.

## USE OF MATERIALS

### Kemi mine

Reuse 200 000 tons of lumpy rock from the concentrating plant to backfill stopes in the underground mine.

### Sheffield, melting shop

Reduce consumption of hydraulic oil by 10% (with 2007 as the reference year) through a program of leakage reduction measures.

Maintain the on-site recycling for primary dusts to match dust output from the melting shop.

### Tornio

Produce more than 120 000 tons of steel slag products.

MATERIAL BALANCE

	2007	2006	2005
<b>Materials used, tons</b>			
Recycled steel	1 480 332	1 797 000	1 597 000
Ferrochrome	282 001	354 987	340 092
Nickel alloys	105 697	130 829	129 743
Other alloys	100 274	103 084	90 347
<b>Additives, tons</b>			
Slag formers	237 454	264 711	251 875
Meltshop process gases	181 048	241 349	217 794
Pickling acids bought	11 322	23 286	21 013
Pollution prevention materials	17 365	16 700	16 000
Packaging materials used for final products	11 797	14 200	12 100
<b>Energy, million GJ</b>			
Electricity	10.5	11.3	10.7
Propane	4.4	5.1	5.1
Carbon monoxide gas	1.7	1.9	1.7
Natural gas	0.6	0.9	0.8
Light and heavy fuel oil	1.4	1.9	1.8
<b>Output, tons</b>			
Steel	1 718 704	2 078 888	1 920 516
<b>Emissions to air, tons</b>			
Carbon dioxide	932 000	1 050 000	1 019 000
Nitrogen oxides	1 653	1 942	1 646
Sulphur oxides	451	736	629
Dust	265	276	179
Ozone-depleting substances	20	14	23
<b>Emissions to water, tons</b>			
Metals	17.2	18.6	16.6
Nitrates	575	600	580
<b>Hazardous waste, tons</b>			
Oily sludge to the treatment	4 834	5 800	5 200
Hydroxide sludge landfilled	44 967	53 000	53 000
Steel making dust to recovery	39 000	42 000	45 000
<b>Wastes and by-products, tons</b>			
Slag, total	547 620	624 000	480 000
Slag utilized	220 000	223 000	148 000

**Recycled steel is our main raw material**

The primary raw material used in manufacturing stainless steel is recycled steel, both stainless and carbon steel. In 2007, Outokumpu used 1 480 000 million tons of recycled steel in producing 1 719 000 million tons of stainless steel. The production process also employs alloying elements such as ferroalloys containing iron and other metals including nickel, chromium or molybdenum.

Although recycled steel represents the majority of the raw materials used, other recycled materials are also employed. Usually, these consist of metal-containing wastes or by-products from manufacturing processes. In a small number of cases (such as swarf and heavy fallout dust from slab, coil and billet grinding operations) these residual products can be re-used as such in the stainless steel production process, but in most cases they are treated to recover the metals from the residue.

**Metals are recovered**

One example of such treatment is the recovery of metals from dust. The stainless steel manufacturing process generates a huge amount of dust and scales. To minimize emissions to the environment these are collected using filters. In 2007, 60 000 tons of dust and scales were collected with approximately 21 000 tons of metals being recovered and re-used in the steel production process. In addition

to the metals recovered for use on stainless steel production, a zinc-rich fraction is separated and sent to other operators who recover the zinc.

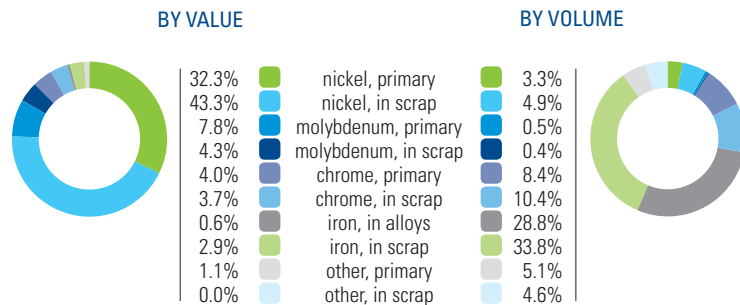
In the Nordic countries, dust from the Group's melt shops is collected and sent to an external facility outside the Group in Sweden that treats the dust to recover the metals it contains. These metals are then returned to the melt shops for use as raw material. In the Group's UK operations, dust recovery is carried out on site.

**Other materials are also required**

In addition to the raw materials used to make stainless steel, other materials are needed for the manufacturing process but do not become part of the steel product. Examples of these are slag formers such as lime, and gases such as oxygen, nitrogen and argon which are used to ensure the correct atmosphere in the melting stage of the process. At Avesta, these gases are manufactured on-site by an external supplier. Acids used for the pickling of stainless steel are immediately recycled as part of the process and re-used.

There are also materials which are used to minimize or prevent harmful emissions to the environment. Examples of these are lime used to neutralize the effluent rinse water, ammonia or hydrogen peroxide used to reduce emissions of nitrogen oxides into the air, or chemicals used for water treatment.

USE OF RAW MATERIAL



### Packaging materials recycled

Another category of material used in stainless steel production is packaging. Waste sorting guides have been issued to encourage recycling of the packaging material used to protect our products while they are being transported to customers. In Sweden and Finland Outokumpu participates in the nationwide recycling system for packaging. Packaging material used by our suppliers for deliveries to Outokumpu plants is also sorted and recycled in accordance with local practice.

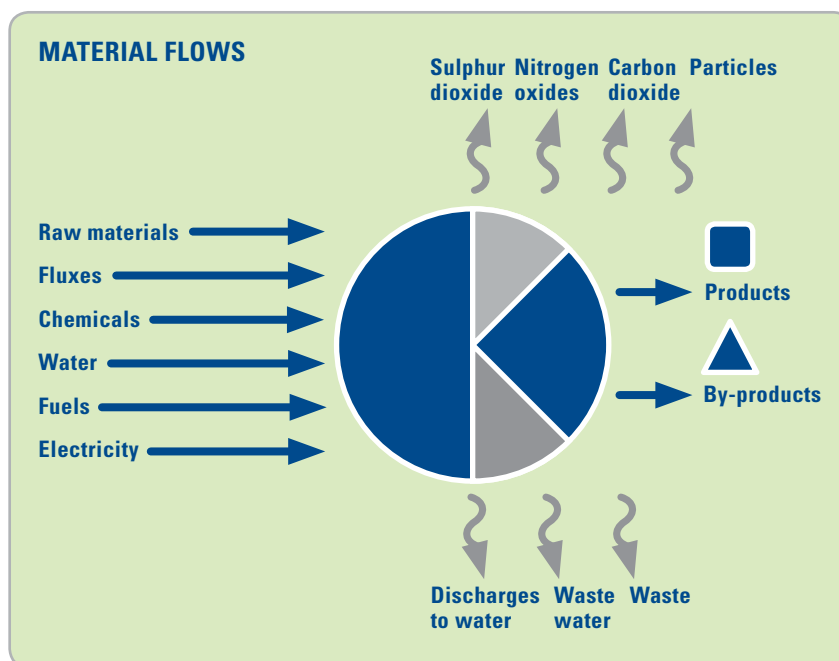
The melt shop in Sheffield, UK receives certain types of steel scrap that was previously used as packaging material. After gaining the status of a registered packaging reprocessor under the UK government's Packaging Waste Regulations in 1997, regularly audits are carried out and Packaging Recovery Notes can be sold.

### Integrating environmental costs into the material value chain

Being the undisputed number one in environmental matters requires Outokumpu to create maximum value while using as little resources as possible and minimizing any resulting ecological burden. To achieve this, the Group has initiated a challenging project to develop an internal environmental value chain. The objective of the project is to construct a model which integrates environmental costs into the material value chain. Environmental costs and the use of resources connected with the process and Group products will be evaluated from a value-creation perspective, with the aim of employing resources in the most efficient ways.

The first phase of the project was conducted in Tornio during 2007 and the results have been very promising. The project includes the analysis and valuations of specific emissions, side streams and environmental costs for different stainless steel grades and product phases.

The environmental burden related to Group operations is one important component in the optimization process. The new model takes Outokumpu one step further. Evaluating value-creating phases in relation to their environmental consequences and material requirements by grade and by process allows



Outokumpu to maximize the eco-efficiency of the Group's production.

### Energy efficiency as a target

The steel industry is traditionally viewed as a major consumer of energy and the steel making and rolling processes operated by Outokumpu are indeed energy intensive. Considerable effort, however, has been put to improve the overall energy efficiency of the Group's operations. Furthermore, many of the processes operated by Outokumpu are considered to be "Best Available Techniques" to minimize the emissions as defined by the European Union as part of the implementation of the Integrated Pollution Prevention and Control Directive. We seek reliable energy sources, security of supply and predictability of prices in a world where energy costs can be very volatile.

Electricity and several other energy sources such as coke, natural gas, propane and fuel oil are used at Outokumpu sites. Our direct energy consumption in 2007 amounted to 18 500 terajoules (TJ). This equates to the annual energy consumption of about 206 000

households, assuming one household consumes about 25 000 kWh, or 0.09 TJ, of energy annually. According to the Statistics Finland, in 2006 Finland as a whole consumed 1 492 000 TJ of energy.

The total energy used by Outokumpu each year includes fuel and electricity consumed at company sites. Analysis of the Group's energy consumption over the last four years (2004–2007) shows that energy consumption per produced steel ton has increased about 10 percent due to increased share of recycled steel used in Tornio and lower production levels.

The need to use energy efficiently has been recognized for many years and Outokumpu has worked hard to achieve an impressive record in reducing the amount of energy consumed. Energy reduction plans are incorporated into our Group's Environmental management systems. Our sites, including the major energy consumers in Finland, Sweden and Britain, are certified to the international standard ISO 14001. The larger Swedish units are also certified according to SS 627750. It is a standard to work with continuous improvements in energy usage.

## Committed to saving energy

Faced with the threats from climate change associated with global warming, governments and industry are increasingly working together through voluntary agreements. Outokumpu participates in such agreements with the national authorities in Finland, Sweden and Britain and many of these arrangements have now been in place for a number of years. In Finland, the Tornio site joined a voluntary energy-conservation agreement scheme in the beginning of 1990 and the contract was renewed in 1999.

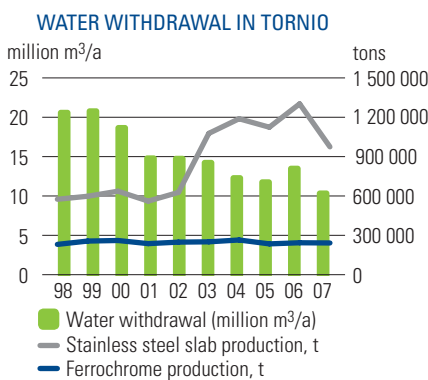
The main objectives have been to promote energy audits and reviews in member

companies to identify new, economically-viable energy-reduction projects and financially support relevant investments. Similar agreements in Sweden and Britain have resulted in lower levels of energy taxation in return for agreement to targets for improvements in energy use.

Continual improvement in the efficiency of using energy demands priorities to be assigned to projects in a systematic way. Outokumpu uses a management system in which the energy consumption for each object is listed and quantified. Projects are then selected from the larger energy consumers. Most our sites have found it necessary to improve their data

collection systems and have done so in order to make their work on energy improvement issues more effective.

There are many ways to improve energy efficiency. Initiatives in place within Outokumpu are many and range from promoting each individual's awareness of energy issues through training programs, maximizing the recovery of energy from sources of waste heat, using new energy efficient technology, integrating production processes and improving the material efficiency by reducing the generation of waste.



## WATER WITHDRAWAL AND DISCHARGES

	2007	2006	2005
<b>Water withdrawal by source</b>			
Surface water, million m <sup>3</sup>	20.3	25.9	22.7
Municipal water, million m <sup>3</sup>	1.1	1.2	1.2
<b>Water discharges by type and destination</b>			
Cooling water out, million m <sup>3</sup>	10.6	16.4	14.8
Waste water out, million m <sup>3</sup>	8.6	7.2	8.4
Metal discharges to water, t	17.2	18.6	16.6
Nitrogen in nitrates, t	574	600	580

## REDUCING ENERGY CONSUMPTION IN 2007

- Routines have been implemented at the largest Swedish sites to always purchase the most energy-efficient equipment when payback time is less than three years. These assessments are made using the energy classification of electrical equipment and using life cycle cost calculations when applicable.
- Tornio Works in Finland will replace most of the oil boilers currently used for heating with energy from a new power plant fueled by peat, biomass, recycled fuels and carbon dioxide gas. The new plant will also generate electricity.
- A new energy reporting system at the Tornio Works has been finalized.
- Tornio Works is a member of a pilot group which is developing a standard for Energy Efficiency Systems. This work is being carried out in cooperation with Motiva Oy, a Finnish state-owned company which provides expert services on energy issues. Energy efficiency contracts were renewed at the end of 2007.
- Tornio Works has also initiated several investigations with the target of increasing energy efficiency at the plant.
- Outokumpu's tubular product units aim to reduce their electricity consumption by three percent each year. The results achieved so far look promising.
- New routines for maintenance shutdowns have been implemented at the Avesta Works in Sweden: motors are shut down when they are not being used.
- Energy consumption in the terminal dispatching area at Degerfors in Sweden has been reduced by 58 percent after replacement of an oil-fired boiler system with infrared heaters fueled by liquid petroleum gas. A decision has been made to extend this replacement process into other areas.
- Degerfors has worked with the general utilization of buildings within the plant area and this will result in lower energy consumption.
- New steam pipes have been installed at Degerfors to minimize the heat losses from pipes. The benefits achieved will be evaluated during 2008.

## Trout restocked in Tornio River

Outokumpu commissioned the planting of about 3 300 sea trout and 24 000 migratory common whitefish in the Tornio River delta in 2007. The fish population is to be restocked annually in the future as well.

The restocking was carried out as a part of the Outokumpu Tornio facilities' statutory payments to the fishing industry. The payments are used to finance current research and projects selected by the authorities. The Tornio facilities have agreed with the fishing authorities that their payments be used specifically for reviving the depleted local stocks of valuable fish in Tornio River, namely its indigenous stocks of local sea trout and migratory common whitefish. This will mostly benefit the endangered marine life and the inhabitants of the area.

