

Summary of ABB's Group Sustainability Report 2001



ABB

ABB at a glance

ABB is a global leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impacts.

Headquartered in Switzerland, the company employs 150,000 people in more than 100 countries.

ABB fulfills its commitment to sustainable development by supplying eco-efficient products, sharing its latest technologies with emerging markets, contributing to common efforts and continuously improving its own sustainability performance.



Highlights of 2001

- The year ended with a net loss, to which charges for restructuring costs and asbestos claims contributed. However, order intake was stable, revenues increased by three percent and cash flow from operations more than doubled.
- A comprehensive program to simplify the company, reduce costs and raise productivity was initiated. This included, among other things, sharply reducing the number of operating companies and cutting the workforce.
- With Bulgaria and Vietnam its newest members, ABB's environmental management program now includes more than 50 countries. ISO 14001 is implemented in 98 percent of manufacturing and service sites.
- The publication of Environmental Product Declarations accelerated. By year-end, 43 declarations covered ABB's major product lines. A further 20 were in preparation.
- Seven winners shared the \$30,000 prize money in ABB's new biennial Environmental Awards for individual initiatives to improve environmental performance.
- ABB published its first social policy and held roundtable discussions with stakeholders in 34 countries about its content and implementation.

What is sustainability?

The use of the word sustainability in this report is based on the classic definition: "Humanity has the ability to make development sustainable – to meet the needs of the present without compromising the ability of future generations to meet their own needs." (From United Nations World Commission on Environment and Development, 1987)

Sustainable development combines economic growth and increased prosperity with preservation of the environment and quality of life for people around the world. Sustainability is often said to have three interdependent dimensions: environmental, social and economic.

Triple bottom line

This year's Sustainability Report has been inspired by the Sustainability Reporting Guidelines, first published in 2000 by the Global Reporting Initiative – an international multi-stakeholder group. The guidelines are based on a "triple bottom line" reporting concept – covering environmental, social and economic performance.

The complete 2001 Sustainability Report can be ordered in English, German or Swedish from ABB Corporate Communications at the address printed on the back of this publication, or download the report from our website.

 www.abb.com



- Guided by corporate staff, 70 sustainability controllers from ABB companies around the world developed a common model for business plans and social policy implementation.
- A new program in ABB's Research and Development organization will investigate future sustainability challenges for ABB and its customers.
- ABB completed the three-year China Energy Technology Program, undertaken in conjunction with the Alliance for Global Sustainability.
- Det Norske Veritas, an independent foundation, reviewed ABB's sustainability progress assessment. The assessors found progress in most areas but also suggested several improvements.
- For the third year running, ABB topped its industry group in the Dow-Jones Sustainability Index. ABB also scored well in other similar indexes.
- ABB's CEO signed a corporate citizenship statement, drawn up by chief executives at the World Economic Forum annual meeting in New York.

ABB's pursuit of sustainability

Adapting to a changing environment

ABB has undergone a profound transformation. In 2001, we reorganized ourselves along customer lines, making our company simpler to do business with. But one fundamental aspect of our business has not changed – our commitment to sustainability.

Our four key goals:

- To improve our economic performance
- To extend our environmental management system to all employees and all activities
- To proceed with the full-scale worldwide implementation of our social policy
- To align our core areas of power and automation technologies with common efforts to help reduce poverty throughout the world

At ABB, we are proud to be among the leaders in sustainability. This means not only implementing best practices but also taking part in the debate about how to achieve sustainability. We support global efforts through dialogues with stakeholders and participation in global business forums.

Because we believe in the reality of climate change, we see greenhouse-gas abatement as the biggest environmental challenge facing the world today. We support the aims of the Kyoto Protocol and the “e-mission 55” initiative, which calls on governments to ratify the Protocol without further delay.



World leaders, business heads and non-governmental organizations that produced the United Nations Declaration on Environment and Development in Rio de Janeiro a decade ago will meet again in 2002 – this time in Johannesburg.

The agenda includes three of the most controversial challenges to sustainability: globalization, climate change and the widening poverty gap. ABB will actively participate in the discussions.

Two years ago we divested our large-scale power generation business and set out our vision of the future of the electricity supply business. A shift to sustainable energy sources would create demand for new, small-scale, distributed power generation technologies.

