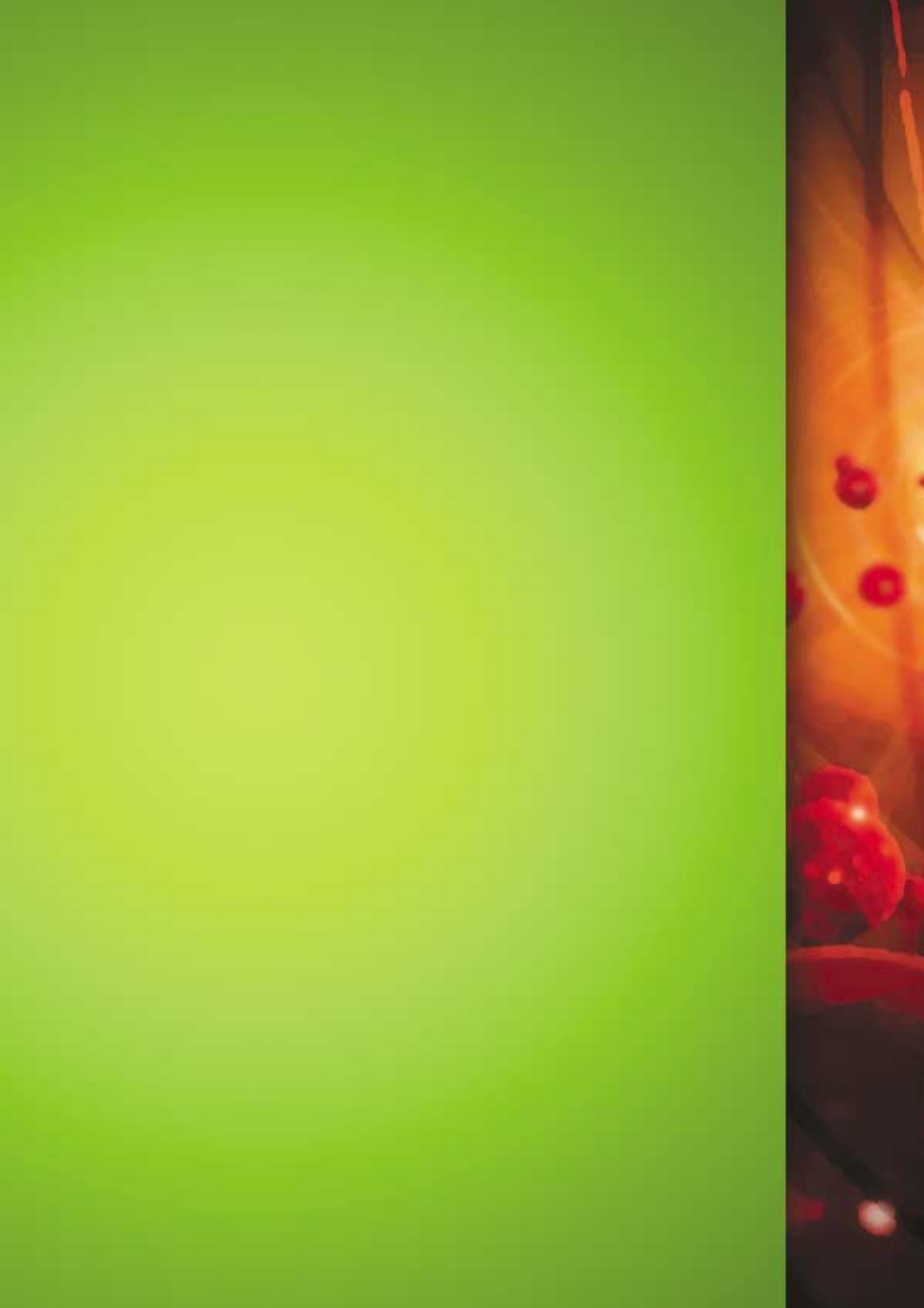
2003

Annual Report

Sustainability Report

EDP



>> THIS REPORT

This is EDP's first sustainability report. It marks the natural evolution of the environmental reports the company has issued since 1997, the last edition of which, in respect of 2002 – published in June 2003 – also included information on social and economic aspects. The 2001 and 2002 editions received the prize for Best Portuguese Environmental Report, awarded by the Council of Statutory Auditors as part of the Portuguese edition of the European Sustainability Reporting Awards.

The production of a sustainability report results from the decision, taken by EDP at the end of 2003, to adopt at the beginning of 2004 a set of sustainable development principles that will guide its activities and constitute a public commitment to this matter. This report presents the environmental, social and economic performance of EDP in 2003 and is intended to be a benchmark for the evaluation of sustainability performance in the future.

The report follows, like its previous editions, the Global Reporting Initiative (GRI) guidelines for sustainability reporting. Internal information control, certification and documentation procedures were used by the departments involved. The degree of compliance with the GRI content requirements can be assessed through the table of contents included in this section.

In drawing up this report, the GRI reporting principles were taken into consideration, particularly with regard to transparency, neutrality, comparability, clarity and timeliness. EDP is making efforts to ensure full application of the principles of completeness, relevance, accuracy and auditability, and it is the company's objective that the 2004 sustainability report will be verified by an external entity.

For the first time, this report includes information on the company's activity in the telecommunications and information technology sectors. Therefore, EDP now reports on the environmental, social and economic performance of all of the companies whose management it controls, individually or jointly, with the exception of activities undertaken in the areas of gas and telecommunications by HidroCantábrico, and of asset management business. This accounts for 96% of the 2003 turnover, excludes only the financial holdings in associate companies, and is similar in scope to the Annual Report and Accounts published by the company. Nevertheless, the internal social performance indicators presented take into account only those employees covered by the collective bargaining agreement (Portuguese acronym ACT).

EDP Sustainability Report 2003 forms part of a set of three complementary sections the company decided to use in the provision of accounts to its stakeholders this year, the others being the institutional section and the financial one. To allow this report to be used separately by certain stakeholders, various items of economic, financial and management information have been taken from the EDP Annual Report and Accounts 2003, and, where justified, reference is made to specific sections in which such aspects are reviewed in greater detail. The complete set of documents is available at www.edp.pt, where further information about the EDP Group can also be found.

Additional information on the sustainability report may be obtained from:
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C - Core indicator
A - Additional indicator
n.a. – Not applicable
(1) The level of availability of each indicator is provided by internal evaluation undertaken by EDP.

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MESSAGE FROM THE CHAIRMAN

To the Shareholders,

this year I am pleased to present the first EDP sustainability report.

The decision to publish what we call a *sustainability* report was taken only after carefull thought. For EDP, sustainable development reporting should be more than just presenting assertive environmental, social and economic performance indicators. It should constitute the structured demonstration of our commitment, of our progress, and perhaps, of our failures, with a view to creating value for shareholders on a lasting basis, based on a proactive attitude towards environmental issues and on a social practice that builds on the company's traditions to answer the new needs of the community.