The value of the planted fish was about 10 000 euros. The fish were planted by the Finnish Game and Fisheries Research Institute under the supervision of Lapland's fishing authorities which, at the same time, made sure that the fish were healthy and of high quality.

Outokumpu's environmental obligations also include the regular surveying of the fish stocks and the bottom fauna found

adjacent to the facilities. The main results of these surveys indicate that even the fish found in the waters in front of the facility are healthy, reproductive and edible. The amounts of metals found in the fish have practically not increased.

The results of the surveys of bottom fauna are more difficult to interpret due to the species' natural variation. Furthermore, the opening of a shipping lane, the dredging of the harbor and the heaping of dredged earth in the area also affect the results. Some bottom fauna, such as mussels and gastropods, found near the facility's sewer are showing higher contents of metals, because these species filter their nutrients from mud and bottom sediments which have, over time, accumulated metal deposits. The surveys, however, have indicated that the facility's sewage water has not been toxic, and the changes in the bottom fauna population cannot, according to existing data, be directly linked to the facility or its sewage water.

### RESTOCKING FISH POPULATIONS

- **What is it about:** Outokumpu commissioned the planting of trout in the Tornio River
- **Background:** the Tornio facility's statutory payments to the fishing industry were used to revive fish stocks
- **When it took place:** spring 2007
- **Fish species:** 3 300 sea trout and 24 000 common whitefish
- **Future:** more restocking will be carried out in coming years



Juha Ylimaunu, Manager, Environmental Affairs at the Tornio Works participated in stocking fish in the Tornionjoki river in May 2007.

## Climate change raises challenges

According to the Corporate Ethics Statement, Responsibility Policy and Environmental Policy, Outokumpu aims to minimize the impact of its activities on the environment. This, among other things, is our contribution to combating global climate change. The share of recycled material in our production is higher than the global industry average of 60 percent and our ferrochromium production technology is the world leader in energy efficiency and in curbing carbon dioxide emissions. Outokumpu pays serious attention to climate change issues and takes them into account when making business decisions. A recent review of the Outokumpu approach can be found in the report Corporations and Climate Change – Views of International Finnish Corporations published in November 2007 by the Finnish Business and Policy Forum EVA.

The major greenhouse gas emissions from Outokumpu operations are direct releases of carbon dioxide from the company's sites as a result of using fossil fuels, and process-related emissions from the Group's steel making operations. In 2007, these emissions totaled 932 000 tons (1 050 000 in 2006 and 1 045 000 in 2005). When combined with indirect emissions of carbon dioxide from purchased electricity, Outokumpu's emissions in 2007 totaled 1 150 000 tons.

It is a fact that both the changing climate and the fight to inhibit it create risks and opportunities which have financial implications. There are both physical and regulatory risks.

## Tube mill in Florida in a "regional hotspot"

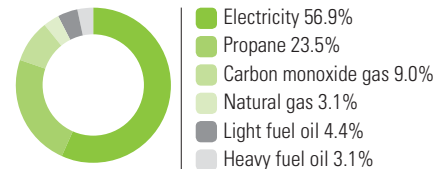
Physical risks relate to, for example, floods, hurricanes and drought. An analysis was made based on World in Transition: Climate Change as a Security Risk, a report issued by the German Advisory Council on Global Change in May 2007. Of its current production operations Outokumpu has just one tube mill in Florida, USA in an area which the report defines as "regional hotspot" with an increased frequency of more intense hurricanes. This area is however already hurricane sensitive and the necessary measures have been taken.

## Influence of the European Union Emission Trading Scheme

Regulatory risks relate to the cost of complying with new regulations. Outokumpu has sites in the UK, Finland and Sweden which participate in the European Union Emission Trading Scheme (EU ETS). In the period 2005–2007, our UK site used the opt-out possibility, but it is part of the scheme in the so-called Kyoto period 2008–2012. As regards the direct costs of emissions, governments in all three countries granted free allowances to Group sites. All our sites had a surplus of allowances, primarily because production levels were lower than planned, the use of recycled steel as a raw material was maximized and improvements in efficiency were achieved.

For the 2008–2012 period, governments have also granted allowances at no cost. Allowances are allocated to the Outokumpu sites in Sweden and the UK by governments

## ENERGY SOURCES



## ORIGIN OF ELECTRICITY

(figures based on estimates)

Renewable sources	53 %
Nuclear	27 %
Fossils and turf	20 %

The carbon dioxide emissions of our purchased electric energy are 66g/kWh

more or less according to need. In Finland, the government cut Group allowances by nine percent. Purchasing this amount would cost 1.5 million euros per annum, if the price of a carbon dioxide ton is 20 euros. On the other hand, our evaluation indicates that even in Finland we will be able to cope with the situation, as improvement measures taken early have a proportionally greater effect as production levels grow.

The direct impacts and risks that will result from regulation after 2012 are very difficult to evaluate because the debate is still weakly focused. A European Commission draft proposes a gradual decrease in free granting of emission allowances instead of granting them for free for industrial installations and power plants in the EU. The industry opposes this proposal as long as the system is not global.

## The price of electricity is a constant concern

For Outokumpu, the indirect influence of the European Union Emission Trading Scheme on the price of electricity is far more important

## ENERGY USED 2007

Unit	Electricity (GWh)	Fuel energy (GWh)	Total (GWh)
Tornio	1 935	1 367	3 302
Avesta	415	450	865
Sheffield	265	132	397
Other	306	264	570
Total	2 921	2 213	5 134

## On the road to being world-class

The 5S Constant Improvements program brings results that make everyday life in Outokumpu's mills easier and safer.

Outokumpu's tubular units in Sweden and Finland began their journey to becoming world-class in the spring of 2005. In practical terms, this means an ever increasing focus on achieving high quality, improved levels of safety, higher efficiency, a good working environment, reduced lead times, improved levels of customer satisfaction and continuous improvements. One of the tools used for this is 5S methodology, which targets not only constant improvements but also changes in working conventions.

**Peter Harnesk**, General Manager, and **Lars Törnander**, Production Manager, have seen with their own eyes how the continuous improvements process has changed the everyday working environment at the Group's tubular mill in Storfors, Sweden. The objective is to make sure everything

is in the right place and improve levels of safety. "Every employee is part of the improvement process. Many ideas for making improvements have been proposed, and all of them are considered," say Harnesk and Törnander. Recent safety-related improvements include additional protection for rails on the floor, increasing light levels around fire doors and rethinking the ways in which electricity outlets are shielded.

Storfors' employees consider the improvements to have been well worthwhile. **Leif Ståhl**, an operator at the mill since 1989, has a long-term perspective on what has changed. "Compared to how things used to be, there have been major changes. It is much cleaner here, everything is in its own place and the work we do is easier and safer," he says.

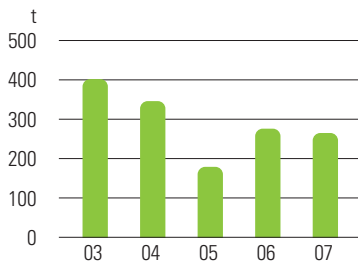
### 5S – CONTINUOUS IMPROVEMENTS AT STORFORS

- A change in ways of working
- "5S" stands for five Swedish words which provide operational guidance: Sort, Systematize, Clean, Secure and Standardize
- All employees participate in the improvement groups established in 2007
- One of the goals for 2008 is to further reduce lead times
- Storfors is one of Outokumpu's 12 tubular units involved in this program

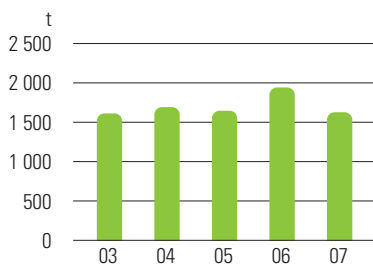


General Manager Peter Harnesk and Production Manager Lars Törnander are satisfied with the results of the wide-ranging improvement initiative.

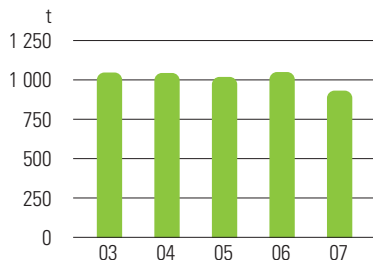
PARTICLE EMISSIONS TO AIR



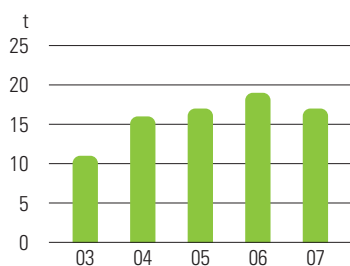
NITROGEN OXIDES TO AIR



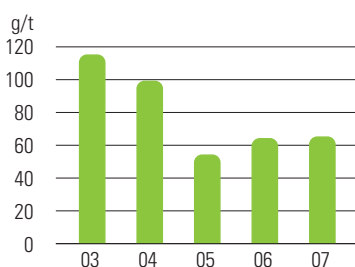
CARBON DIOXIDE TO AIR



METAL DISCHARGES TO WATER



MELTING SHOP PARTICLE EMISSIONS



than the emission allowances. This is because Outokumpu is a major user of electrical energy. The market price of electricity is determined by condensing power plants and the power companies transfer the cost of their allowances to the market price. According to a study carried out by the Technical Research Centre of Finland VTT, the price of electricity increases 7–9 euros per MWh when the price of one ton of carbon dioxide grows 10 euros. For the 2008–2012 period, the European Commission will be allocating emission allowances that are much lower than in 2005–2007. Hence the forecast prices of allowances in 2008–2012 are 20–25 euros per ton of carbon dioxide, whereas during the first period they had almost no value.

#### Own power solutions

To protect itself against increasing price risks, Outokumpu has reinforced its power procurement policy through strategic, long-term electricity agreements. The Group has also taken a position in efficient power production by acquiring Norwegian hydropower, participating in the construction of a new multi-fuel power plant in Tornio as a minority shareholder, investing in a new Finnish nuclear company, applying for a building permit for a nuclear power plant, and working on a windpower farm in Tornio.

The average proportion of our total consumption represented by Outokumpu's "own" power in 2008–2012 will be about 16 percent. The company hedges itself against variations in electricity prices on a staggered basis such that a total of 12 percent of electricity purchases in 2008 are exposed to price risks due to emission rights. The figure for 2012 is 68 percent. With this hedging pattern, an increase of 10 euros per ton of carbon dioxide will increase the Group's electricity bill about 1.5 percent in 2008 and 15 percent in 2012.

#### Also opportunities opened

Regulations and other measures to curb climate change also result in opportunities for Outokumpu. Stainless steel is used as a construction material in many projects, which aim at prevention of the climate change. No quantitative analysis has been made of the individual impact of climate-change-related

issues on growth in these industrial segments, but the average annual growth in global use of stainless steel is 5–7 percent and the industry segments affected constitute some 65 percent of the market for stainless steel.

#### Investment in a local carbon fund

Direct financial impacts resulted from the sale of surplus carbon dioxide allowances and optional profits from investments in carbon funds. Due to lower production than planned in 2005–2007, Outokumpu was able to sell 889 000 tons of allowances for a total of 9.38 million euros. In 2007, the Group invested 0.5 million euros in Testing Ground Facility, a local carbon fund which finances projects primarily in Poland, Lithuania, Latvia, Estonia and Russia (2006: one million).

Impacts on the price of electricity are more difficult to evaluate. In the main, they depend on the share of electricity production creating carbon dioxide emission, the hydropower reserve in the Nordic countries and competition between the power companies. The European Union Emissions Trading Scheme will certainly not result in lower energy costs.

In the 2008–2012 period, we do not expect our carbon dioxide allowances to result in a surplus. The Group's investment in the local Testing Ground Facility carbon fund, mentioned above, is expected to bring us extra allowance units, but evaluating the actual amount is not possible at this time.

#### Ozone-depleting substances still used to some extent

Outokumpu has eliminated the use of ozone-depleting substances from its steel process operations and has also phased out the use of halons in fire protection systems throughout our operations. Methylbromide treated wood is not used in the product packages. But a number of air conditioning systems, which have ozone-depleting substances as refrigerants, are maintained. Our production units are subject to ongoing maintenance programs that are designed to minimize the risk of any releases. The use of ozone-depleting substances will be phased out in line with nationally agreed timetables or earlier if appropriate.



## Steel moves onto rails

Steel is now being transported between Tornio in Finland and Eskilstuna in Sweden using railways instead of roads. The railway transports create environmental, safety and cost benefits.

The distance from Tornio at the northernmost tip of the Gulf of Bothnia to Eskilstuna in central Sweden is about 1 200 kilometers. In the past steel rolls were transported from the Tornio facility to the Folkesta service center in Eskilstuna using trucks but, in 2007, road transports were replaced with a railway connection.

Steel shipments destined for Eskilstuna leave Tornio five times a week. The route is operated by a total of 12–14 wagons of the Green Cargo railway company, carrying a total of 15 000 tons of steel annually. Several hundred trucks would be required to transport this amount of steel.

The move to railway transports reduces emissions, as transporting 15 000 tons of steel by road would generate about 660 tons of carbon dioxide emissions, whereas

transporting the same amount by railway generates a mere six tons of emissions.

In addition to environmental benefits, the change has made sense financially as well. The railway route will bring about annual savings of approximately 275 000 euros for Outokumpu.

Outokumpu is aiming to increase the proportion of railway and ship transports in its total traffic, because they are more friendly to the environment, more economical and safer than truck transports. No data has yet been compiled on the share of different modes of transportation in the movement of raw materials. Trucks remain the largest mode of transportation for finished products, accounting for 47 per cent, while ship transports account for 41 per cent and railway transports for 12 per cent.

### FROM TORNIO TO ESKILSTUNA BY RAILWAY

- Steel transported on railways instead of trucks
- **Railway traffic began:** 2007
- **Journey length:** about 1 200 kilometers
- **Annual transports:** 15 000 tons of steel rolls
- **Carbon dioxide emissions from transport:** 6 tons a year from train transport, 660 tons a year from truck transport.
- **Financial savings:** 275 000 euros annually



In its choice of transport modes, Outokumpu accounts not only for the costs, but also the environmental impacts.