ABB is already a leading supplier of many of these new technologies, including cogeneration systems and wind-powered generators. We are also strong in power electronics and controls – key enabling technologies for renewable and distributed power. We are developing converters and control systems for microturbines, fuel cells and photovoltaic applications.

Industrial IT, our new integrated systems architecture for industries and utilities, brings many benefits. Remote control and automation cut costs, make factory floors safer and reduce consumption of energy and raw materials, rendering finished products more eco-efficient.

In most product lines, ABB now offers sustainable solutions. But this is not enough – customers have to buy them. It is pointless for them to buy sustainable products if the extra cost makes their businesses uncompetitive. Sustainability, therefore, requires the involvement of more parties than just supplier and buyer. Governments, for instance, can create fiscal incentives. Nongovernmental organizations are increasingly mobilizing public opinion against unsustainable practices. And many consumers choose to buy sustainable products, even if they cost a little more.

In 2001, we began an extensive transformation to make our organization more responsive to customers' needs. A business downturn and improved internal processes caused us to reduce the number of employees. However, our sustainability function, with some 600 people, was unaffected.

A significant development was the launch of our new social policy, followed by roundtable discussions with stakeholders in 34 countries to gather views on the policy and suggestions on how to implement it and measure performance.

We also started a program called "Access to Electricity." Two billion of the world's poorest people have no electricity and no access to the benefits, such as clean water and basic sanitation, that electricity can help provide. Our researchers are examining how ABB's small-scale power generation technologies might fill this gap. This will be a long-term commitment, working with various partners to help the international community make real progress in the fight against poverty.

In 2002, we intend to integrate sustainability into all levels of our organization: our strategic plans, our management systems and our operating processes. To spearhead this effort, we have brought in Christian Kornevall, who has extensive and diverse experience in the sustainability area. As head of our Group Function – Sustainability Affairs, he succeeds Jan Strömblad, who retired in 2001.

We believe that the global business climate is changing. ABB has already shown that a commitment to sustainability can be good for business. Soon, commitment to sustainability will be a fundamental requirement for all businesses. ABB is well prepared for this.

Outlook for 2002 and 2003

Putting our special skills and knowledge to work

Our priorities

- To integrate sustainability into all management systems
- To raise awareness and get the commitment of every employee
- To extend our environmental management system to nonmanufacturing activities
- To implement our social policy worldwide with guidelines and performance indicators
- To help combat poverty through our "Access to Electricity" program

Vision and outlook

Sustainability is about securing our common future. Customers, suppliers – in fact, all our stakeholders – must agree on the value of sustainability. This is the true challenge before us. Gradually, subtly, every company, government, stakeholder and individual must come to agree that sustainable policies are the only acceptable policies.

Improving our sustainability performance will also improve our economic performance. Many environmental improvement projects save money as well as the environment. More and more customers want eco-efficient products and are prepared to pay for them.

What we will do in 2002 and 2003

These are some of the actions we will take to improve our sustainability performance:

- We will work with selected business areas to integrate sustainability with strategic planning and management systems.
- A new internal awareness campaign will demonstrate that sustainability is everyone's business.

- Working with key customers, we will analyze supply chains to map out the environmental, social and economic impacts of each industry segment from primary production to disposal of products.
- We will look into our transportation of goods and people around the world with a view to cutting costs and minimizing environmental impact. Can we reduce the impact by improving logistics and making better use of telecommunications?
- Almost all ABB's manufacturing and service sites now have environmental management systems implemented to the ISO 14001 standard. We will concentrate on the last few sites to reach 100 percent implementation.
- We will extend our environmental management systems to cover non-manufacturing activities, such as research and development, engineering, sales and administrative offices.
- We will work with our supply management teams to tighten supplier selection criteria and ensure that key suppliers match our own environmental and social performance standards.
- We will continue to eliminate unwanted and hazardous materials in our products and increase the use of recycled materials.
- Personnel who have direct contact with customers will learn how to use sustainability arguments to communicate the benefits of our products, systems and projects.
- We will develop guidelines for the worldwide implementation of our social policy, along with indicators to measure performance. A steering group will monitor the implementation.
- New guidelines for occupational health and safety, including a "zero-target" policy for serious and fatal incidents, will be implemented at all ABB sites.
- The program of stakeholder dialogues, initiated with the launch of the social policy in 2001, will be continued and expanded to cover other topics.