We want EDP's sustainability report to simply be the image of an instituted policy and of an ongoing practice. Therefore, at the end of 2003, we defined as a target the disclosure, by the end of the first quarter of 2004, of the set of the EDP Group's Sustainable Development Principles. With this step, many of the initiatives already developed by the company will now have a structured framework that will come to guide our actions in these matters and will constitute a strong commitment towards all those who are directly or indirectly interested in our business. It is, we are aware, a major challenge that, faced in a serious manner, will have an impact in every area of the company, but it is, above all, an opportunity to improve our overall performance. We believe that proper identification and management of not only economic but also environmental and social risks, can reduce and avoid costs, optimise investment decisions and increase stakeholders' confidence, that is, it can make a positive contribution to the company's medium and long term value.

This is why we also decided, at the end of 2003, to join Global Compact, an initiative through which the United Nations is bringing together the international corporate community in the construction of a more sustainable global economy. EDP thus joins some of its most important counterparts, in adopting a set of principles in the areas of human rights, labour and environment, lending a new dimension to its concept of corporate citizenship.

In addition to these commitments, 2003 was also marked by other important events. The Health and Safety Management Systems of Carregado thermoelectric power station and Alto Lindoso and Touvedo hydroelectric power stations were certified according to OSHAS 18 001 standard, putting them among the pioneering electricity generating facilities in this area in the Iberian Peninsula. Important investment decisions were taken, designed to secure additional reductions of acid emissions through changes on the combustion conditions and flue gas desulphurisation at Sines thermoelectric power station. The issue of climate change continued to play a central role and we moved on to the preparation of the company's involvement in the future European emissions trading scheme.

Lastly, I would like to say that the report that we now bring to you also marks the conclusion of a cycle begun with the 2000 Environmental Report, by extending the scope of the covered activities outside the electricity sector, and providing more detailed information on social aspects. But it is, above all, a "baseline" report, the benchmark against which we will measure our evolution.

I hope that, at the beginning of 2005, when reporting on the progress made, I shall have good news to pass on to you.

Francisco de la Fuente Sánchez

>> VISION, POLICIES AND MANAGEMENT

>> Contents

>> 1. Vision of sustainable development

EDP develops its core business activities in a sector that is vital to economic and social development, the electricity sector. In addition to producing an essential good, EDP's business also creates wealth for the community through dividends paid to shareholders, through its role as employer and through meeting its tax obligations. Operating in a highly technological sector, the companies of the EDP Group are also sources of technical skill and innovation.

However, the way in which EDP carries on its activities has important consequences, both environmental and social. The company has a long tradition in including these aspects into its management, particularly with regard to the social benefits granted to employees, to the pioneering spirit with which it has addressed environmental issues and to the public service school that it really is. The challenge now consists of ensuring that the fulfilment of electricity needs coexists with environmentally sound and socially responsible corporate practice. This comes at a time of unprecedented change for the sector, as a result of privatisation and, more recently, of market liberalisation, thus leading to the appearance of new stakeholder groups with specific needs, namely the financial community and, in particular, shareholders.

These concerns are reflected in EDP's Mission and Values. The company's mission is based on three fundamental aspects: creation of shareholder value, customer orientation, and a focus on the company's human potential. The aim is to be the most competitive and efficient electricity and gas operator of the Iberian Peninsula. To achieve this goal, EDP undertakes the management of its activities in accordance with principles of transparency, respect for the environment and compliance with the very highest standards of ethics and honesty. The declaration on the vision, mission and values of EDP is set out in the institutional section of EDP Annual Report and Accounts 2003.

Aiming to structure the activities already developed in the environmental protection and social support area around expressly assumed principles, EDP decided, at the end of 2003, to define a set of guidelines balancing the economic, environmental and social aspects in the pursuit of its business:

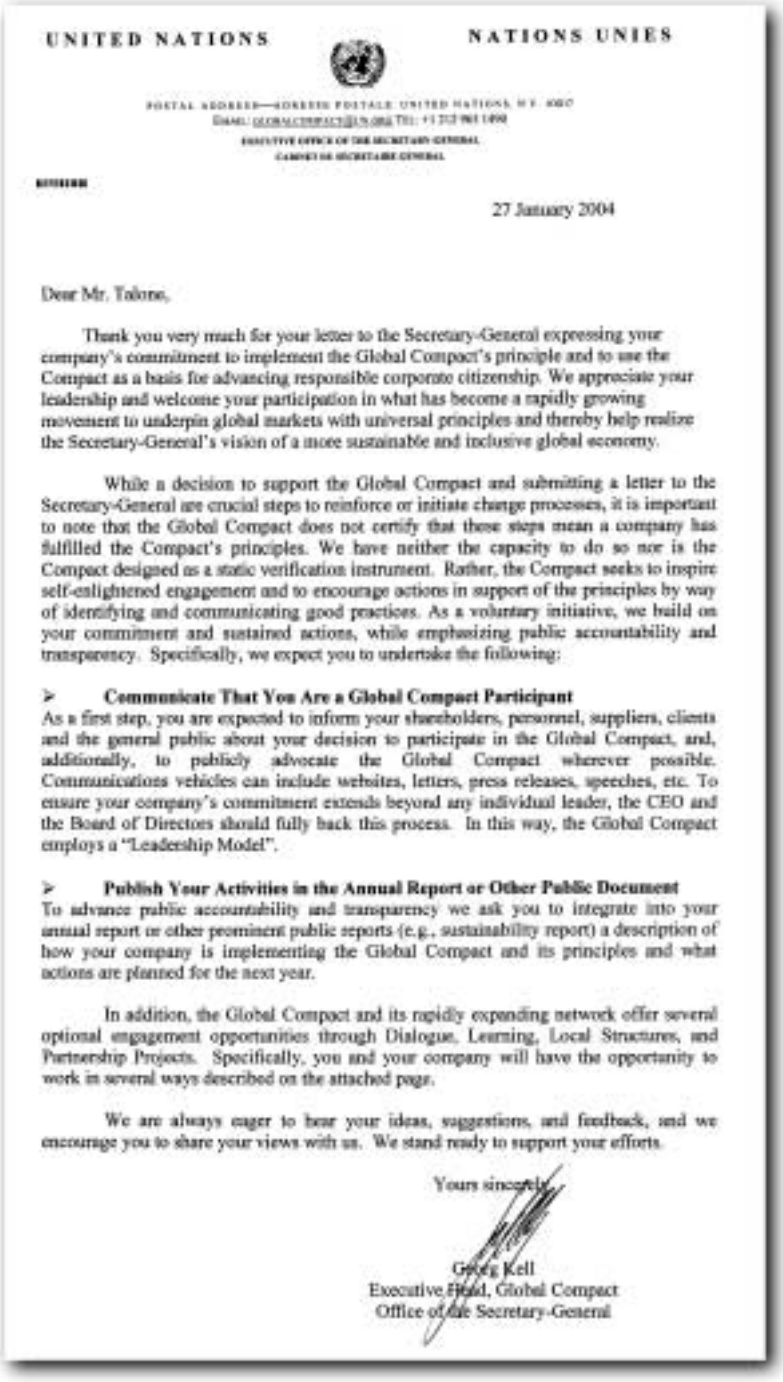
- Creation of shareholder value through increased productivity, customer orientation and reduction of exposure to risks stemming from economic, environmental and social impacts;
- Focus on cleaner, more efficient and renewable energy technologies;
- Minimisation of the environmental impact throughout the entire value chain;
- Compliance with ethical, human rights, and non-discrimination standards and elimination of abusive practices;
- Open, transparent and trusting relationship with the various stakeholder groups, including the implementation of specific interaction mechanisms and public disclosure of credible and objective information on the company's performance;
- Adequate management of the company's human potential and implementation of systems that ensure the well-being of the employees, promote their individual advancement and reward merit;
- Support to social and cultural promotion initiatives, on the basis of transparent evaluation criteria.