## Water cools, rinses and cleans

Steelmaking is a high-temperature process. For many years, water has been the natural choice for cooling in high-temperature sections of the process, protecting people and equipment. Outokumpu's main production operations also use water for rinsing and cleaning.

In overall terms, large volumes of water are employed, particularly in melting and rolling operations. To minimize any risk of pollution that could affect local resources, a high proportion of the water used in the production process is recirculated.

In many areas where the Group operates, local water supplies are abundant and amounts extracted by Outokumpu have only a minimal effect on the resources available. At Avesta, for example, water intake is less than 0.05 percent of the total volume contained in the river flowing past the plant. The impact at this site is further reduced, since most of the water is used for cooling and then returned to the river.

The availability of water is also of great importance in high-temperature processes, where disruption of the water supply can result in major damage. Both water pumping

stations and associated piping are therefore carefully monitored and rebuilt as and when required to meet updated needs.

In 2007, water extracted during Outokumpu's operations mostly consisted of surface water from rivers or the sea (a total of 20.3 million m<sup>3</sup>, about 20 percent less than in 2006) or municipal water (1.1 million m<sup>3</sup>) originally derived from a river or lake. Rainwater is not employed in the Group's processes, but treated together with indirect cooling water. A positive aspect is that only small amounts of groundwater were used.

Outgoing water streams are clean water, wastewater, rainwater and domestic sewage.

None of the Group's operational sites are located near protected wetlands listed in Ramsar List of Wetlands of International Importance.

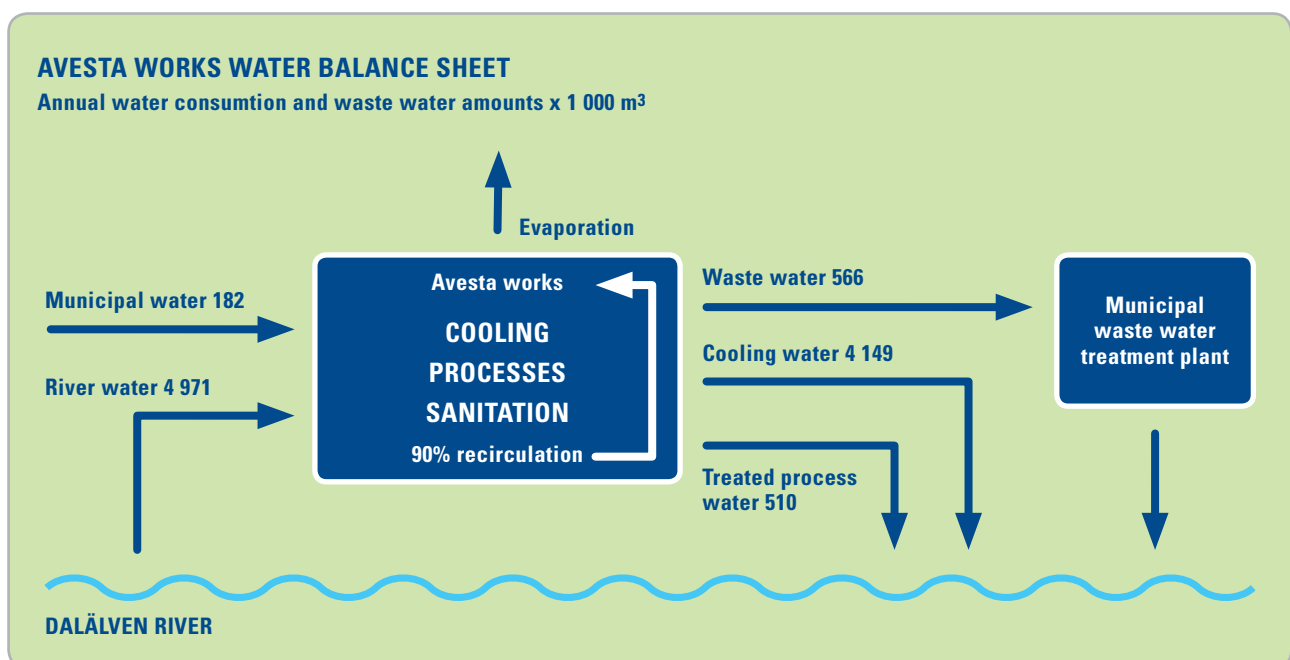
### Cooling and process waters recycled

Cooling water is used either directly in contact with the steel being produced, or indirectly when fresh water meets a circulating stream of cooling water in a heat exchanger. In the latter case, the outgoing water is only "contaminated" by being raised to a higher

temperature than the incoming water before it is pumped back to the watercourse from which it was extracted.

The use of re-circulating cooling systems and water treatment programs results in high levels of recycling in both cooling and process waters being achieved at many of Outokumpu's sites. The actual recycling rate can vary on a seasonal basis. In winter, only partial recycling of cooling water at Tornio is carried out, with the balance being discharged into the harbor basin to assist in reducing the amount of seaborne ice.

In autumn 2007, a second seawater pumping station constructed to provide cooling water for a new heating and power plant was completed and commissioned in Tornio. In a cold climate, the prevention of ice formation in harbors is an important task, helping to avoid the regular use of energy and fuel to power icebreakers. This is why cooling waters are mainly pumped to the harbor in Tornio instead of circulation. Even so, the amounts of water used in Group operations has been considerably reduced. At Avesta, more than 90 percent of process water is recycled.



### Rainwater is also used

Rain falling on Group sites amounts to significant volumes. At Avesta, for example, at least a million cubic meters of water falls each year in the form of rain or snow on the works area of 2.4 km<sup>2</sup>. Some of this water evaporates, but a large proportion is collected and run together with used cooling water through oil separation facilities before flowing to the recipient.

In Sheffield, the old British Steel Tinsley Park melt shop (dismantled many years ago) used to operate a wet fume dust collection system. The sludge settlement lagoon from this system remains intact and has been used to settle out solids from collected surface drain and rainwater. Some of this water is now being recycled for use in dust-suppression bowsers. As this has reduced the consumption of potable mains water, further recycling opportunities will now be investigated. Rainwater falling within the boundary of the landfill site filters through the tipped slag and becomes alkaline leachate, which has to be pumped from a collection chamber to a drain. The newly-issued separate landfill pollution prevention and control regulation permit requires that this liquid has to be effectively neutralized. A capital investment of 154 700 euros was therefore made in 2006 for a new automatic leachate treatment plant. However, the reliability of the system has not been satisfactory. Pump manufacturers have been consulted and it has been found that an alternative system is hard to find.

### Floods in Sheffield

During 2007, water was abundant in more than one respect. In June, the centre of Sheffield, where Outokumpu's Thin Strip unit has operations, was flooded after record rainfall raised the level of the River Don. The whole of the works area was affected by the two-meter rise in water level.

### Biodiversity

Outokumpu production sites are not located in sensitive areas such as UNESCO World Heritage locations, protected wetlands listed in Ramsar List of Wetlands of International Importance and UNESCO Biosphere Reserves. None of the Group's sites have been

found to disturb biodiversity in any unacceptable way.

Scientists and environmental authorities have evaluated marine environment and EU Natura areas near the Tornio site in Finland. A Finnish consulting firm Jaakko Pöyry Infra has made a report on the environmental impacts of Outokumpu Tornio site's enlargement in the area. Lapland Regional Environment Centre has given a statement on the report. According to the report and the statement, Outokumpu's activities are not threatening or having a negative impact on biodiversity in these areas.

### Former production locations returned to their natural state

Outokumpu operates in a responsible manner towards nature and biodiversity. Areas once utilized by production operations are returned to their natural state. At the Kemi mine, the whole of the oldest concentrating sand bond, an area of 20 hectares, was landscaped and reforested during 2007. The two bonds that are still in active use, one of 22.5 and the other of 34.5 hectares, are home to a rich waterfowl population that includes rare species.

Outokumpu closed two production sites in 2006, one in Sheffield, Britain (30 hectares) and the other in Sorsakoski, Finland (5 hectares). Site restoration and aftercare has been initiated in these locations in accordance with local regulations.

### Impacts on biodiversity evaluated at regular intervals

None of the IUCN's (International Union for Conservation of Nature and Natural Resources) Red List species, or species on national conservation lists are known to be affected by the Group's activities. Even though Outokumpu does not have any significant operations in sensitive areas, impacts on biodiversity at Group production sites are evaluated regularly.

There are locally-rare graylag nests on the Tornio site and nesting has now been ongoing for two consecutive years.

At the Group's Sheffield site, an area was established to provide protection for wading birds who might decide to nest there during the spring. Activities include checking that

## Stainless steel is 100 percent recyclable

nesting birds are not being disturbed and ringing to establish future breeding and migration patterns.

A marine study, conducted by Helsinki University and led by professor Erkki Pulliainen, near the Tornio site waterfront concluded that the fish population in this location is healthy, edible and reproductive. One of the sampling points was located right in front of the plant's main sewage outlet. Measured metal concentrations were well within the required limits.

Avesta has some 300 hectares of forest land. Outokumpu maintains public footpaths in areas where walking is very popular and has taken measures to run a forestry operation that protects wildlife and plants. This work is certified according to regulations laid down in standards issued by the Forest Stewardship Council, an international organization which promotes the managing of forests in environmentally, socially and economically-responsible ways.

### Emission control by best available techniques

Outokumpu follows the principle of using best available techniques (BAT) to reduce emissions and minimize any harmful environmental impacts resulting from its operations. The term BAT applies to pollution prevention technology that is economically and technically the best available as agreed and made public by the EU. While employing BAT means that emissions are at the lowest level currently achievable with modern

technology, Outokumpu is also continuously developing its processes and pollution control techniques so that levels of emission control will also be good in the future.

### Some non-compliances occurred

All Outokumpu production sites have environmental or risk-based management systems. Altogether 88 percent of these systems are certified according to ISO 14001, the international standard for environmental management systems. When it comes to the service centers, 45 percent of them have the ISO 14001 certificate. This way of working helps to avoid many of the spills and accidents that could be harmful to humans or the environment.

The general level of emissions and discharges in 2007 was normal and in compliance with environmental permits. A total of 23 spills and non-compliances occurred during the year. The problems were quickly identified and preventive action resulted in only minimal environmental impact:

- At the Sheffield meltshop, the automatic breach alarm system indicated 13 minor breaches in the DC arc-furnace extraction system. Restrictions on emission levels at this location are extremely tight.
- Two reports from the special strip unit in Sheffield, one for a minor breach of hexavalent chromium levels and one for a release of rolling oil resulting from the significant flooding incident on June 15.
- A total of 5 non-compliances occurred at the Tornio Works, all of them related to dust emissions. Only one resulted in permitted levels being exceeded.
- Tests on wastewater from the Wildwood tube mill in the United States showed higher than permitted chromium and nickel levels in February and June.
- One breach of the 24-hour limit set for nitrogen oxide was recorded at the rod mill in Sheffield.
- At Tornio Works, the most significant emissions of dust particles resulted from malfunctions in the dust filters at the ferrochrome plant. The annual permitted level of particle emissions at this facility (20 tons) was exceeded by 18 tons. The malfunctions led to changes in the dust

filtering process which enabled the problematic filter to be replaced.

- The major flooding on June 15 caused several problems for the Group's UK production units. The breaches mentioned above at the Special strip unit in Sheffield, Meadowhall, were caused by the flooding. The first period of flooding was overshadowed by subsequent, city-wide floods that occurred on June 25. It affected seriously the Stocksbridge site and temporarily stopped whole operations at Meadowhall.
- On June 21, a low level of radioactivity being emitted by a source of the radioactive isotope Am241 was registered in a slag sample from the electric arc furnace at the Sheffield melting shop. Three slag pots of a total of four contaminated by the radioactive isotope Pu 238 from an earlier incident in 2000 were transported to the low-level waste depository near a village Drigg in North-West England. The total weight of the slag pot and its protective package, containing approximately 0.02 grams of Pu 238, was 120 tons. Regulatory approval is still being sought for transportation of the fourth pot, in which the level of radioactivity is highest.
- At the Tornio Works in Finland, slag contaminated with low levels of radioactivity was separated and stored in a safe manner according to guidelines issued by the national authority (STUK).

### Emissions to the air reduced

Dust emissions have traditionally been the main cause of releases by the steel manufacturing industry. The main particulate emissions by the Outokumpu group originate from the Tornio, Avesta and Sheffield steel mills and the New Castle hot rolling mill. In 2002–2006, investments totaling 20 million euros have been made at Outokumpu's steel plants to improve their environmental performance and minimize these dust emissions. The net result is that dust emissions have been reduced significantly in spite of increased production levels: during 2002–2007 the dust emissions reduced by more than a half.

At the beginning of 2007, the steel melting shop in Tornio began monitoring dust par-

## Recycled steel accounts for some 70 percent of the raw materials used in the production of stainless steel

ticle emissions using a continuous emission measurement system. It helps to detect and repair potential filter leakages more quickly. A new dust filter was also installed at the Tornio cold rolling unit in August 2007. In 2007 the emissions from this source were 88 percent less than in 2006.

Dust emissions from Outokumpu's operations typically contain some quantities of metals (including iron, chromium and nickel) which are mainly present in a harmless form. For example, chromium is usually in its trivalent form and not in the hazardous hexavalent form. In recent years, Outokumpu has supported many studies that have examined the effects of metal emissions on human health and the environment. For instance in Tornio area the studies are done by University of Jyväskylä, Finnish Meteorological Institute and Institute of Occupational Health.

Emissions of nitrogen oxides by Outokumpu's units have also fallen. These reductions have been achieved by investing in new technology and abatement plant. For example, production sites in Tornio, Avesta, Nyby and Sheffield use both the latest burner technology and selective catalytic reduction. Selective non-catalytic reduction technologies are also used in certain processes to minimize their emissions.

## Stainless for the cars of tomorrow

Stainless steel producers and carmakers join forces to put the automotive industry on a sustainable path by enabling the industry to use stainless in the structural components of cars.

Two major concerns in today's automotive industry are how to achieve high environmental standards and how to improve safety. To reduce carbon dioxide emissions from vehicles and thus make them more environmentally sustainable, vehicle weight will have to be reduced dramatically. As this weight mostly derives from the steel used in the structure, the dilemma is how to do this without compromising passenger safety.