Common efforts

Working together to address global problems

Common efforts

Greenhouse-gas emissions threaten climate change. One-third of the world's people have no access to basic services. Industrialization in developing countries often means poor working conditions and new environmental threats. ABB participates in many global and regional collaborations to address such problems. The following are just a few examples.

Access to electricity

Lack of basic infrastructure – for which electricity is vital – keeps around two billion people trapped in poverty. ABB's technologies and competencies can help to ease this poverty. Our project started with basic studies in 2001. We are now defining objectives together with prospective partners and will then sign formal agreements. We will select sites for pilot projects in 2003 and start work on the ground. The next stage will combine ABB's resources with those of development agencies and non-governmental organizations.

Sustainability and global change

This new corporate R&D program focuses on sustainability issues affecting ABB's business. It works closely with our business units and external partners, including universities, scientific institutions, nongovernmental partners and other companies. It will, among other things, develop analytical methods and support tools for environmental impact assessments, examine the effects of sustainability issues on our business and collaborate with external organizations that research sustainability issues.

Clean energy and the protection of biodiversity

A three-year cooperation agreement with the World Wide Fund for Nature (WWF) recognizes both parties' common interests: ABB wants to promote its small-scale, distributed and clean energy solutions, and the WWF wants to protect biodiversity through new, less polluting energy policies. ABB will provide funding and other resources. The first joint projects have already started.

The Global Compact

ABB was one of the 50 companies supporting the launch of the United Nations Global Compact in 2000. The Compact will help people understand the role industry can play in sustainable development. We are identifying projects that meet the Global Compact criteria. In South Africa, for example, ABB participates in the "Conquest for Life" project, which works to discourage young people from criminal behavior. In 2002, ABB is starting a project under the South African government's "HIV/AIDS Partnership" program.

WEC greenhouse-gas reduction program

The World Energy Council Pilot Program on Greenhouse Gas Emissions Reductions began work, under ABB's leadership, in February 1999. It reached its initial goal, to demonstrate a one-billion-ton annual reduction, in April 2001 – four years ahead of schedule. The goal has been revised to two billion tons annually by 2005, though even this now seems modest. A database of nearly 900 emission-reduction projects in 100 countries is accessible on the World Wide Web.

Sustainability performance in 2001

At ABB, we see sustainable development as our commitment to integrate economic, environmental and social objectives into our strategic planning, as well as into our daily business decisions. We believe sustainable development to be a competitive advantage for us.

We set annual sustainability goals for our operations and measure our progress against those goals. Then we report our progress – in printed form and on our website www.abb.com. This ensures transparency, allowing our stakeholders to evaluate our performance and providing other businesses with data for comparison.

This is the eighth year we have published a formal report. The first six reports covered environmental performance only. The 2000 report included social performance as well. The 2001 report is the first to be inspired by the “triple bottom line” framework set forth by the Global Reporting Initiative.

Environmental performance

This year's Sustainability Report covers 48 environmental performance indicators, up from 36 last year. Selected indicators are shown below.

We have extended the base for reporting beyond manufacturing and service activities. This report covers almost 80 percent of all ABB employees, and we aim to cover 100 percent in coming years. We are now establishing formal reporting procedures within all parts of the organization.

Because the scope for reporting has changed, this year's figures cannot be directly compared with those for previous years.

	1999	2000	2001
Total energy use (GWh)	3,175	2,413	2,373
Energy use per employee (MWh)	22	21	20
Greenhouse-gas emissions (kilotons CO ₂ equivalent)	1,671	1,349	1,411
Implementation of environmental management systems (percent of manufacturing and construction sites)	97	97	98
Number of Environmental Product Declarations available	4	30	>50



Economic performance

ABB is on track in terms of its operations and financing, after a demanding year in 2001 – a year that ended with a net loss, to which charges for restructuring costs and asbestos claims contributed. These claims stem from the use of asbestos as insulation material by a former U.S. subsidiary, which had abandoned the use well before ABB acquired it. At the end of 2001, we took a charge of \$470 million, increasing our provisions to \$940 million to cover expected claims.

A program to simplify the organization, cut costs and raise productivity included, among other things, reducing the number of operating companies and cutting the workforce. Results were evident by the end of the year. In the last quarter, we reduced net debt by \$2 billion. Productivity, in terms of revenue per employee, increased slightly in 2001. Order intake was stable, and revenues increased by three percent over the year. Our cash flow from operations more than doubled.