As a first step in the actual implementation of these principles, EDP decided, also at the end of 2003, to join Global Compact, an international initiative organised by the United Nations among the business community, whose object is the subscription of nine principles in the areas of human rights, labour and environment. Membership of Global Compact helps EDP to manage its activities on the basis of a set of universally accepted values, simplifying its own definition of sustainability and the drawing up of specific codes of conduct. It also constitutes a strong public commitment towards its various stakeholders, and promotes contact with best practices in this area.

Participation in organisations

EDP is associated with the following organisations working in the sustainable development area:

- Environment and Sustainable Development Committee and Workgroups of EURELECTRIC – Union of the Electricity Industry;
- Portuguese partner of the World Business Council for Sustainable Development;
- United Nations Global Compact.



UNITED NATIONS NATIONS UNIES

27 January 2004

Dear Mr. Talone,

Thank you very much for your letter to the Secretary-General expressing your company's commitment to implement the Global Compact's principle and to use the Compact as a basis for advancing responsible corporate citizenship. We appreciate your leadership and welcome your participation in what has become a rapidly growing movement to underpin global markets with universal principles and thereby help realize the Secretary-General's vision of a more sustainable and inclusive global economy.

While a decision to support the Global Compact and submitting a letter to the Secretary-General are crucial steps to reinforce or initiate change processes, it is important to note that the Global Compact does not certify that these steps mean a company has fulfilled the Compact's principles. We have neither the capacity to do so nor is the Compact designed as a static verification instrument. Rather, the Compact seeks to inspire self-enlightened engagement and to encourage actions in support of the principles by way of identifying and communicating good practices. As a voluntary initiative, we build on your commitment and sustained actions, while emphasizing public accountability and transparency. Specifically, we expect you to undertake the following:

➢ **Communicate That You Are a Global Compact Participant**
As a first step, you are expected to inform your shareholders, personnel, suppliers, clients and the general public about your decision to participate in the Global Compact, and, additionally, to publicly advocate the Global Compact wherever possible. Communications vehicles can include websites, letters, press releases, speeches, etc. To ensure your company's commitment extends beyond any individual leader, the CEO and the Board of Directors should fully back this process. In this way, the Global Compact employs a "Leadership Model".

➢ **Publish Your Activities in the Annual Report or Other Public Document**
To advance public accountability and transparency we ask you to integrate into your annual report or other prominent public reports (e.g., sustainability report) a description of how your company is implementing the Global Compact and its principles and what actions are planned for the next year.

In addition, the Global Compact and its rapidly expanding network offer several optional engagement opportunities through Dialogue, Learning, Local Structures, and Partnership Projects. Specifically, you and your company will have the opportunity to work in several ways described on the attached page.

We are always eager to hear your ideas, suggestions, and feedback, and we encourage you to share your views with us. We stand ready to support your efforts.

Yours sincerely,

Georg Kell
Executive Head, Global Compact
Office of the Secretary-General

>> 2. The EDP Group

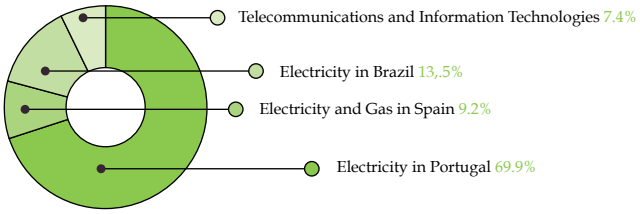
>> 2.1 Markets and activities

EDP's activities are centred on the electricity sector within the Iberian Peninsula. EDP is the largest electricity company in Portugal and controls HidroCantábrico, the fourth operator of the Spanish sector.

The EDP Group is also involved in the Brazilian electricity sector and has a small holding in electricity companies operating in other markets. In Portugal, EDP is also active in the fixed telecommunications and information technologies sectors, and provides laboratory and engineering services.

Turnover and number of employees by business area

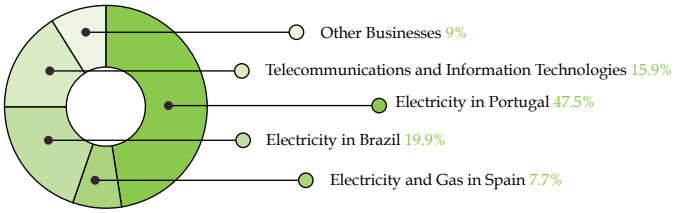
Turnover [1]



EDP Group consolidated: € 6 977.5 million

(1) Excluding EDP Valor and adjustments between companies

Number of employees



Total EDP Group: 17 664 (taking into account 100% of the companies controlled in Spain and Brazil

In 2003, electricity generated by EDP power stations accounted for 64% of the electricity consumption in Portugal. The company supplied electricity to more than 5.7 million customers in the public sector and to 73% of the customers operating in the liberalised segment of the domestic market.

In Spain, following the acquisition of NaturCorp, the natural gas distributor in the Basque Country, HidroCantábrico became the second gas operator of the Spanish market, with more than half a million customers, a figure similar to the number of its electricity customers.

Within the context of the reorganisation of the Portuguese energy sector, the government decided in 2003 to bring together the natural gas and electricity businesses and to incorporate the former into EDP, which is expected to take place in 2004.

The growth of generating capacity continued, with the experimental coming on-stream of the first group of the Ribatejo natural gas combined cycle power plant and the decision to exercise the option to construct its third group. The power station (3x392 MW) is expected to come on-stream in full in April 2006.

Wind-power capacity has also increased with the coming into operation of Serra do Barroso (18 MW) and the upgrading of Cabeço da Rainha (6 MW) wind farms. The EDP Group now has an installed aeolic capacity of 65 MW in Portugal, about 25% of the national total.