A key solution comes from the materials employed: stainless steel has powerful potential for weight reductions. Realizing this, three of the world's largest stainless steel producers - including Outokumpu - and six major automotive companies have joined forces to present stainless as a viable alternative for the structural components used in cars. Using high-strength stainless

steel rather than ordinary steel, car parts can be made considerably thinner and lighter, while safety levels are actually higher. Other benefits of stainless for carmakers include excellent fabricability and unique hardening behavior during cold-forming processes.

Working under the umbrella of the Next Generation Vehicle research project launched in 2005, the research partners are developing new tools for use by carmakers in designing and fabricating structural components from stainless steel. Virtual design tools were made available to the automotive industry at the end of 2007. The goal of the project over the next - and final - 12 months is to fine-tune the tools and establish them as a permanent part of carmakers' toolkits.

### NEXT GENERATION VEHICLE RESEARCH PROJECT

- **Launched:** 2005
- **To be completed:** 2008
- **Goal:** Lighter car components
- **Research partners:** AUDI AG, Bayerische Motoren Werke AG, Centro Ricerche Fiat, DaimlerChrysler AG, Outokumpu Oyj, Saab Automobile AB, Thyssen Krupp NIROSTA, Ugine + ALZ, Volvo Cars
- **For more information:** [www.ngvproject.org](http://www.ngvproject.org)



The carbon dioxide emissions of vehicles can be reduced by manufacturing vehicle parts from stainless steel: stainless is lighter than ordinary steel.

The main origin of sulphur dioxide emissions is the district-heating unit at the Tornio Works, which has to be used mostly in the cold winter period.

Recovering heat from waste furnace gases at the Tornio and Avesta Works leads to lower overall energy consumption. This also has a beneficial effect on the level of nitrogen oxides, carbon dioxide and sulphur dioxide emitted at the site since the emissions which would otherwise be associated with combusting fuels to provide this heat are avoided. In general terms, the energy efficiency measures which have been implemented have reduced, among others, specific emissions of carbon dioxide.

The impact of emissions on local air quality in the vicinity of Outokumpu's major production sites are studied on a regular basis by external experts. At Avesta, measurement of mercury emissions from the steel melting shop have begun. On the Swedish side of the border near Tornio, discussions took place during the autumn of 2007 about releases of osmium by the Tornio ferrochrome plant. Osmium is a very rare metal which is present in very low concentrations in chromite ore extracted from the Group's Kemi mine. For the first time in the world, Swedish researchers analyzed and documented the association between osmium concentrations in humus and a metal industry plant. Discussions began because one form of osmium is toxic. According to the researchers, however, concentrations of osmium in the ambient air in the area are 20 000–50 000 times lower than the risk limit and there is no reason for speculation concerning health effects.

The quality of ambient air in the Tornio and Haparanda communities is generally just as good as in other small communities of similar size in Finland and Sweden. Emissions by traffic and dust arising from the streets are the factors which have the most significant impact on air quality in these communities. According to a study carried out with the local municipalities and authorities, the effect that Tornio Works has on air quality is very local.

### Developing the use of by-products

The efficient use of materials is one of the cornerstones of Outokumpu's thinking on

environmental responsibility. In recent years, the Group has conducted many research and development projects targeting material-related issues and has also implemented a number of schemes to reduce the volumes of waste generated. One of the most important ways to reduce the amount of waste generated by the steel manufacturing industry is to modify melting shop processes so that slag can be turned into a product that can be put to some useful use. Since 2004 Outokumpu has invested over three million euros in developing slag-based products, including an investment of 1 million euro in an automatic steel-slag analyzer in Tornio to help ensure that new steel slag products comply with the necessary environmental and technical requirements. As a result, an increasing number of stainless steel slag products are being sold and used each year in Finland, the UK and Sweden. These products are used mainly as construction materials. At Tornio, over 60 000 tons of stainless steel slag and 315 000 tons of ferrochrome slag were sold and used as products in 2007. In addition, almost 90 000 tons of mixed fine slag was used in Tornio for Outokumpu's own purposes, among others for building projects. Traditionally, more than 70 percent of the slag produced in the Group's Sheffield unit has been reused, primarily as building material. At Avesta, a test road was built in 2005–2006 using slag as the construction material. In May, the Tornio Works received its first CE-certificates for new steel slag products. CE marking is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety and environmental protection legislation.

Avesta, Nyby and Degerfors are engaged in a project to develop further uses for hydroxide flux, thus avoiding it ending up in landfill sites. Working with the Finnish chemicals company Kemira, Tornio Works continued a development study on treating metal sulfate salts produced during the pickling-acid recovery process.

### Waste

The collected dusts and scales that result from stainless steel manufacturing operations are considered to be significant waste streams for

## The long-term target is to deposit no waste in landfills

Outokumpu. To recover the valuable alloying elements such as nickel, chromium and molybdenum that are present, these waste materials are collected and recycled where practicable. To do this, we use either specialist recovery equipment such as our DC arc furnace in the Sheffield melting shop or external treatment facilities operated by other companies. Dusts and scales collected and treated in Tornio, Avesta, Sheffield, Nyby and Degerfors in 2007 totaled 60 000 tons. Wastes from the Group's production units are sent to appropriate treatment facilities or to landfill sites licensed to accept such material.

Waste streams include both hazardous and non-hazardous materials and pre-treatment of the wastes is carried out where required. Hazardous wastes (oily waste, steel-making dust and hydroxide sludge) generated by the company's operations in 2007 totaled 88 700 tons (101 000 tons in 2006 and 103 000 tons in 2005). All hazardous wastes are treated, reused or disposed of in accordance with current legislation and best practices.

Outokumpu owns and manages landfill areas at some of the Group's production sites in Finland, Sweden and the UK. In Tornio, a new large five-hectare landfill site suitable for hazardous waste stands ready, but the old one is still in use. Both sites fulfill all demands and standards laid down in European legislation.

As the efficient use of materials is a cornerstone of Outokumpu's strategy, Tornio Works has begun investigating the flow of each waste material stream on its site. The aim of this

## > FROM ORE TO STAINLESS STEEL – CASE TORNIO

The Tornio ferrochrome plant manufactures ferrochrome from ore produced at the Kemi chromite mine. Chromium is the most important raw material in the manufacture of stainless steel as it contributes the majority of the end product's corrosion resistance. The Group's Kemi mine is the largest chromium mine located in the European Union and the only one in western Europe.

Because the ore minerals extracted are very stable and no chemicals are used in the beneficiation process, operations at the Kemi mine have only a minor effect on watercourses. Metal discharges in particular are small, their effect only being observable as slightly-higher nitrogen, solids, calcium and iron concentrations in watercourses.

In the mining industry, the largest emissions into air result from open-pit mining activity, the transportation of ore and waste rock, from operations in the product-loading area and from piles of concentrate. During

2005, the Kemi mine moved from open-pit operation to underground mining. The effect of particulate emissions on air quality is monitored by studying Suspended Particulate Matter (SPM).

The piles of gangue (waste rock), open-pit mining activities and beneficiation and clarification basins at Kemi all have a long-term effect on the landscape. Tailings ponds are landscaped after they have filled up. The gangue will be used in backfilling the underground mine.

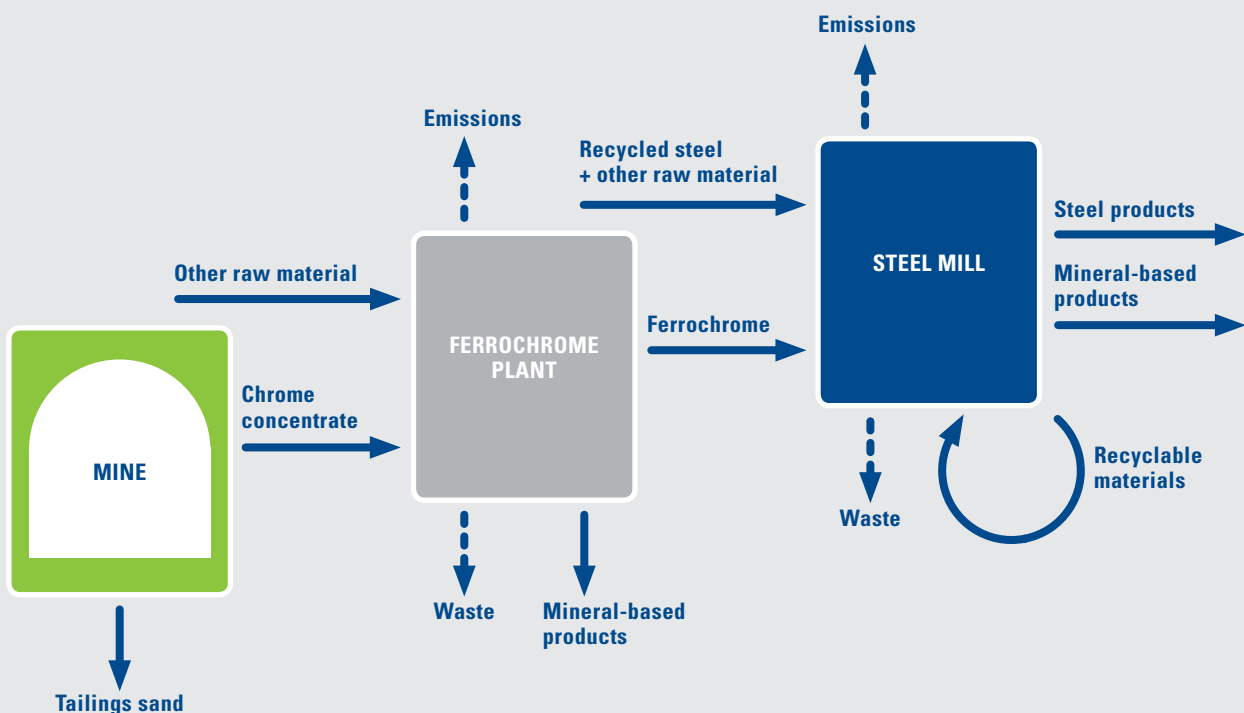
### Molten ferrochrome means efficiency

All the concentrate produced at the Kemi mine is delivered to the Tornio ferrochrome plant, which employs the best and most energy-efficient technology available. The ferrochrome produced is delivered to the Tornio steel melt shop with the processes involved being linked in an energy-efficient manner. A large proportion of the ferro-

chrome is delivered in molten form, and the carbon monoxide produced during ferrochrome manufacture is used as fuel in the steel mill, replacing other fuels.

### From hot and black to cold and gleaming

In the steel melt shop, recycled steel and other alloying elements are added to the molten ferrochrome while impurities detrimental to the steel's final properties are removed. After it has been worked into its final composition in the melt shop, the molten stainless steel is cast into slabs. At the hot rolling mill, these slabs are rolled into black hot strip which is delivered to the steel mill's largest unit – the cold rolling mill – for further processing. At the cold rolling mill, the black steel strip is formed into gleaming sheet steel and coil in accordance with customer requirements.



project is to establish the most cost-effective ways of recycling, re-using, treating or disposing of each material, and of minimizing the amount of waste produced.

#### Water discharges

The most significant discharges to water from the stainless steel manufacturing process are the metal compounds and nitrates which result from the neutralization of acidic wastes produced in cold rolling units. Effluent discharges at all Outokumpu's production units are controlled in order to minimize the environmental impact of such releases. At the Tornio Works for example, the natural load of metals carried by local rivers into the sea (i.e. the Gulf of Bothnia in the Baltic Sea) is much higher than the primary metal discharges (iron, chromium, nickel, zinc) from the steel works.

The nitrate load referred to in the previous paragraph results from the pickling acids used in descaling stainless steels. A number of different techniques are employed to reduce the nitrate load in the effluent discharges from these operations, including a range of different pickling-acid recycling technologies. Outokumpu is developing the Group's discharge handling techniques to further reduce the effluent load.

A research project on using bacteria to reduce nitrate discharges by the Kemi mine was completed. The results indicate that future investment in additional nitrate removal at the Kemi site is unlikely. The two current ponds, which together cover an area of almost 100 hectares, already form natural removal units for nitrates and there are no negative impacts on the recipient water system.

Research projects studying ways to reduce nitrate discharges at several of the Group's production sites in Sweden were undertaken in 2007.

At the Avesta site in Sweden, the oil separation station handling cooling water and rainwater was rebuilt to incorporate a modern lamella filter unit with process control, thus ensuring that oil in the water stream is separated. A study to optimize the operation of neutralization plant at Tornio was initiated. The aim of this study is to minimize releases of solid material into wastewater.

## The long service life of stainless steel products conserves natural resources

#### Impacts of water discharges and runoff

Outokumpu's production sites are located in many different areas of the world and the impacts of water discharges differ from site to site. At small production units, wastewaters may be pre-treated on site prior to final treatment in local municipal water treatment plants. The Group's facility in Wildwood, Florida has installed a new two-step pre-treatment system to reduce variations in nickel and chromium content in effluent discharged to the City of Wildwood's treatment facilities. This is important to the City of Wildwood, as its treatment plant has a limited capacity.

Outokumpu's most sensitive production site from an environmental perspective is perhaps the Tornio Works, which is located in the estuary of the Tornionjoki river on the coast of the Gulf of Bothnia. On the border between Finland and Sweden, this site is close to a number of nature reserves. Many biological, physical and chemical monitoring studies have been carried out in the vicinity of the Tornio site since the 1970s. In 2007, together with experts from consulting firm Pöyry and the University of Oulu, the Tornio Works initiated a voluntary research project to evaluate the impact of nitrates on recipient water systems at the Tornio site and the Group's Kemi mine.

In the last few years, production of stainless steel at Tornio has doubled and further expansion is currently under way which will result in a tripling of output from the site.

On the other hand, the pollution prevention techniques now being employed mean that corresponding increases in emissions will not take place, and that reductions from previous levels will be achieved in many instances.

A number of studies, including the continuous monitoring of discharges, show that the levels of chromium and nickel discharged have fallen by 60–80 percent from the levels discharged a couple of years ago. These two metals are considered to be the most significant ones released by the Tornio Works into the sea. Current discharge levels are only few percents of the total metal loading, most of which originates from natural sources, in the northern part of the Gulf of Bothnia. This is because the local Tornionjoki and Kemijoki rivers carry far greater concentrations of these metals into the sea than combined releases by the Tornio Works and the Kemi mine. The chromium discharge from Tornio site and Kemi mine has been 20–30 percent of the total chromium releases and the share of nickel and zinc less than 10 percent.