	1999	2000	2001
Total revenues (million \$)	24,356	22,967	23,726
Gross margin (percent)	24.2	25.0	21.1
Earnings before interest and taxes (EBIT) (million \$)	1,222	1,385	279
Dividend per share (CHF)	0.75	0.75	0

Access to electricity

Electricity is essential for social and economic development. Yet almost one-third of the world's people have no electricity supply. ABB's "Access to Electricity" program will show how to solve the problem, using small-scale sustainable solutions.

Social performance

Last year, we reported social performance for the first time with just three indicators. This year's report covers many more, using the recommendations of the Global Reporting Initiative. Selected indicators are shown below:

	1999	2000	2001
Working hours lost due to illness and accidents	n.a.	326,477	589,991
Working hours lost per employee	n.a.	3.08	4.03

Ratio of lowest wage to national legal minimum, spread of ratio in percent (data available for 2001 only):

Europe	100 to 500
North America	100 to 153
South America	113 to 141
Middle East and Africa	100 to 500
Asia	100 to 200

Percentage of women in senior executive and senior and middle management ranks, spread in percent (data available for 2001 only).

Europe	1 to 30
North America	1 to 8
South America	5 to 20
Middle East and Africa	1 to 15
Asia	2 to 21

Number of stakeholder dialogues	45
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Stakeholder dialogue

How do you give a global corporation a social conscience?

In 2001, ABB published its social policy. The first of its 13 principles commits us to open dialogue with stakeholders. It was therefore fitting to use stakeholder dialogue to evaluate the policy.

ABB managers and workers met stakeholders in 34 countries on five continents. Countries were chosen to represent a diverse range of cultures, geography and development. Stakeholders included national and international nongovernmental organizations, trade unions, central and local governments, academics, the media, religious groups and business partners. Most dialogues were held as roundtable discussions with an independent facilitator.

Two main areas were discussed:

1. Does the social policy cover all the issues it should? What should be added, and which issues are most important?
2. How do we put the social policy into practice? How can we measure compliance and progress?

After the first round of dialogue, countries could proceed to a second round, in which they were asked to identify the principles that should have the highest priority and those where ABB was most vulnerable to criticism. By the end of 2001, 11 countries had progressed to this second stage.

In 30 out of 34 countries, the scope of the policy was judged right. In four countries, suggestions for expanding it were made. All 13 principles drew comments. The most discussed principle was community involvement, followed by health and safety and equality of opportunity. Working hours and compensation drew the least comments.

In the second round of dialogue, the principle of greatest concern was the social performance of ABB's suppliers, rather than ABB itself. This was followed by health and safety and equality of opportunity – areas that ABB has already prioritized for closer attention.

Almost all the dialogues revealed the need for clearly defined and planned implementation. The social policy principles need to be integrated into organizational structures and business processes. Measurement of performance was a frequently raised concern. Quantifiable indicators must be defined to gauge year-to-year improvement.

Reporting should be by country to be meaningful; the diversity of the countries in which ABB operates would make it difficult to consolidate data into global indicators. However, only in two countries was it considered necessary to adapt the policy to local conditions.

The comments on the social policy will serve as the basis for a second version of the policy, planned for 2003. Several projects are now being initiated to develop implementation guidelines and indicators to measure continuous improvement.

Stakeholder consultation will be completed in all of the 43 countries initially invited to participate. In 2002, we will also begin dialogues about ABB's environmental policy and our "common efforts" participation. Ongoing, regular stakeholder dialogue will be increasingly important for achieving sustainability.



Another form of stakeholder dialogue, this time in Austria, where the ABB employees at the venue were invited to witness the dialogue and participate in the discussions.

The role of eco-efficient products

Getting more from less

Much of ABB's research and development focuses on new technologies that reduce environmental impacts – particularly those that contribute to curbing CO₂ emissions. However, making products that deliver more from less, with reduced environmental impact, is not enough. The products must also offer high economic performance over their complete life cycles. Only if they save time, labor and capital will they replace traditional, less eco-efficient products.

Each working day, ABB manufactures nearly a million products, ranging from simple switches to sophisticated industrial robots. The greatest environmental impact – often 99 percent or more – usually occurs from energy consumption during the useful life of the product. Therefore, continuously increasing the electrical efficiency of our products – delivering more to society from each unit of energy – is a principal aim for ABB.