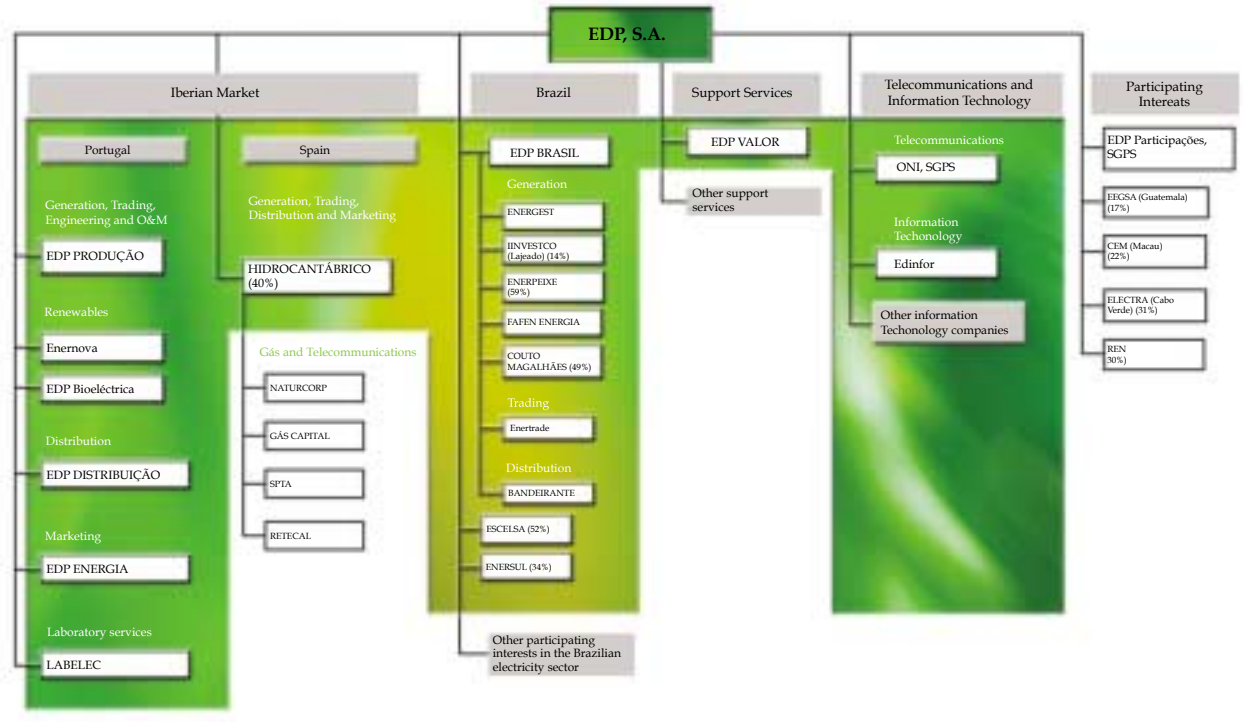
In Brazil, work on Peixe Angical (452 MW) hydroelectric power station recommenced and the facility is expected to come into operation in 2006. For questions related to the licensing process, Couto Magalhães hydroelectric project (150 MW) was put aside and an application lodged for friendly termination of the concession contract.

Operating highlights

	2003	2002
Electricity in Portugal		
Maximum installed capacity (MW)	7 939	7 654
Electricity sales - Generation (GWh)	28 532	25 513
Electricity sales - Distribution (GWh)	38 869	36 905
Electricity sales - Supply (GWh)	2 724	644
Number of customers	5 767 400	5 665 005
Electricity in Spain (*)		
Maximum installed capacity (MW)	2 554	2 554
Electricity sales - Generation (GWh)	14 155	13 308
Electricity sales - Distribution (GWh)	8 659	8 447
Electricity sales - Supply (GWh)	4 712	3 955
Number of customers	564 584	551 338
Electricity in Brazil (*)		
Maximum installed capacity (MW)	957	903
Electricity sales - Generation (GWh)	4 624	2 790
Electricity sales - Distribution (GWh)	18 260	19 284
Electricity sales - Supply (GWh)	2 737	1 348
Number of customers	2 902 208	2 848 235
Telecommunications and Information Technologies		
Number of registered telephone lines (thousand)	649	506
Voice traffic (million minutes)	2 639	1 651

(*) Considering 100% of the controlled companies

EDP Group´s simplified organisation structure



Activities covered by this report

>> 2.2 Governance structure

EDP's business is organised as a corporate group. The Board of Directors of the EDP holding company currently has 13 members, three of whom are independent. Day-to-day management is delegated on an Executive Committee comprising five members.

The management and governance of EDP are subject to statutory and legal rules and to internal regulations, including those of the Board of Directors, the Executive Committee and the Audit Committee. These regulations are available on the company's Internet site. As a listed company, EDP also complies with the recommendations of the securities market commissions of those markets on which it is listed, including most of the optional rules.

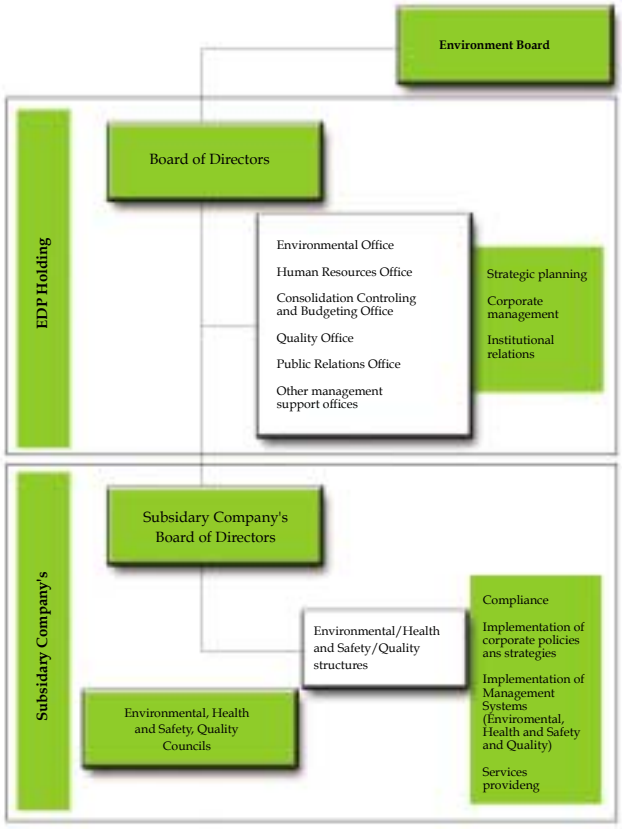
The management of the different sustainability aspects is provided for in the Group's organisation structure. There is a corporate centre that supports the decision making process, with overarching responsibilities, which reports to the Executive Committee and is organised in the form of offices and co-ordination areas. At both the holding company and the Group companies levels, there are structures that provide management of environmental, social and economic aspects. The integrated corporate vision is provided by the structures of the holding company and the fulfilment of performance targets is ensured by the structures of the various companies.

EDP has an Environment Board, a statutory body that provides consultancy to the Board of Directors, comprising five independent personalities of recognised competence in this area.