It is worth noting that fish caught close to the Tornio Works have been found to be healthy and that commercial fishing is also carried out near the site. Research made by the University of Helsinki and experts of environmental monitoring has shown that releases from the works do not accumulate in fish or the marine food chain.

#### Impacts on soil and groundwater

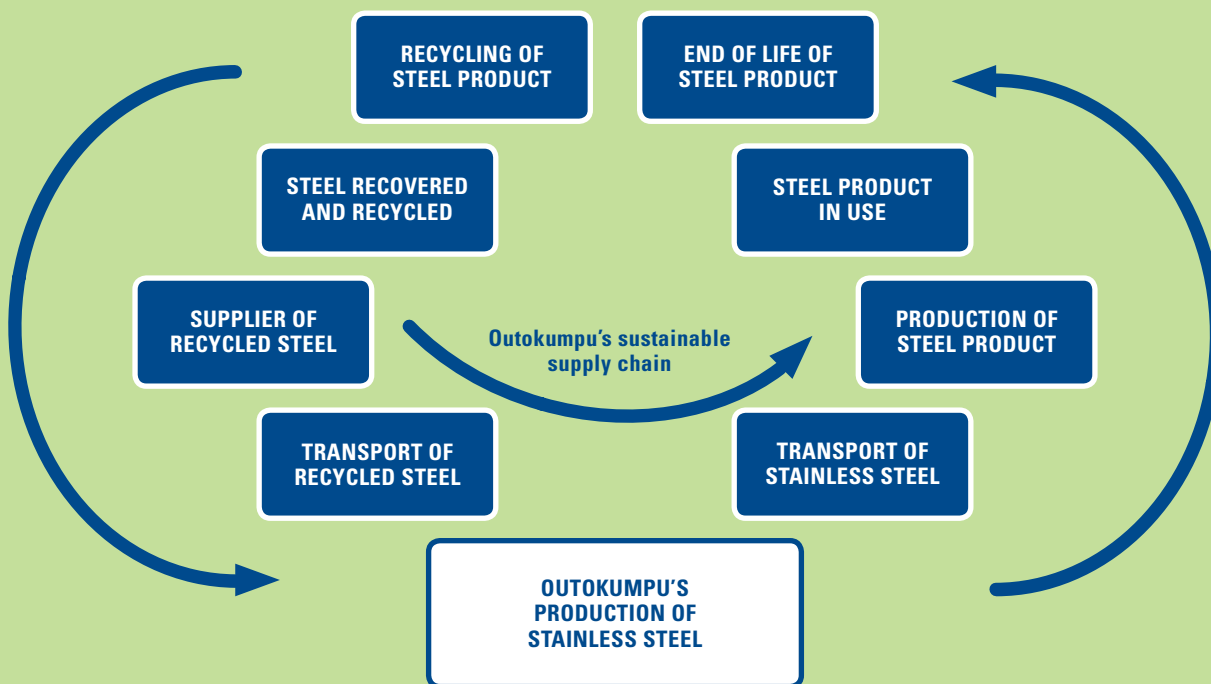
Preparations to handle environmental responsibilities resulting from closure of the Fagersta tube mill in Sweden are ongoing. In 2007, intrusive samples were taken from soil and groundwater as part of an environmental study.

A survey of soil and groundwater contamination using intrusive sampling methods is under way at the Group's Avesta site.

Normal remedial procedures related to groundwater continued at the Tornio site in 2007. Groundwater under old landfill suffered local contamination as a result of dust stored in the 1970s and 1980s. Good results, i.e. lower concentrations of metals in groundwater, have been achieved through this remedial action. Planning related to closure of the whole landfill site is ongoing.



There are many phases in the life-cycle of stainless steel products. It is Outokumpu's aim to improve the sustainability of each phase – from production to re-use. Outokumpu's sustainable supply chain from supplier of recycled steel to production of stainless steel products.



## Stainless steel is recyclable and sustainable

Most of the environmental impacts associated with stainless steel manufacturing come from the raw materials and the steel production processes. The usage phase results in a very low burden. Stainless steel products do not require coatings, corrosion-protection measures or significant amounts of maintenance which could add to the environmental burden. Stainless steel is also very durable, and its long service life reduces the need for replacement materials thus saving resources.

The best way to ensure that stainless products have a minimal impact over their lifetime is to ensure that the right grades are chosen for products in relation to their operating environment, and that good manufacturing practice is employed in stainless applications. In this way, corrosion risks are minimized

and a long service life ensured. Outokumpu has skillful and motivated customer support personnel who provide expert help in resolving questions concerning material choice and material handling.

### Steel is the world's most recycled material

Even though steel is the most recycled material in the world, the amount of stainless steel being recycled is insufficient to satisfy the current need for raw materials in stainless steel melt shops. This is a result of the strong increase in stainless steel consumption – 5–6 percent per annum – in recent decades and to the long service life of stainless steel products.

Furthermore, the quality of stainless steel is not adversely affected by recycling. The same stainless steel can be recycled an infinite

number of times to form new high-quality stainless steel products. The high-speed train you are traveling in could easily have been a kitchen sink in its previous incarnation.

In general terms, recycling rates are higher when stainless steel can be easily identified in the waste sorting process. For example, excess or waste stainless steel resulting from industrial manufacturing processes has an estimated recycling rate of almost 100 percent because knowledge about what materials have been used and routines for separating valuable metals still exists. When stainless steel is used in construction or for architectural purposes, similar high rates of recycling can be safely assumed for the same reasons. Recycling rates for consumer goods are lower, and will vary depending on the kind of product the material has been used to make. Small items such as cutlery that enter municipal waste streams

may not be identified and sorted out. Large kitchen appliances such as dishwashers are usually easier to identify, allowing the stainless steel they contain to be reclaimed.

Estimates by the International Stainless Steel Forum (ISSF) indicate that some 80 percent of the stainless steel currently being discarded is collected and remelted. Recent research results published in the magazine of Iron and Steel Institute of Japan suggest that the actual end-of-life recycling rate could be even higher at more than 90 percent.

Statistics supplied by ISSF show that the total volume of recycled steel used for production of new stainless steel amounts to 60 percent of annual global stainless steel production. In Europe, the input of recycled steel is slightly higher than the global average at some 70 percent.

In 2007 Outokumpu used 1 480 000 tons of recycled steel which is 86 percent of the total amount of stainless steel produced and 63 percent of total raw material consumption.

Outokumpu used 11 800 tons of packaging materials in 2007. The Group's Nordic production facilities are part of nation-wide packaging recycling systems.

### More transportation using ships and trains

When choosing a mode of transportation, environmental aspects are taken into account in addition to the elements that affect cost. On average, ships and trains are more environmentally friendly than trucks and lorries. Outokumpu's aim is to increase the use of ships and trains in order to reduce the amount of pollution generated.

Currently, conventional trucks are used to transport the largest proportion of Outokumpu's finished products. In 2007, 47 percent of transportation was carried out by truck, 41 percent by ship and 12 percent by rail.

There are two ways of increasing the use of ships and trains in transportation. Firstly, by finding ways of making the current systems more systematic: certain trains and ships operate the same distance according to regular, fixed schedules. Secondly, by focusing on the development of new rail and ship systems that enable new material flows.

The Group's Logistics strategy is formulated accordingly.

Emissions caused by the transportation of finished products include 285 629 tons of carbon dioxide, 7 018 tons of nitrogen oxides and 4 270 tons of sulphur dioxide. The calculations that result in these figures include final products leaving Avesta, Tornio, Terneuzen, Nyby, Degerfors and the Group's tubular units in Sweden and Finland, a total quantity of approximately 1 600 000 tons.

On average, every ton of finished product transported to customers resulted in the generation of about 180 kg of carbon dioxide, 4 kg of nitrogen oxides and 3 kg of sulphur dioxide.

The calculations on emissions resulting from the transportation of finished products to customers reveal that by far the largest emissions of – for example – carbon dioxide can be attributed to ship transport. One reason for this is that in general terms, the distances involved in ship transportation are more than ten times longer than the average trip by truck. Of the almost 290 000 tons of carbon dioxide generated by finished product transportation in 2007, 87 percent resulted from long-distance journeys by ship. Almost 100 percent of the sulphur dioxide emissions also resulted from ship transportation.

### Group-wide manual for the correct handling of products and transportation claims

In 2007, a new Group-wide Cargo Handling Manual was published. This manual includes basic rules and procedures for the correct handling of Outokumpu's products during logistical operations. It is intended for all Group employees working in material handling, sales and logistics, and also for external suppliers. Observing the instructions and guidance it contains helps in avoiding transportation losses and acting correctly in cases of damage.

This is the first Group-wide cargo handling manual that Outokumpu has issued. Previously, instructions were provided at local level. The Group-wide manual harmonizes work in the whole organization and is published on the Outokumpu intranet. It is updated continuously as and when best practices are determined.

## Outokumpu seeks to increase use of trains and ships to reduce emissions

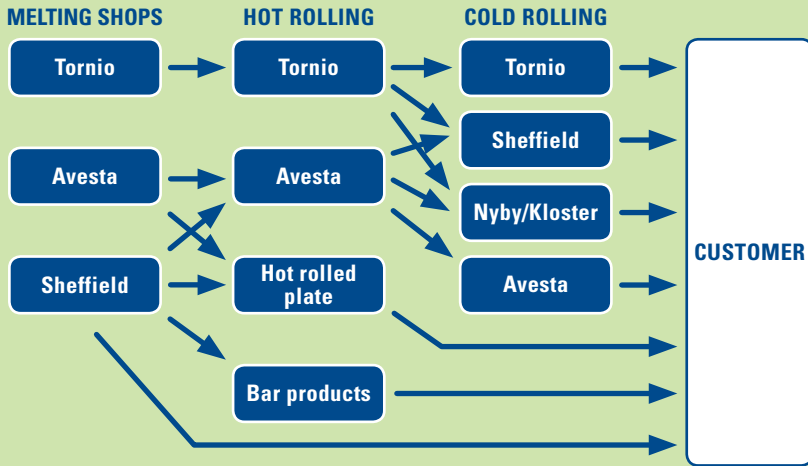
### Expenditure on environmental protection and investments

Environmental investments by Outokumpu in 2007 totaled some 12 million euros. Operational costs in 2007 totaled 44 million euros, of which the treatment of waste and disposal amounted to 2.7 million euros. Provisions and guarantees related to environmental considerations at the end of 2007 totaled 23 million euros. In addition, the provision for aftercare of old mine sites was 0.35 million euros.

### Largest environmental investments in 2007

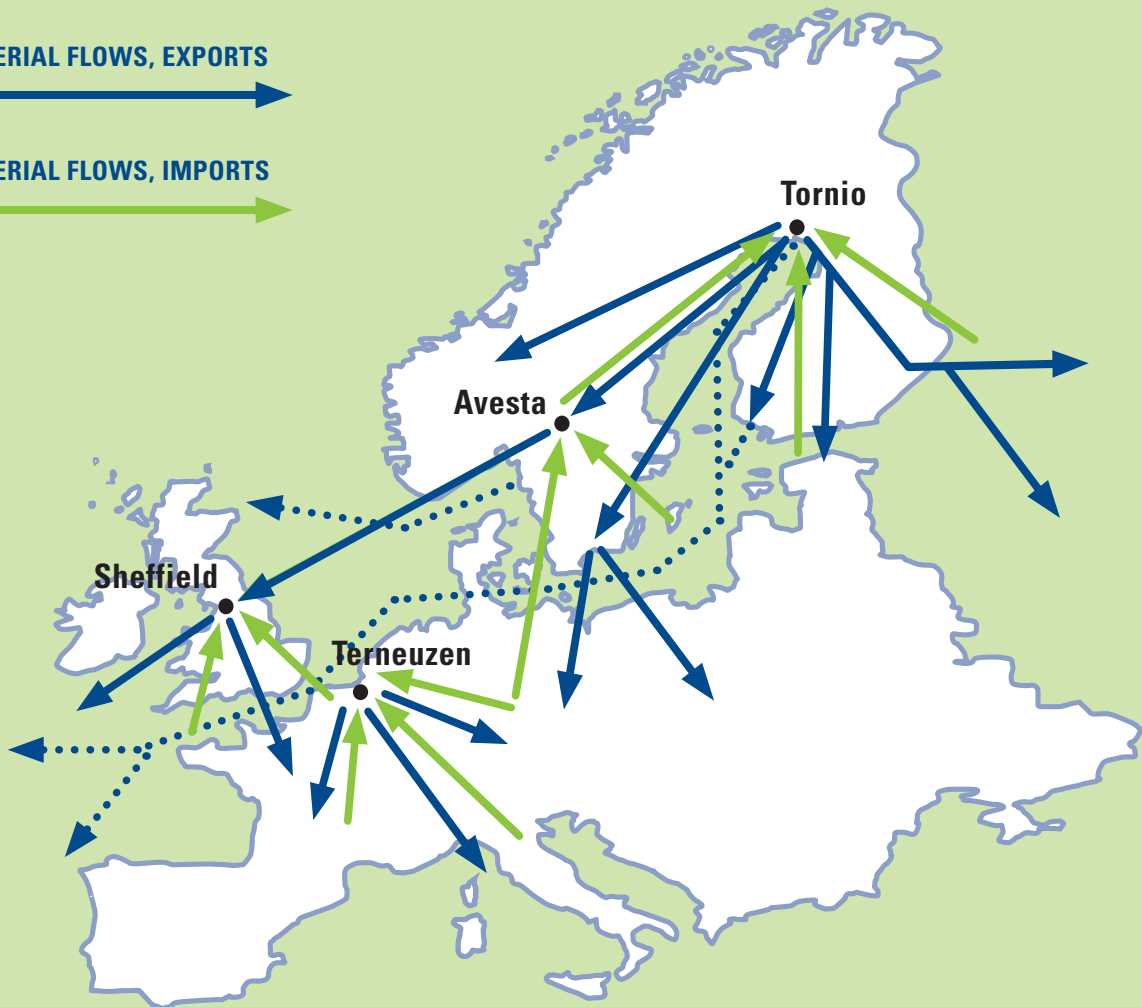
- Energy efficiency in Tornio: New pipeline to transport carbon monoxide gas to the Tornion Voima Oy power plant, 1 040 000 euros, and renewal of carbon monoxide storage tank, 3 805 000 euros.
- Investments in production of by-products at Tornio, 1 500 000 euros.
- Air protection in Tornio: dust removal unit for AP1 line, 633 000 euros.
- Wastewater treatment system for landfill waters in Tornio, 498 500 euros.
- Installing mechanical stirrers in two spent acid tanks and replacement of one of the tanks in Sheffield, 127 500 euros.
- Investments at Avesta totaled 530 000 euros, including continuous measurement of mercury levels, an oil separation unit for rainwater and improvements to the pickling section in the AP line.