Some recent examples:

- Wind power is increasingly competitive with conventional power. ABB is by far the world's largest supplier of components for wind power technology.
- Turbec, a company set up by ABB and Volvo, is a world leader in microturbine technology. Fueled by natural gas, microturbines are ideal for supplying local heat and electricity needs in areas not connected to power grids.
- ABB's Motorformer, the world's first high-voltage electric motor, connects directly to the grid, eliminating the need for transformers and other ancillary components. This has both economic and environmental advantages. Replacing a conventional 20MW motor with a Motorformer in continuous operation for 20 years on a European Electricity Mix will reduce CO₂ emissions by approximately 7,500 tons.
- ABB's variable-speed drives match motor speeds to process requirements – in some cases cutting electricity consumption by as much as 70 percent, with corresponding reductions in CO₂ emissions.

Continuous improvement

Thousands of steps in the right direction

At any given moment, there are up to 2,000 ongoing improvement projects at ABB. The impact of each project may be small, but together, they have a huge effect on ABB's sustainability performance.

ABB applies ISO 14001 environmental management systems (EMSs) throughout its operations, with systems now in place at 98 percent of manufacturing and service sites. But this does not mean that there is no further room for improvement. Much still remains to be done – and it must be done through many small projects, in a relentless process of continuous improvement.

Each site's EMS is adapted to that site's specific activities and environmental problems. Overall corporate objectives are common to all. Beyond that, local environmental managers are expected to come up with creative solutions to solve their own special problems.

ABB's employees have seized this opportunity with enthusiasm. Since 1993, when we put our first EMS into effect, we have cut our use of solvents by 35 percent. Our output of hazardous waste has declined by 35 percent. The use of "restricted" materials and substances has been reduced substantially. And energy consumption per employee continues to decline year by year.

Environmental benefits often bring economic benefits too. More than 40 percent of the environmental projects have saved money – usually by cutting waste, using less energy or reducing transportation costs.

Sustainability policies and organization

Our goal is to continuously improve our sustainability performance and to take initiatives that improve quality of life in the communities and countries where we operate. Several documents inspire ABB employees to live and communicate our commitment to sustainability. These documents are also publicly available in several languages.

Mission and values

ABB's organizational vision is set out in the document "ABB's Mission and Values," first published when ABB was created in 1988 and now in its third revision. New employees receive an introductory course, and all employees attend regular refresher courses.

Social policy

Published in February 2001, the policy draws on four sources: the United Nations Universal Declaration of Human Rights, the International Labor Organization's Fundamental Principles on Rights at Work, the OECD Guidelines for Multinational Enterprises and the Social Accountability 8000 (SA 8000), a standard for the protection of workers' rights developed by the Council on Economic Priorities Accreditation Agency.

Environmental policy

ABB is a signatory to the International Chamber of Commerce Business Charter for Sustainable Development and, in 1992, adopted the 16 principles of the Charter as its group-wide environmental policy.

Business ethics

Our policy on business ethics is incorporated in our Mission and Values statement. It is also incorporated in ABB's Business Ethics Standards. We subscribe to the International Chamber of Commerce Rules of Conduct, 1999 revised edition, and the OECD Convention from 1997.

Sustainability Affairs organization

The organization comprises some 600 people in more than 50 countries. Not all work full-time on sustainability activities – many have additional, often related, roles.

Sustainability Advisory Board

Founded in 1992 and chaired by ABB's CEO, this panel of independent experts offers objective advice on ABB's sustainability management program.

Group Function – Sustainability Affairs

Reporting directly to the CEO, the staff runs ABB's sustainability management program and training programs to increase social and environmental awareness and proficiency.

Business area sustainability controllers

The tasks of the 23 controllers include the development of environmental product declarations; implementation of environmental and social goals and programs; education and training; and review of environmental and social performance.

Country sustainability controllers

Nearly 50 controllers are responsible for establishing and communicating ABB's social and environmental policies, programs and procedures to all facilities within their countries. They also commission independent social and environmental audits and prepare performance reports.

Environmental specialists

In some countries, environmental specialists work alongside the country sustainability controllers.

Local sustainability officers

Some 500 officers, located at ABB facilities, are responsible for local environmental management programs. On many sites, they also implement local occupational health and safety systems, as required by ABB's social policy.



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