Stock option plans are in force for directors and senior executive staff as a means of stimulating performance and compliance with medium and long-term objectives. This form of reward is not linked to compliance with objectives of an environmental or social nature.

More detailed information on corporate governance, including the exercise of voting rights and shareholder representation, can be found in the institutional section of EDP Annual Report and Accounts 2003.

Sustainability management in the EDP Group



>> 3. Overarching policies and management systems

>> 3.1 Environment

EDP was a pioneer in Portugal in addressing environmental issues arising from its business, and publicly adopted an Environmental Policy in 1994.

At the same time, the company adopted an Environmental Code of Good Practice, which consists of a set of rules to be applied in a committed manner by all employees as to underpin the actual implementation of the Environmental Policy.

Basic principles of EDP Group's Environmental Policy

In 1994, the Board of Directors of the EDP Group adopted a Declaration on Environment Policy based on the following fundamental principles:

- To consolidate environmental assessment criteria in the company's activities and to audit its performance;
- To examine the importance of the environmental issues in generation, transmission, distribution and final use of electricity;
- To encourage rational energy usage systems;
- To increase knowledge concerning the interaction of the company's activities with the environment;
- To promote nature conservation and cultural advancement strategies;
- To guarantee appropriate mechanisms for environmental information;
- To encourage the use of clean technologies and suitable waste-management practices.

The complete EDP Environmental Policy and Code of Good Practice is available at www.edp.pt.

One of the basic instruments of EDP´s Environmental Policy is the implementation of Environmental Management Systems (EMS). The Company's goal is to obtain progressive certification of every activity undertaken in the electricity sector. At the end of 2003, about 30% of the installed capacity of the EDP Group in Portugal had EMS certification in accordance with ISO 14 001 Standard.

Following a first stage centred on the thermoelectric power stations, EDP, with the support of EDP Produção EM, has recently moved on to the implementation of EMS at its hydroelectric power stations in Portugal. Currently, the small-scale hydroelectric plants of Cascata do Ave, Penide, Cefra and Serra da Estrela have implemented EMS, though not yet certified. At the large-scale hydroelectric power stations' implementation is planned to be concluded during 2004 at the Cávado-Lima and Tejo-Mondego Generation Centres.

EDP Produção proceeded with the preparation of the environmental permitting process of its facilities covered by legislation on integrated pollution prevention and control (IPPC) regulation. During 2003, environmental permits were obtained for Ribatejo thermoelectric power station and for ENERGIN cogeneration plant. The other thermoelectric generation units should be licensed by 2007.

In 2003, total environmental related investment in electricity generation and distribution in Portugal amounted to €9.6 million. A total of about €40 million is planned for 2004, about half of which related to the adaptation of Sines power station to the new environmental requirements.

In the telecommunications sector, ONI has gradually incorporated procedures linked to its concerns in the environmental and social responsibility areas. The management of these issues is currently entrusted to the heads of those areas in which more relevant

environmental aspects of the company's business are of greater importance, particularly waste generation and electric and magnetic fields.

Objectives

2004: Reorganisation of ONI's Environment and Sustainability area. Appointment of a team to define and implement a policy and specific objectives.

In the information technologies area, EDINFOR has also been implementing procedures and organising initiatives in the environmental and social responsibility areas. Clear responsibilities have been assigned for the management of these aspects in the various areas of the company.

At the end of 2003, EDINFOR defined its first structured environmental action plan.

Objectives

2004: Implementation at EDINFOR of measures designed:

- To internalise the concepts of Environment and Sustainability in every business area;
- To extend waste management best practices to the entire company;
- To extend and monitorize urban waste recovery procedures.

In Spain, HidroCantábrico reorganised its Environment area in 2003. An Environment Division was set up to deal with corporate management of environmental issues and to coordinate these aspects in the various business areas.

In the wake of this organisational change, during the second half of 2003, HidroCantábrico started to work on a new Environmental Policy and its specific plans of action, directing the company towards the implementation of an integrated environmental management system.

Objectives

2004: Approval of HidroCantábrico's new Environmental Policy.

EDP Brazil's business is undertaken in accordance with the principles of the EDP Group Environmental Policy. Within this framework, the electricity generating and distribution companies controlled by the Group are responsible for the implementation of specific procedures to ensure compliance with environmental legislation in force in the country.

Bandeirante has recently started to implement EMS. During 2003, a preliminary survey was undertaken on the company's environmental impacts and a minimisation plan was established for the 2003-05 period.

During 2003, Escelsa concluded the Social-Patrimony and Environmental Management Plans for seven hydroelectric power stations. These plans include the physical and legal inventory of the reservoirs, a social-patrimony diagnosis, preparation of masterplans and implementation of vegetation preservation and recovery and ichthyofauna monitoring programmes.

Enersul intends, in 2004, to obtain environmental permits for a number of generation centres, substations and distribution lines, with a view to a gradual implementation of EMS

>> 3.2 Human Resources

EDP's Human Resources Policy is designed to ensure employee satisfaction and to align their activities with the Group's objectives, so that each member feels a part of a living, participative institution.

Basic principles of EDP's Human Resources Policy

The Human Resources Policy is directed at three main areas:

- Developing skills and knowledge of the business;
- Rejuvenating the workforce;
- Revitalising and renovating corporate culture.

In the management of its human capital, EDP is governed by the principles enshrined in Portuguese constitutional law, which forbid any type of discrimination. Since they are assumed to be common practice, control of compliance with non-discriminatory rules is not a tradition in the international companies of Portuguese root.

Objectives

2004: Implementation of internal procedures, at EDP Group level, to optimise collection and disclosure of information of a social nature.

In Brazil, Bandeirante has publicly assumed a code of ethics known as "Ethics for Living". This document sets out a number of guiding principles of the company and is intended to define parameters governing the ethical conduct of all employees.

"Ethics for living", Bandeirante's code of ethics

Bandeirante's code of ethics is based on the following fundamental principles:

- **Customers**: Customers are the focus of our activity. Relationship with customers, with due regard for their values, will seek to ensure their satisfaction and to outperform their expectations;
- **Relation with partners and suppliers:** Selecting and contracting will be transparent and ethical. Resourceful to suppliers with doubtful reputation or that directly or indirectly exploit child or slave labour is prohibited;
- **Employees:** Employees are the source of our energy. Discriminatory attitudes will be fought against and trust, respect, justice and innovation will be enhanced;
- **Bandeirante, a citizen company:** Bandeirante supports policies that encourage human development. The company cares for cultural integrity and provides adequate channels of communication with the various interested parties;
- **Shareholders:** Business is run on principles of prudence, so as to attract investment that will improve and enlarge the system and increase the company's assets;
- **Environment:** Bandeirante seeks to create public awareness of environmental preservation. It uses environmental impact evaluation criteria and aims to optimise management of natural resources;
- **Public authorities:** The company takes into account the requests of the public authorities, harmonising standards of honesty and integrity with the company's interests;
- **Possible conflicts:** The use of company's position to obtain personal favours and the acceptance or offering of presents and gratuities are forbidden.