### TRANSPORTATION AT OUTOKUMPU



### MATERIAL FLOWS, EXPORTS

### MATERIAL FLOWS, IMPORTS



# Social Responsibility

Outokumpu's goal of becoming the undisputed number one in stainless steel not only shows that we need to achieve better earnings than our competitors but also that we aim to become an attractive employer and a member of local communities.

Our ethical principles and corporate responsibility policy provide sound guidelines for the way in which we shoulder social responsibility within our company. People must be treated equally and fairly irrespective of ethnic origin, nationality, religion, political views, sex, sexual orientation or age. Outokumpu is opposed to the use of forced and child labor, and it condemns corruption and bribery.

The backbone of Outokumpu's human resources policy is that success is based on people. The objective is to become an attractive and long-term employer that motivates its employees, provides them with development opportunities and shows clear direction. We prioritize the importance of quality management because it plays a vital role in ensuring that the company's personnel are motivated and enthusiastic about their work and know their targets. Other key elements include reinforcing unity within the company and safeguarding the availability of competent personnel.

## Personnel

At the end of 2007, the Group employed 8 108 people in around 30 countries. There was a decline in the number of Outokumpu personnel on the previous year's figure; at the end of 2006, the Group employed 8 159 people.

The average age of employees was 43.5 years. The average length of service was 16.3 years, and personnel turnover was 6.1 percent. It has been estimated that the average employee turnover in the industry in Finland might be around five percent.

The majority of our employees, over 7 000 in total, fell within the scope of the collective agreements in 2007. Of our personnel, 441 were on fixed-term contracts.

Of all Outokumpu employees, 94 percent were located in Europe. The majority worked in Sweden (38 percent), Finland (34 percent) and Britain (11 percent). Men accounted for 82 percent of employees and women for 18 percent.

There is freedom of association at Outokumpu. In practice, this means that the personnel in all operating locations are members of trade unions in line with the rules and regulations of the local labor market culture. The strike by the Finnish Union of Salaried Employees TU in October 2007 resulted in a brief 4-day disruption to production in Tornio. A total of 1 235 working days were lost throughout the Group due to strikes in 2007. There were 15 strike days in 2006 and 510 in the preceding year.

In general, the number of strikes in Finnish industry has remained steady over the past ten years. With the exception of 2005, a peak year, industrial actions have numbered slightly under one hundred a year. These statistics include the 16 000 member companies of the Confederation of Finnish Industries

## PERSONNEL BY COUNTRY

31.12.	2007	2006	2005
<b>Europe</b>			
Sweden	3 070	3 061	3 697
Finland	2 759	2 802	3 275
Britain	862	845	1 397
The Netherlands	253	233	243
Germany	194	216	574
Italy	141	138	142
Other European countries	321	379	440
	7 600	7 673	9 768
<b>North America</b>			
The United States	394	388	411
Canada	34	33	289
	428	421	700
<b>Asia</b>	51	35	57
<b>Australia</b>	25	26	177
<b>Africa</b>	5	5	62
<b>Group total</b>	<b>8 108</b>	<b>8 159</b>	<b>10 764</b>

## KEY FIGURES

	2007	2006	2005
Sales/person, € million	0.8	0.7	0.5
Incentives of total remuneration costs, %	5.6	4.2	4.6
Training costs of total remuneration costs, %	1.4	1.1	1.5
Training days/person	3.3	2.9	5.0
Days lost due to strikes	1 235	15	510
Personnel turnover, %	6.1	10.1	5.7

EK, which have about 950 000 employees in all. There were 140 strikes at these companies in 2007.

Along with the organizational change, wide-scale internal recruitment was launched at the end of the year. All the key positions in sales came up for open internal application. The investment decisions made in 2007 placed challenges on recruitment to which we must be able to respond within the foreseeable future.



We are  
committed  
to our goals

### A reduction of 50 jobs in Sheffield

In 2007, the Group recruited 437 new employees.

The number of jobs in Sheffield, Britain, was reduced by 50 due to restructuring at the Stocksbridge special strip mill. The need to reduce the number of employees was met by some employees volunteering for early retirement, and arrangements were made with local trade unions to minimize any problems faced by individual employees as an outcome of the change: An agreement was made regarding redundancy pay and employees' advance pension rights. Assistance was also provided with the preparation of CVs, financial planning and job interview skills.

### Follow-up arrangements for the 2006 redundancies in Sheffield and Fagersta

The closure of the Sheffield cold rolling plant resulted in 670 redundancies in 2006. Outokumpu wanted to ensure that as many people as possible would be assisted with finding new employment. In order to achieve this objective, we purchased the services of a reinvestment company. The company co-operated with the local personnel department. The redundant employees received IT training, assistance with working on a curriculum vitae, and they were given guidelines for job interviews and the benefit of being able to check for open positions before they were placed on the job market. The arrangement proved to be extremely valuable. Of those that lost their jobs, 98 percent found new positions or some other alternative occupation.

The Fagersta tube mill in Sweden will be closed in 2009. By the end of 2007, 78 of the 144 employees at the plant and 14 of the 27 office staff had already found new jobs. Some people chose retirement programs. Two activities were launched in November 2007 to assist the remainder.

Outokumpu is supporting a two-year program being run by the Fagersta and Norberg municipalities to stimulate the creation of job opportunities in the area. For Outokumpu, the total cost of this program will be some 157 000 euros.

The Group will also carry out a competence reinforcement program for some forty blue-collar employees. This program will

provide them with the necessary education and training to work at Outokumpu's nearby Avesta facility where the need for personnel will increase by 200–300 when expansion of the plant is completed in 2010. Outokumpu Stainless Tubular Products has invested about 211 000 euros in education and training, the majority of which will be used for this program.

### We listen to personnel

Personnel at Outokumpu play an important role in the search for solutions to problems as well as when issues concerning work are being ameliorated. In 2007, we arranged our third extensive personnel survey. Personnel representatives were given the opportunity to hold discussions with management at the annual meeting of the Outokumpu Personnel Forum in October 2007. A working committee elected by the Outokumpu Personnel Forum is responsible for ongoing co-operation between personnel and management. Development dialogues are also a key element in mapping out the views of personnel.

### The survey told us where we are

In the autumn of 2007, a Group-wide personnel survey was carried out at Outokumpu under the title O'People. The survey mapped employees' opinions concerning their working environment, working practices, company strategy and leadership. Responses from 64 percent of employees were collected.

According to the survey results, a key focus area for development is raising levels of motivation and commitment within Outokumpu. Special attention should therefore be given to managers' leadership skills, the quality of performance and development dialogues, career planning, competence development and recognition for a job well done.

Strengths highlighted by the survey indicate that employees view the Group's vision and strategy as clear. Organizational efficiency was considered to be very strong, and actually resulted in a best-in-class benchmark for a process industry. Employees gave very high ratings to safety conditions and also considered that team spirit and support for others within their working environment was good.

The results are being examined in a trans-

## Our goal: performance and development dialogue to all

parent manner throughout the organization and action is being taken to address key areas for improvement.

This was the third time that O'People was arranged. The previous survey was carried out in 2004–2005. At that time, the response rate of close on 70 percent was higher than for the 2007 survey. The survey indicated that people who worked in units where development dialogues took place regularly showed a considerably higher level of satisfaction and commitment to their work. The signals given by O'People encouraged us to build a Group-wide performance and development dialogue model that was adopted for clerical staff in 2007. Our objective is for all of the Group's employees to fall within the sphere of the dialogues in 2008.

### Co-operation between management and personnel

The Outokumpu Personnel Forum is a joint consultative and information channel and collaborative body for personnel and management at Outokumpu that complies with a European Union directive. Its members comprise representatives from personnel, senior management and human resource management, and it includes 21 personnel representatives from Outokumpu's various operating

## Stainless Pro trains future leaders

Outokumpu launched the Stainless Pro - International Graduate Program in 2007 for young graduates who have completed a university level degree.

The objective of the program is to train selected graduates to become skilled management personnel who, in the future, may hold key responsible tasks in the Group.

The program received almost 900 applications, with eight talented graduates being selected in the rigorous recruitment process. They began their intensive two-year trainee periods in different parts of the company in September. Each of the trainees received a tailored program that takes into account their areas of interest and qualifications.

One of the eight trainees is 27-year-old **Shahin Rouhani**. Shahin started his traineeship at the Nyby unit in Sweden, where he worked on process and product development. At the turn of the year Shahin was transferred to Sheffield in the U.K., where new challenges awaited him.

Shahin applied to join Stainless Pro because he wanted work that was more challenging, international and dynamic. "I was attracted by the opportunity to evolve in a managerial role," he says. "It also gave me the possibility to learn and try out some new aspects of the business – something which might otherwise have been difficult to do."

During his two-year traineeship, Shahin wants to acquire a good overview of Outokumpu and its businesses and get to know plenty of people. "It's good that nothing is fixed as yet. After two years, we'll sit down and see what my next step should be. I hope to be handling stimulating and challenging tasks, and I would certainly like to try out a managerial or strategic role. But right now these are just ideas."

### STAINLESS PRO – INTERNATIONAL GRADUATE PROGRAM

- **Objective:** developing future leadership talent for Outokumpu
- **Target group:** talented graduates, internal candidates can also apply
- **Number of participants:** 6–10, 8 participants in 2007
- **Schedule:** two-year program, initiated in September 2007
- **Next program:** 2008



Shahin Rouhani, a Stainless Pro trainee at Outokumpu, aims high.

locations. In line with the reduction in Group personnel, the number of representatives in the Personnel Forum was 12 fewer than in the previous year.

The Personnel Forum generally convenes once a year. The 2007 meeting was held in Avesta, Sweden. The personnel representatives were given the opportunity to pose their questions directly to senior management. The management was particularly interested in hearing the views of personnel concerning the change in the operating and organizational model, which is based on the company's strategy. The forum in Avesta was the sixteenth annual meeting.

A working committee elected by the Outokumpu Personnel Forum is responsible for ongoing co-operation between personnel and management. It is charged with acting as the corporate management's consultative body on matters concerning personnel and the human resources strategy. In order to further the flow of information, the working committee meets with senior management regularly every quarter and more often if required. The committee met six times in 2007.

The role of the Group Working Committee has been under review during the last two years. External specialists from both the

employer and employee sectors were brought on board for this stage of development and comparisons with other companies were also carried out. It was decided that the current role of the committee – a communication channel between management and personnel – is adequate for the purpose.

In November 2007, six personnel representatives had the opportunity to become more familiar with China's steel industry. Operations at three Chinese steel companies were examined during a six-day trip. Participants were excited by the new perspectives this provided.

## Development opportunities and training

Personnel training and development are one of the main priority areas of Outokumpu's human resources policy. Development and training needs are mapped out during the performance dialogues that each employee has with his or her supervisor.

When we are seeking suitable people for new positions, we map out precisely the competencies of people who already work within the Group. Key positions in particular are mainly filled by people already employed by the Group.

Outokumpu provides continuous training and opportunities to develop skills and competence. The most visible projects are an extensive management training program as well as a training program on production excellence.

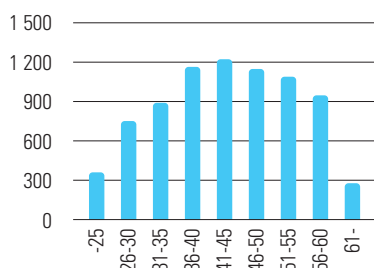
Training costs amounted to 1.4 percent of total salaries in 2007 whereas in 2006, they accounted for 1.1 percent. The Group provided 3.3 training days per employee, and the corresponding figure was 2.9 for 2006 and 5.0 for the preceding year.

## A uniform model the basis for development dialogues

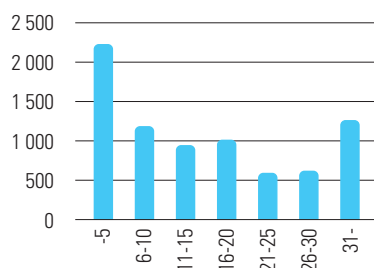
A uniform model was adopted throughout the Group as the basis for performance and development dialogues. In 2007, discussions on objectives and development took place with all clerical staff, who account for about third of all personnel. Our objective is for all Group employees to fall within the sphere of the dialogues in 2008.

A uniform model does not exclude taking innovative approaches. For instance, a manager at the Sheffield unit in Britain, which produces special strips, was open to new ideas. The manager rejected the traditional office environment and instead arranged for

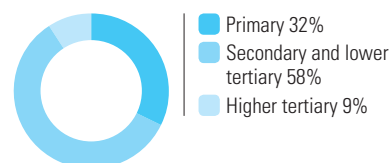
**PERSONNEL AGE PROFILE**  
(Permanent employees)



**PERSONNEL BY YEARS OF SERVICE**  
(Permanent employees)



**EDUCATIONAL BACKGROUND**





## From Terneuzen to Espoo

Outokumpu encourages its employees to participate in its job rotation scheme. Bart Rammelaere, 27, from the Netherlands, worked for four months at Outokumpu's headquarters in Espoo last spring.

"When the job rotation scheme was suggested to me, my first reaction was that it isn't for me", recounts **Bart Rammelaere**, who works as a human resources officer in Outokumpu's Terneuzen unit in Holland.

Now Bart is glad he made the decision to leave. His job rotation with Group human resources in Espoo was a terrific experience. "Job rotation broadens and expands your understanding of what is being done elsewhere. It can help create a consistent company culture. Job rotation is a valuable experience for your personal development as well."

Bart points out that management's attitudes play an important role in promoting job rotation. "I noticed how important it is that management supports this kind of activity. Thanks to them, I was given this opportunity."

During his job rotation Bart was able to work on many interesting projects. He participated in the development of the SAP tool for human resources, took part in the Stainless Pro International Graduate Program's recruitment process and worked as the second coordinator of Outokumpu's Group-wide orientation program.

Bart is pleased that he was able to gain new insight into Outokumpu as a whole, including areas outside the human resources department. He had productive meetings with the management of other departments and, during his stint, his eyes were opened to new working methods. "People at headquarters work on matters concerning the entire Group. Everything is on a much larger scale than in Terneuzen."

### WORKING ELSEWHERE IN THE GROUP

- The corporate responsibility dialogues in 2006 revealed that Outokumpu's personnel wished that job rotation would be carried out more efficiently
- The goal is to have 20 per cent of Outokumpu's key personnel participate in job rotation within the Group during 2008
- Jobs can be rotated between countries, units and business locations
- Employees can also take up another task temporarily in their own business location



The Dutchman Bart Rammelaere had fruitful discussions with the heads of different departments at the Espoo headquarters.

dialogues with her subordinates during walks. The exercise stimulated the discussions to a more fruitful level.

The new development dialogue model clarifies the link between work performance and reward for certain personnel groups, and it facilitates immediate feedback.

Incentive bonuses paid in 2007 amounted to 5.6 percent of total salaries. The corresponding figure for 2006 was 4.2 percent.

The SAP human resources management system, which will gradually be introduced in 2008, will assist with knowledge management and identifying the needs for personnel development. It will provide a basis for planning development functions at the level of the individual and the organization, and it will facilitate data collection and reporting.

### **Good leadership of primary importance**

Here at Outokumpu, we prioritize the importance of quality management because it plays a vital role in ensuring that the company's personnel are motivated and enthusiastic about their work. According to Outokumpu's leadership principles, a good manager makes sound decisions, achieves ambitious targets, creates a winning team, inspires to perform and builds trust and respect.

The year 2007 saw the continued implementation of the leadership principles and practices through the strategic leadership training program. The aim of the program is for participants to get to grips with Outokumpu's leadership principles and their internalization as well as with leadership skills. Important skills include the ability to prioritize, to think analytically and to resolve problems. The program also provides the tools for successfully applying the lessons in practice.

In February 2007, senior management was given the mission to carry forward the message of good leadership in accordance with a specific plan. The implementation of the plan was monitored through two questionnaires that were emailed to the participants.

The O'People personnel survey also mapped out how well the leadership principles were becoming entrenched. The main development area for Outokumpu's leaders according to the survey is increasing employees' motivation and level of commitment. Employees'

## Behind every motivated and enthusiastic employee is a good leader

motivation is in connection with career planning, competence development, recognition for a good job, quality of the performance and development discussions and leadership skills of the managers.

Middle management has its own development program that enhances managers' skills in strategic thinking, transformational leadership and their understanding of the business. Managers are also given the tools to strengthen their personal leadership skills. One training program comprising three modules was arranged in 2007, and it was attended by a total of 25 middle-level managers.

The annual management evaluation procedure expands knowledge about Outokumpu's leader resources and potential and contributes towards determining the needs for development.

### **Excellence programs call for huge investment in training**

Outokumpu's production and commercial excellence programs have involved substantial

investment in training. The training waves resulting from the launch of the programs in the latter half of 2005 continued in 2007.

Change agents, who take forward the objectives of the programs, are being trained for both programs. The training for the production excellence program includes theoretical studies, real project work and leadership training. Each training program lasts about one year. Students get to apply in practice the lessons they learnt during the theoretical module on projects that deal with reducing production losses and increasing efficiency in their own units. At the end of 2007, fifty-two employees were attending the program and 30 participants in all had completed the course. In the future, a questionnaire will be sent to those who have completed the training in order to determine how they have benefited from the course in their daily work.

### **Continuously updating competence – as fairly as possible for everyone**

A question about the equality of training opportunities came to light in the 2006 corporate responsibility dialogues that mapped out the views of personnel. Some of the respondents were concerned whether such matters as one's educational background or supervisor affected access to training: did the subordinate of an active supervisor or a highly educated employee have an added advantage?

Outokumpu's human resources management is aware of the problem. They are doing their utmost to safeguard the fair treatment of personnel with regard to training but it is difficult to monitor the degree to which the objectives are achieved with respect to each individual.

An eOrientation induction system based on multiform learning, which targets new and old employees, has been up and running at Outokumpu since 2005.

A Group-wide training program that supports professional development is available for university-educated people who have been working at Outokumpu for a few years. Employees who have the potential and desire to take on increasingly challenging tasks in the future are selected for the program. One of the program's advantages is that it gives participants the chance to build their own

## Good leaders “walk the talk”

Leif Rosén, Senior Vice President working in Degerfors and Avesta, knows how to use Outokumpu’s leadership principles and behaviors in everyday life.

At Outokumpu, everyone in a leading position should aim to make sound decisions, achieve ambitious goals, build trust and respect, create winning teams and provide people with the inspiration to perform.

These leadership principles have been familiar to **Leif Rosén** for quite a long time. “We have integrated them into leadership training and discussed the issues in depth,” he says.

Rosén points out that ‘walking the talk’ is very important for a leader. “It means that he or she must really follow the principles in daily life. Leaders must be trustworthy persons, who others are ready to follow. They should also be able to handle difficult and sensitive discussions.”

So what kind of leader does Rosén perceive himself to be? “I am a very open person.

I think discussing things with me is easy. I’m also very target orientated so I push our organization to reach the targets that have been set. And I’m concerned about people. I like building strong teams and creating harmony within those teams.” There are however areas he would like to improve. “From time to time I have to remind myself to provide more positive feedback - and to inform people more frequently about the strategic direction of our business.”

For Rosén, the most important of Outokumpu’s leadership principles is building trust and respect. “Everyone can be appointed a boss, but to be a leader you have to earn your position every single day. You won’t be building trust and respect if you yourself do not behave absolutely correctly in ethical and moral issues.”

### TOWARDS GOOD LEADERSHIP

- Leadership principles launched in March 2006
- Cascading the principles for top-management in 2006–2007
- Education for middle management began in 2007
- **Checkpoints:** two questionnaires sent to top management in 2007, a third will be sent in 2008
- **Measuring change:** O’People survey for employees at the end of 2007



Senior Vice President Leif Rosén: “To be a leader you have to earn your position every single day.”

contact networks within the Group. The program also includes group work on the theme of corporate responsibility. In 2007, 42 employees attended the program.

In addition to Group-wide training programs, different locations provide training to maintain professional skills. Units also arrange training for their staff.

### Diversity and equal rights

Outokumpu's ethical principles require that all people be treated equally. Discrimination and intolerance are not tolerated. The Group complies with international labor treaties, and condemns the use of forced and child labor.

A recommendation for a statutory equality plan for Outokumpu's business units in Finland was drawn up in co-operation with personnel representatives.

The wage and salary comparison that got underway at the units in Sweden in 2006 received the approval of the Swedish equality authority in 2007. The comparison is updated annually. The aim is to assure statutory equality in wages and salaries, where the amount of pay is in direct proportion to an employee's duties and competence and not to gender.

There are constant deliberations in search of more effective measures to achieve equality. For instance, participants in a teamwork discussion on corporate responsibility arranged in Sheffield observed that cultural diversity should feature more prominently. The teamwork discussion concluded that a training program would enhance understanding and respect among employees and would lead to a stronger one-company culture. The suggestion was made to apply this practice throughout the Group.

No information has been systematically collected concerning the proportion of women at different levels of the Group. Three members of Outokumpu's Board of Directors are women. Six of Outokumpu's 95 key personnel are women, and eight of the 142 local key personnel are women. Outokumpu's Board of Directors and Executive Committee are presented on pages 58–61 of the annual report.

### Supplier responsibility as a target

Outokumpu's business units use different processes for screening supplier responsibility.

The Avesta Works in Sweden requires that all the Swedish service providers supplying it have a collective agreement to secure decent working conditions. The Tornio Works in Finland tracks of qualified domestic suppliers of recycled carbon steel, auditing them every third year on the basis of safety, quality and environmental criteria. No violations of the requirements have been found in these audits.

On occasions, Outokumpu's business units have discontinued cooperation with a supplier if everyday quality control procedures reveal that the supplier in question does not have an environmental licence, has not paid taxes or other social payments or does not meet quality requirements, and is not willing to make the necessary corrections.

Currently, Outokumpu does not have a common process for screening human rights and contracts in force do not include criteria relating to human rights. However, our basic principle is to deal only with suppliers who comply with all applicable laws and regulations

in their business activities. Paying increased attention to responsible procurement is a future target for the Group. The Sustainable Supply Chain Management Tool project was launched in 2006. More about the project can be found on page 10 of this report.

### Occupational health and safety

Outokumpu is committed to providing its personnel with a healthy and safe working environment. The Group is also accountable for the safety of subcontractors and suppliers when they are working at Outokumpu's production plants. The basic principle is that they receive the same occupational safety training and induction as Outokumpu's own employees. All management committees and equivalent bodies throughout the Group start their meetings with a safety review.

Our employees have access to occupational health services. We arrange regular health checks for those employees who are exposed to health risks. Outokumpu provides its employees with rehabilitation and offers various sports activities in order to foster occupational well-being.

#### > OUTOKUMPU'S SAFETY PRINCIPLES

- Make it Zero – all injuries are preventable
- Management as well as each individual employee and contractor are accountable for safety
- Safe work practices are an essential part of the work skills and a condition of employment
- Safety training is continuous
- Safety audits are conducted regularly
- Incidents and near misses are investigated and reported without delay
- Corrective actions are properly taken
- Safety means good business, and well-being for our employees

### Accident prevention, risk awareness

The annual theme for 2005 was occupational safety at Outokumpu. That year, a target was set to reduce the accident rate to less than five per one million man-hours by 2009. The target set for 2007 was a maximum of 12 accidents per one million man-hours, and the actual rate was 11.2 accidents (17.0 in 2006). Sick leave days per million hours worked numbered 137. There were a total of 175 individual accidents during the review year. As in the previous year, there were no fatal accidents. In 2005, one employee died at the Nyby mill in Sweden. The figures include accidents suffered by Outokumpu's own employees as well as those suffered by subcontractor personnel. In 2006, the accident rate for the member companies of the International Iron and Steel Institute within the EU was 7.7 per million man-hours.

The Tornio cold rolling mill received the Outokumpu occupational safety award for 2007. It has systematically developed occupational safety training, risk assessment and the use of personal protective gear. The preventative new occupational safety culture has noticeably raised the level of safety in the

workplace. The accident rate at the cold rolling plant was 10.9 per million man-hours.

Compiling data on hazards and near misses is an essential aspect of raising safety awareness and risk prevention. Outokumpu employees are encouraged to report all the dangerous situations they confront during working hours. There were 3 478 reports in 2006 and 4 480 in 2007.

Tornio received the Safety Buoy award for 2007 for good safety development in terms of statistics as well as for good practices to enhance safety. The competition covered the entire area of the Occupational Safety and Health Inspectorate of Northern Finland.

### Information system bolsters occupational safety

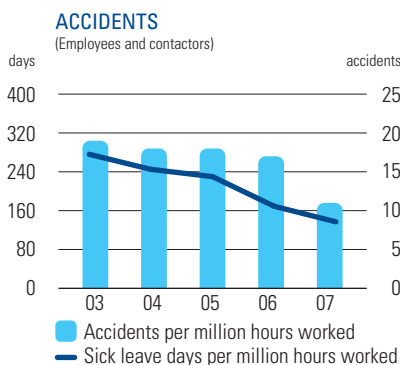
Work on developing a new occupational safety information system for the entire Group got underway in February 2007. The system is supplied by Sofor Oy and it is customized to correspond with the varied requirements of Outokumpu's production plants. The project group includes occupational safety experts from all of the business units. Alongside the definition work for the actual information system, it was also possible to create a new and hands-on basis for co-operation in occupational safety between the Group's various production plants. The system is being brought into production use at the beginning of 2008, and it can be used to generate and report in real-time comprehensive information concerning occupational safety that can be used as the grounds for decision-making.

### Staying healthy in the workplace

Outokumpu provides occupational health services at its operating locations in line with national legislation and local needs. The services are provided either by the company's own occupational health centers or by external service providers. Activities focus on improving the working environment. The health of employees is also monitored by various occupational health checks and fitness tests. The occupational health centers at some locations also provide routine medical services.

In 2007, an average of 6.2 percent of working time at the Group's production plants was

## The long-term target is zero accidents



lost due to sickness and accidents. A total of 4 occupational diseases were diagnosed during the year. Industrial hygiene measurements are carried out at production plants to monitor work-related exposures such as noise and dust. Issues relating to the work environment are also studied in joint research projects carried out in collaboration with universities and specialist institutions.

AIDS awareness at Outokumpu is handled as part of the healthy lifestyle counseling provided by occupational health staff. The HIV infection rate in the communities around the production sites has not given cause for more extensive campaigns.

### **Co-operation with local communities and educational establishments**

Outokumpu may be a global company but in numerous ways, it is also a major actor in several small and slightly larger communities. As a member of the local community, Outokumpu provides employment, engages in co-operation with universities and educational establishments, supports local activities and arranges open house events for local inhabitants.

Outokumpu also has a significant indirect impact on employment in several communities. A study conducted by the University of Oulu in the 2000s showed that the impacts of Tornio site and Kemi mine on employment in Northern Finland and Northern Sweden were 3.5 times compared with in-company jobs. In essence, this means that while Outokumpu employs around 2 300 people in Tornio and Kemi, Outokumpu actually sustains around 8 000 jobs in the area. The Tornio plants were expanded in 2000–2003, and the social impacts of the extensions were mapped out in a follow-up report conducted in 2005. The extensions to the plant generated more than 300 jobs. An assessment carried out by the City of Tornio showed that the indirect employment generated for the local community and the surrounding areas (580–830 jobs in all) was on a scale of 1.8–2.6 times that of permanent jobs at the steel plant.