The complete code of ethics is available at www.bandeirante.com.br

>> 3.3 Health and Safety

Safety is an integral part of the quality of products and services of the EDP Group companies. Aware of its importance in efficient and responsible management, EDP revised its Safety Policy in 2002.

Basic principles of EDP Group's Safety Policy

The prime object of EDP Group's Safety Policy is to promote the improvement of safety conditions and to keep the company at the forefront in works accidents prevention, through the application of the following principles:

- Guarantee a safe and healthy work environment;
- Promote training and awareness on the risks related to its activities;
- Protect facilities and equipment, guaranteeing adequate safety conditions;
- Minimise risks to people and to the environment;
- Guarantee that safety is an integral part of the quality of services and products in all the companies in the Group;
- Guarantee that no situation or urgency puts anybody's life at risk.

2003 was largely directed at establishing operational procedures and methodologies designed to consolidate health and safety management systems, based on OSHAS 18 001 Standard.

At the end of the year, two thermoelectric power stations (Carregado and Setúbal) and four hydroelectric power stations (Alto Lindoso, Touvedo, Alto Rabagão and Vila Nova) had received OSHAS 18 001 certification, thus covering about 33% of EDP's installed capacity in Portugal.

In Brazil, Escelsa has in place, since 2002, safety management systems covering the whole of its suppliers. Within the scope of this system Escelsa awards Safety Certificates to its service providers, valid for a period of 6 to 12 months. During 2003, 20 certificates were issued.

>> 3.4 Quality

Quality has been an explicit concern of the EDP Group since 1993. In 2003, the company decided to review its quality management system. The aim is to introduce a new culture based on quantitative information that answers the needs of a demanding and modern management.

The model now implemented by the Group is based on three fundamental principles:

- Customer satisfaction;
- Internal Customer satisfaction;
- Employee satisfaction.

According to this new model, quality leadership, based on established satisfaction indexes and on continually optimised procedures, is essential to employee and customer satisfaction, and will have a positive effect on the financial results of the company.

Objectives

2004: Development of an EDP employee satisfaction study. The study will identify the factors impacting on motivation and productivity, and evaluate the management system.

>> 3.5 Sponsorship and patronage

The fundamental objective of EDP's sponsorship and patronage activities is the social provision of certain cultural, scientific, and social goods, understood as a privileged form of relationship with the community.

EDP's role in this area follows an essential principle: decentralisation. Supporting initiatives undertaken by local communities is a tradition of the Group companies, thus lending viability to projects organised outside major urban centres and contributing to the formation of new publics.

EDP's sponsorship is directed at four priority areas: cultural, social, sports and scientific.

The selection of the projects in the cultural area is based on the following appraisal criteria:

- Intrinsic quality of the project;
- Feasibility in the absence of sponsorship;
- Promotion of access to quality works by a traditionally underprivileged public;
- Encouraging the appearance of new values;
- Initiatives directed at youths and their training.

In the social area, EDP endeavours to promote the well being of impoverished people, through support to proper institutions of recognised merit.

In the sports area, the focus is on initiatives appealing to the participation of amateurs and on encouraging a healthy lifestyle. Support to professional competition is based on the need to promote quality standards that act as role models and encourage sports.

In the scientific field, the focus is on conferences and workshops addressing themes of interest to the company's business and that allow the training of its staff.

>> 3.6 Research and Development

During 2003, EDP defined a new Research and Development Policy centred on the Group's core business and directed at the following priority areas:

- Optimisation of the quality of service of electricity networks;
- Development of renewable energies and distributed generation;
- Reduction of the environmental impact of electricity generation and distribution;
- Added value markets and services.

During the year, the effort to develop new projects was directed at these priority areas. EDP took part in more than 20 projects in the area of electricity generation and distribution, of which the following are underscored:

- Implementation, at the Sacavém complex, of a gas microturbine demonstration project, with a 30 kW electric capacity. Operating under the cogeneration regime, the system is expected to come on-stream early in 2004;

- Adjudication of the supply and assembly of a multi-technologies platform to demonstrate micro-generation based on renewable energies, also to be set up at Sacavém. The project includes photovoltaic, wind powered and fuel cell components. The aeolic-photovoltaic component is planned to start up at the beginning of 2004.

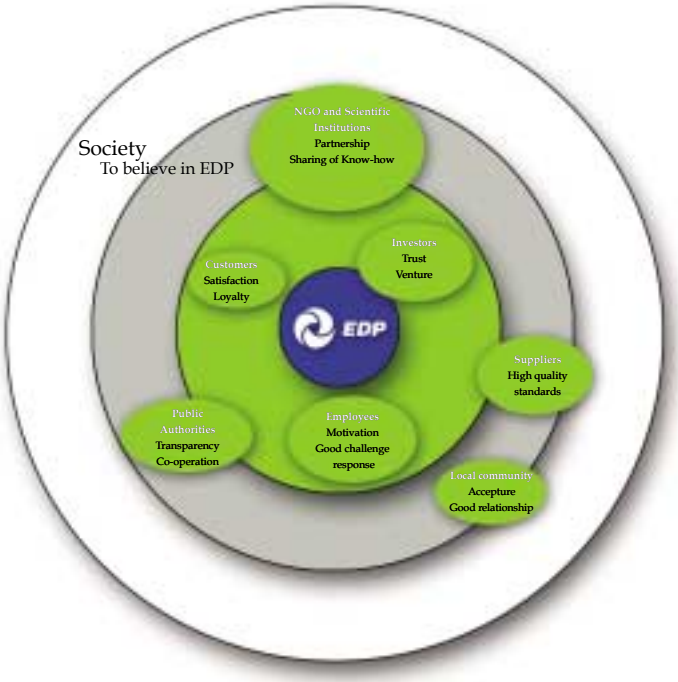
A start was made to the activities of the Wave Energy Centre, in which EDP is represented. Its aim is to promote and develop the use of this form of renewable energy in Portugal.

>> 4. Stakeholder engagement

The existence of a relationship of trust with its various stakeholders is vital to the future of EDP. The company exists to serve the interests of these various parties and its success depends upon them. In this connection, clear identification of the specific stakeholder group needs and the establishment of procedures directed at its satisfaction is a priority for the company.

The existence of such procedures is essential if EDP is to evaluate and report the degree of efficiency of the relationship with these various parties. Concerning 2003, EDP is only able to provide information directly related to its activities in Portugal.