Outokumpu donated in charity and sponsored events, sports and culture, in line with its sponsorship and donation policy, in its

main locations in Avesta, Tornio, Sheffield and Espoo to a total of 390 000 euros in 2007. In sports the focus is on juniors and the disabled.

Outokumpu is a corporate partner of the Finnish Millennium Technology Prize, the largest technology award in the world. The prize is awarded for a technological innovation that significantly improves the quality of life. The award takes into consideration all fields of technology, and it aims to steer the course of technological development in a more humane direction. The one-million-euro award is presented every other year. The prize will next be awarded in 2008.

More in-depth information about Outokumpu's dialogue with its various stakeholders appears on pages 10–13 of the report.

### **Diverse co-operation with schools, colleges and universities**

Outokumpu values its co-operation with universities. As in previous years, we continued our activities as a corporate partner to the Helsinki School of Economics and participation in the Stratos International Business program, which is run by the Helsinki University of Technology. In 2007, we took part in three debates on the theme of corporate responsibility.

University students from various disciplines completed theses for Outokumpu units. In 2007, a total of ten theses were completed for the Tornio research center and four for the Avesta research center.

In September 2007, Outokumpu announced it was investing 550 million euros in Avesta. In the light of this decision, work has got underway to plan customized training in order to safeguard the availability of competent personnel in the future.

Besides our activities with universities and vocational education establishments, we also collaborate with comprehensive and upper secondary schools. Such collaboration enables us to heighten the awareness of children and young people about the steel industry and to encourage them to train for the sector. Outokumpu has adopted schools in several locations where it operates.

## **Research focused on the utilization of slag**

### **Close involvement with research**

Collaboration with educational establishments is not the only way that Outokumpu supports the expansion of knowledge and skills in steel and technology. The company continues to play a role in the Triple Steelix project in the Bergslagen district of Sweden. The project supports new inventions and production ideas relating to stainless steel.

Outokumpu invested 18 million euros in research and development in 2007. The corresponding amount for 2006 was 17 million euros. Outokumpu conducts research independently as well as in collaboration with its customers, research institutes and universities. Our objective is to develop new, more durable and lightweight steel grades and increasingly environmentally friendly stainless steel production methods. We also study innovative applications for stainless steel. Environmental friendliness constitutes a vital aspect of process development. The Avesta and Tornio research centers have collaborated with universities to develop waste utilization. One of the key research areas in 2007 was the utilization of slag. Three patent applications for new inventions have been submitted. The inventions were associated with rod and strip production and sheet and strip processing.

## Product safety and product liability

Stainless steel is a versatile and completely recyclable material. It is an ideal choice for the foodstuffs industry because it does not give off any taste or odor and it is an extremely hygienic material. Heavy industry uses tough stainless steel to transport and store oil, gases and other hazardous materials whereas the automotive industry uses it for catalyzers and exhaust pipes. In most homes, stainless steel is found in cutlery, kettles and household appliances.

For decades, stainless steel has made it easier to prepare, handle and transport food. The metal concentrations of foods cooked in stainless steel receptacles have been tested and found to be negligible when compared with the levels that occur naturally in foodstuffs.

The properties of stainless steel differ from those of the individual metals from which it is made. For instance, the most common stainless steel grades that contain nickel do not cause allergic reactions, even in individuals who have been diagnosed with a nickel allergy.

### Guidelines for safe downstream processing

The industry's marketing organizations, such as Euro Inox, issue reports on the health and environmental impacts associated with the use

of stainless steel. Information is also available from the product liability bulletins of international nickel, chromium and molybdenum organizations, and Outokumpu contributes towards drafting these communiqués.

Outokumpu supplies its customers with product liability descriptions for its own products. These descriptions provide information on the environmental and health impacts of the products.

Although stainless steel is safe in its final form, there may be certain risks involved in its downstream processing that need to be taken into consideration. For instance, inhaling welding gases can be harmful. Therefore, the use of the correct protective gear and compliance with safety guidelines are of primary importance. The safety guidelines are available in the Material Safety Data Sheet for Outokumpu stainless steel.

All Outokumpu products undergo testing in the company's own laboratories in order to ensure that they meet the strictly defined technical criteria.

All units have a quality management system in place. The ISO 9001:2000 management standard constitutes the minimum requirement for the Group's quality policy. Ninety-seven percent of production plant and service center quality management systems have been given certification.

### > THE OBJECTIVE IS THAT IN 2008

- 20 percent of key personnel will participate in job rotation within the Group
- Performance and development dialogues will take place with all Outokumpu employees in line with a uniform model

### > SOCIAL RESPONSIBILITY TARGETS FOR RESPONSIBILITY THEME YEAR 2008

- To decrease number of accidents by one third
- To improve well-being at work through concrete actions (e.g. to combat workload, uncertainty related stress, unclear responsibilities, discrimination)

## Independent assurance report

**A**t the request of Outokumpu Oyj we have assured the economic, social and environmental information of the Outokumpu and the environment 2007 report (further The Report).

The Report has been prepared in accordance with the Global Reporting Initiative G3 guideline. The Report, including the preparation and the data presented, is the responsibility of the management of Outokumpu.

### Scope

Our engagement, which is of limited level of assurance, has covered assurance of the data concerning year 2007 in The Report.

We conducted our engagement in accordance with the assurance engagements standard (ISAE 3000) "Assurance Engagements other than Audits or Reviews of Historical Financial Information".

The inherent limitations of completeness and comparability of the data and statements are set out in The Report.

### Work undertaken

We have undertaken the following procedures:

- discussions with two members of the Group Executive Committee and other persons responsible for preparing The Report;
- a review of background information regarding the data presented;
- a review of compiling and reporting the data presented in The Report;
- a review of the systems for gathering and processing data at site level in Tornio and Avesta.

Our work was planned and performed in a way that we have gathered necessary evidence for the basis of our conclusion.

### Conclusion

Based on our engagement undertaken, nothing has come to our attention that causes us to believe that the information presented in The Report would not be appropriate.

Helsinki, 12 February 2008  
KPMG OY AB

Mauri Palvi  
Authorized Public Accountant

Olli Miettinen  
Advisor, Sustainability Services



# Comparison with Global Reporting Initiative guidelines

Global Reporting Initiative (GRI) is an international initiative of the United Nations, which aims to apply to reporting on corporate responsibility the same widely accepted operating model as already applies to financial reporting. Over thousand companies worldwide report on the economic, environmental and social aspects of their operations in line with the indicators given in the GRI guidelines on the reporting of sustainable development. Outokumpu follows the GRI G3 guidelines set in 2006.

GRI contents	Responsibility report, page	More information/ annual report, page
Vision and strategy	2	
Profile	1, 5, 12, 18, 51	2–3, front inside cover, 20–28, 46
Report profile	back cover, 1	
Report scope and boundary	1	
Governance, commitments and engagement	4, 6–9, 13, 20, 44, 46	44–45, 52–57
Stakeholder engagement	10–13, 44, 46, 52	
<b>Economic performance indicators</b>		
Value added to stakeholders	14, 16, 18, 19, 50	46–51
Impact of climate change	28, 30	
Market presence	18	
Core indicator EC7: data not systematically collected; larger sites have their own practices. Additional indicator EC5 is not relevant, majority of workforce falls within scope of collective agreements.		
<b>Environmental performance indicators</b>		
Materials	20, 23–25	
Energy – climate change	22–26, 28, 30	3, 39
Water	26, 32, 33, 36, 38	
Biodiversity	33	
Emissions, effluents, and waste	22–24, 30, 33, 34, 36, 38	42–43
Significant spills	33, 34	42
Products and services	53	
Compliance	27, 33, 34, front cover	42
Transport	31, 40, 41	
Environmental expenditure and investments	40	42
Core indicators have all been reported, from additional indicators we report those from which we have collected data from the whole Group; we are developing our reporting system.		
<b>Social performance indicators</b>		
Employment	6, 42, 44	40–41
Labour/management relations	12, 44, 46	40
Occupational health and safety	6, 50–53	43
Training and educations	9, 46–48	
Diversity and equal opportunity	6, 48, 50	
Human rights	6, 48, 50	
Investment and procurement practices	50	
Non-discriminations	6, 42	
Freedom of association and collective bargaining	6, 42	
Forced and compulsory labor	6, 42	
Community	6, 11, 13, 18, 19, 50, 52	
Corruption	6	
Public policy	13	
Anti-competitive behavior	6, 8, 9	
Customer health and safety	53	
Product and service labeling	53	38
Core indicators LA2, LA14, HR4, HR5, HR6 and HR7: no systematic data collection from the whole Group; reporting system under development. Indicators PR5, PR6 and LA6-8 are relevant, and data collected has been reported. Indicators PR2, PR4 and PR7-9 as well as LA9 are not so relevant to our business.		

Report applications level of GRI G3 guidelines (A/B/C+)

Outokumpu's own and third party estimate is C+

More information on our internet site:  
[www.outokumpu.com](http://www.outokumpu.com)

### **BAT (Best Available Techniques)**

The technology that takes into consideration the technologically and economically most efficient and highly developed solutions.

### **Life cycle**

The stages of a product or service, including the procurement and transport of raw materials and the final processing of wastes that arise, recycling or events connected with winding up the service.

### **Energy-efficiency**

Energy-efficiency means that the product is manufactured with the smallest possible energy consumption. Energy-efficiency is also referred to when speaking about products: products that consume a low amount of energy are energy-efficient.

### **Ferrochrome**

An important alloying element in stainless steel: it contains chromium, iron, carbon and silicon.

### **Granule**

A granular (under 5 mm in diameter), vitreous product that is made from slag, for example, by means of rapid water cooling. Granules are used, say, as a material in earthwork constructing.

### **Fugitive emissions**

Emissions, effluents or discharges into the soil resulting from a non-intended discharge point.

### **Recycled raw material**

The reuse of products that have been removed from a process (e.g. metal, paper and glass) as a raw material or principal material.

### **Slag**

A by-product arising when metals are melted. The mass consists of flux and impurities. Being lighter, slag rises to the surface of the molten metal, forming a layer of slag that is then removed. Slag serves a number of purposes such as removing impurities, protecting steel from oxidization, and it can be turned into products that find reclaimed uses in various applications.

### **Slag former**

A substance that forms slag, for example, calcium oxide, quartz or magnesium oxide.

### **Hot rolling mill, cold rolling mill**

A plant where steel slabs go into manufacturing steel products by shaping them with heavy rollers. In the shaping processes, the slab is given the desired dimensions and form.

### **Neutralization**

A measure by means of which a neutral solution is produced from acidic and alkaline solutions. Neutralization enables a material going to a landfill or into the sewage system to be rendered safe for the environment.

### **Specific emission**

Emissions per ton of molten metal.

### **Pickling process**

A method whereby an oxide layer or other surface material (such as rust) is removed from the surface of the metal by immersing it in a solution of appropriate chemicals (e.g. dilute acid) that affect the surface layer but leave the metal itself virtually unchanged.

### **Regeneration plant**

At a regeneration plant, spent pickling acids, for example, are reclaimed so that they can be recycled back into the process.

### **Ore dressing, concentrate, tailings**

The valueless minerals contained in mined rock are separated from the valuable minerals in an ore dressing process. The separation is performed on finely ground rock, for example, by means of a foaming process with chemicals or by gravitation. The fraction containing valuable minerals is called the concentrate, and it goes on to further processing. The valueless minerals fraction is called tailings, which are stored in a tailings basin in the mining area or used as fill in the mine.

### **Certified environmental system**

A certified environmental system is verified by an external body to show that the site has undertaken a commitment to developing and managing environmental matters and achieving related targets. It enables the organiza-

tion to reach the level of environmental protection which it has set for itself, including control and monitoring. For example, the ISO 14001 standard defines the requirements of an environmental system.

### **By-products**

A product arising in conjunction with the process of manufacturing the main product. For example, in the manufacture of stainless steel (the main product), nowadays the by-product can be used to manufacture material for uses such as soil conditioning and road building (slag granules). In this way, the volume of waste that arises can be reduced and, in the best case, there is no waste at all.

### **Seepage**

Water or wastewater that leaches into the environment (mainly into a watercourse) or the groundwater from a basin, landfill or piling area through dams or the ground.

### **Steel slab**

A general term (cf. billet, bloom) for a piece of steel that is manufactured by casting, rolling, forging or in some other manner and goes on to further processing.

### **Smelting plant (melt shop)**

In a smelting plant (melt shop) the dressed ore is melted down with additives to make hot metal and slag.

### **Environmental efficiency**

Environmental efficiency refers to addressing environmental considerations (such as air protection, water protection, energy consumption). The principle is to obtain "more from less". This can thus involve factors such as more efficient use of resources, maximizing the use of renewable natural resources, minimizing energy consumption and increasing the recyclability of products.

### **Environmental impact**

An environmental change caused by an organization, products, services or some other human activity. The change can be either detrimental or beneficial.

A more comprehensive glossary is available on our website at [www.outokumpu.com](http://www.outokumpu.com).

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Your opinion matters in developing  
reporting systems.  
Please find our feedback form on our  
website.

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Outokumpu

## > THE WORLD'S STEEL

Most of the steel in the world is carbon steel. More than 500 million tons of recycled steel is used in annual global steel production, which now totals some 1 343 million tons. Annual production of stainless steel totals about 27.5 million tons, and consumption is growing at an annual rate of five to six percent. Stainless steel now coming onto the market contains an average of 60 percent recycled steel (both carbon and stainless steels). Using recycled

material in combination with ore when manufacturing stainless steel saves natural resources considerably and also reduces the amount of energy used, since producing metal from ore is a very energy-intensive process. Stainless steel is especially easy to recycle since it is not coated with paint, plastics, zinc or other coatings, which create harmful emissions when steel scrap is re-melted.

# OUTO KUMPU

Outokumpu is a global leader in stainless steel. Our vision is to be the undisputed number one in stainless, with success based on operational excellence. Customers in a wide range of industries use our stainless steel and services worldwide. Being fully recyclable, maintenance-free, as well as very strong and durable material, stainless steel is one of the key building blocks for sustainable future.

What makes Outokumpu special is total customer focus – all the way, from R&D to delivery. You have the idea. We offer the world's best stainless steel, technical know-how and support. We activate your ideas. [www.outokumpu.com](http://www.outokumpu.com).