EDP and its main stakeholders

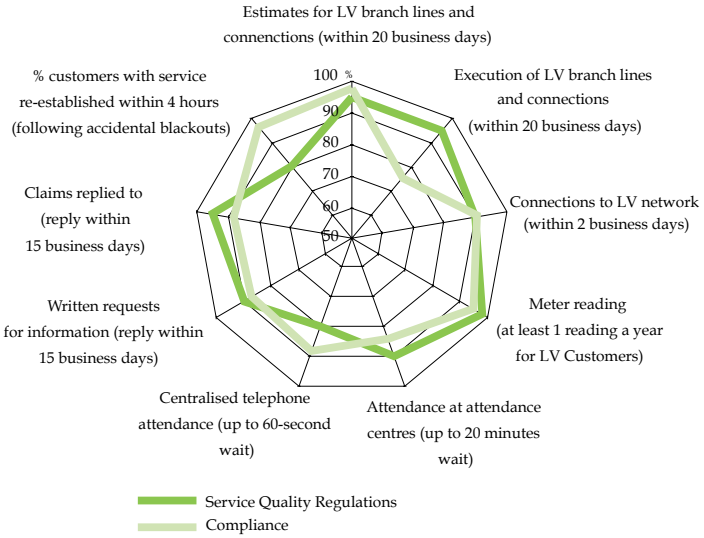


>> 4.1 Customers

The new Service Quality Regulation (Portuguese acronym RQS) was published in 2003. It introduces significant changes to continuity of service standards, to the method of calculation, to compensation payments and to complaints processing.

EDP Distribuição is already in control of quantified information regarding the service quality indicators established in the RQS. Although it was not possible to meet all the standards, general compliance is expected for 2004, following the introduction of new procedures currently underway.

General Service Quality Indexes in 2003



LV - Low Voltage

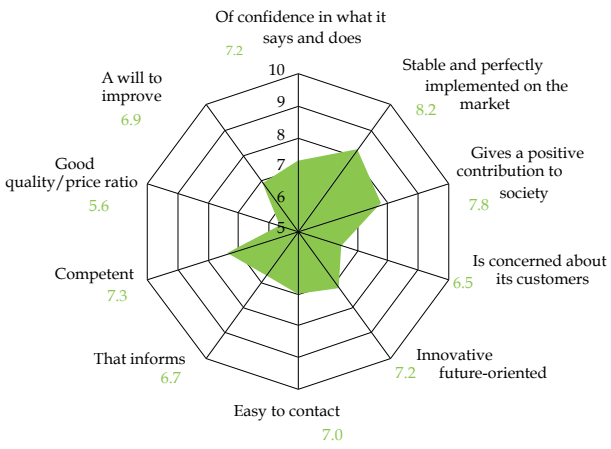
A new customer satisfaction study was carried out towards the end of 2002, the results of which were published in 2003. These results were used as a basis for the reviewing of priority actions by EDP Distribuição in order to improve its performance.

Although the overall results of the polls have been positive, some areas were identified in which the company needs to make additional efforts to ensure customer satisfaction, particularly with complaints processing, regarding residential customers, and with supply quality, regarding industrial customers. With this in mind, EDP Distribuição invested significantly during 2003 in network improvements.

In the analysis of the results of the residential customers poll, emphasis is given, under the Average Variable Indexes, to the *Quality of Products and Services* and *Overall Quality* indicators and, under the Institutional Image poll, to *Makes a Positive Contribution to Society* indicator, in which EDP scored very well.

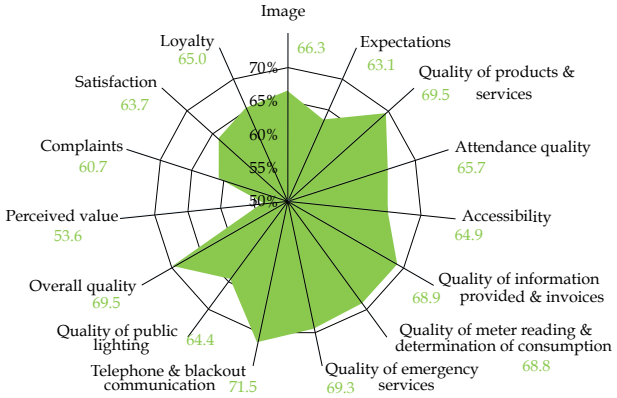
EDP's satisfaction levels are similar to those of its counterparts of identical size.

EDP's institutional image



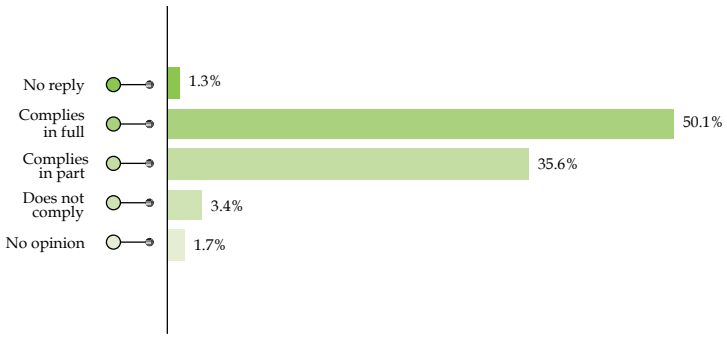
Methodology: ECSI - European Customer Satisfaction Index

Average variable indexes



Methodology: ECSI - European Customer Satisfaction Index

Overall appraisal of EDP´s performance by industrial customers [1]



[1] Self-polling

During 2003, special attention was given to customer communication channels. The Energy Points network has expanded and 45 new attendance posts were set up. Investment in the Call Centre was also increased in order to provide more efficient attendance, and the contents of a commercial nature in EDP Internet site were improved.

>> 4.2 Investors

In line with best practice insofar as the governance of listed companies is concerned, one of EDP's concerns is to ensure that all relevant information is disclosed in a clear, objective and non-discriminatory manner to the various financial market players.

The structure of the EDP holding company includes an Investor Relations Office, the purpose of which is to ensure adequate communication with shareholders, analysts and potential investors, as well as with the supervisory entities of the stock markets on which it is listed.

Through this Office, EDP maintains a constant flow of communication with institutional investors and financial analysts, providing such information as is necessary to comply with the duties of responsibility and due diligence of these institutions.

>> 4.3 Employees

EDP grants its employees a large number of social benefits, including medical assistance and medication, pension complements, several subsidies and support to student-workers. The company also has a workplace medical support area that periodically provides staff members with support in safety and health matters.

In 2003, EDP's health care provision area provided pensioners, retired personnel and their families with a total of 424 000 appointments, involving 58 000 users.

Part of the profits of the EDP Group companies is distributed to its employees, the total amount being in portion of the economic performance of the Group. In 2003, distribution criteria were based on companies' performance and on an evaluation of the individual contribution of each employee. For senior management positions, 30% of this incentive was paid in EDP shares as a means of strengthening their commitment to the company.

Internal communication is one of EDP's strong points. Its aim is to promote the identification of all employees with the mission, values and objectives of the company. During 2003 a number of initiatives were undertaken, the most important of which was the 1st EDP Meeting, under the theme *More Market. More Competition. More EDP,* attended by more than 9000 employees.

1st EDP Meeting

The 1st EDP Meeting took place in October 2003, a pioneering event not only for its size but also for the way in which it allowed employees to ask questions directly to the company's Board.

The meeting was split into three sessions, and about 9000 workers attended.

The idea behind the meeting was to establish a means of direct communication, designed to overview the present position of the EDP Group in the various areas in which it carries on its business, and to present the company's Strategic Agenda and the Action Plan to face the forthcoming challenges.

EDPonto, EDP Group's intranet, has made its mark as the up-to-date and accessible information channel, contributing to the consolidation of the corporate business culture. In the latest online poll, 80% said that they often consulted EDPonto, reflecting not only the perception of its usefulness but also the employees' interest in being informed.

During 2003, EDPonto provided a new polling tool, three new databases on environmental, health and safety legislation, and standardisation, in addition to EDP Training Portal. EDP Valor channel launched a new service dedicated to the management of the Group's facilities, allowing online recording of occurrences, thus facilitating the planning of necessary corrective measures.

Emphasis is also given to the heading "Send your message to the CEO", through which any employee can establish direct contact with EDP's Chief Executive Officer. More than 200 questions had been raised by the end of 2003.

On the eve of the full market liberalisation, *Mundo EDP*, the Group's monthly magazine, focused on the provision of information on this issue and its implications on the business of the Group companies.

>> 4.4 Suppliers

EDP's relations with its suppliers are governed by transparent, non-discriminatory criteria that meet applicable Portuguese and European Community legislation.

In electricity generating and in the provision of centralised services, the acquisition of goods and services takes into account supplier selection and evaluation procedures that include specific environmental criteria. This is also true for the evaluation of suppliers of services in the distribution business. Whenever necessary, external workers operating at the company's premises are enrolled in specific training courses in the areas of safety, environment and quality.

In 2003, the implementation of QUALIFOR was lunched. This integrated supplier evaluation system will be used by EDP Produção, EDP Distribuição and EDP Valor and will include specific environmental evaluation criteria , the content of which is presently under preparation.

ONI suppliers environmental appraisal study

For the first time, ONI undertook an appraisal of the environmental performance of its suppliers. The study involved a sample of 641 suppliers (about 5% of the total) accounting for about 43% of the value of orders placed by ONI.

A selection of 32 of these companies was analysed, accounting for € 31 million worth of supply. Each company was accessed based on information obtained both through its Internet site and via direct phone contact.

About 41% (13) were found to be certified in accordance with the ISO14 001 Standard (7) or to have established an environmental policy (6). Of the remainder, about 40% stated they intended to implement an environmental policy and only 6 had no concerns in this area.

>> 4.5 Government, scientific institutions and local communities

EDP has excellent relations with several governmental institutions, with a focus on the Directorate General of Energy (Portuguese acronym DGE) and the Energy Services Regulatory Entity (Portuguese acronym ERSE). Given the importance of the upcoming regulatory period (2005-07), EDP's priority is to ensure dialogue, transparency and a spirit of co-operation in the work to be undertaken with the Regulator.

Its close relationship with local authorities and the Company's ability to answer their needs allowed EDP to renew 95% of the concession contracts in 2003.

Co-operation with scientific and academic institutions ranges from the development of joint innovation projects to the support to graduates training. During 2003, EDP granted 94 training scholarships and made Labelec High-voltage laboratory available for the practical lessons of university courses and for activities leading to masters degrees and doctorates.

ONI has encouraged new talents, in partnership with IADE – *Instituto de Artes e Design*, involving an idea contest for the company's Christmas card. Three pecuniary prizes and three honorary mentions were awarded, the successful candidate's work being used as ONI Christmas card 2003.

EDP also takes part in the evaluation of higher education courses in an endeavour to bring university studies more into line with the needs of the companies.

>> PERFORMANCE

>> Contents

>> 1. Environmental performance

>> 1.1 Climate change

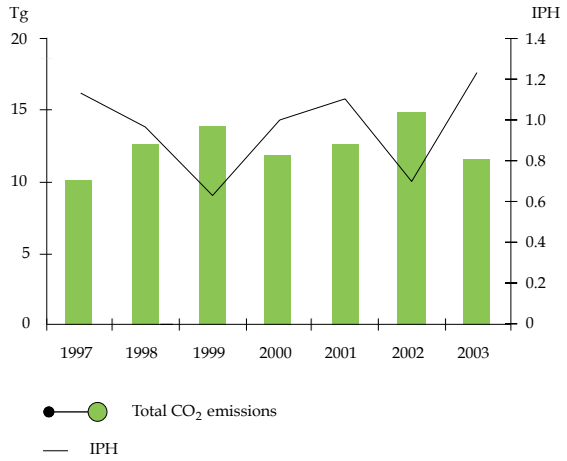
Directive 2003/87/EC on greenhouse gas (GHG) emissions trading was published in October 2003. The directive called for transposition by Member States by the end of December 2003, though this did not come about in most Community countries, including Portugal and Spain. By March 31, 2004, each Member State must draw up its national allocation plan (NAP) establishing the total amount and the sector distribution of emission allowances for 2005-07 period.

During the second half of 2003, EDP, together with other Portuguese electricity producers, adopted a common position with regard to the application of the Directive during the 2005-07 period. The aim of this work is to present, early in 2004, a formal proposal to the Portuguese government within the scope of the discussion of the National Emission Allowances Allocation Plan (Portuguese acronym PNALE). During this period, information was submitted to the national authorities within the emission certificate attribution process.

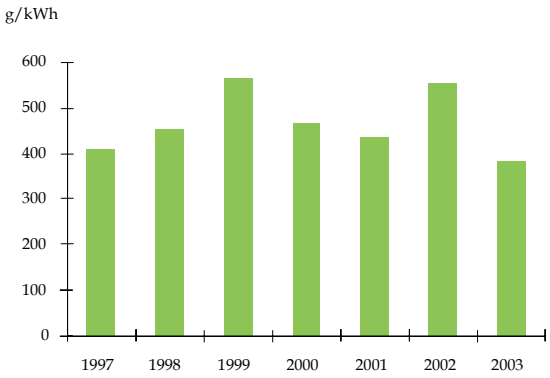
The public discussion of the Additional Measures of the National Climate Change Plan (Portuguese acronym PNAC) started by the end of 2003. This comprises a set of measures proposed by the government with a view to ensuring compliance with national commitments within Kyoto Protocol. EDP set in motion a process of analysis and dialogue with the team responsible for PNAC, focusing on those measures more closely related with its business, namely reduction of energy losses in the distribution network and demand side management initiatives.

The year was marked by an exceptionally high Hydroelectric Capability Index (Portuguese acronym IPH), which allowed for intensive use of the Company's hydroelectric installed capacity and led to carbon dioxide (CO_2) emissions significantly lower to those of previous years.

Total CO_2 emission - EDP in Portugal



Specific CO_2 emissions from generating units - EDP in Portugal



The first phase of the sulphur hexafluoride (SF_6) inventory in EDP's activities in the Portuguese electricity sector was concluded. During this stage emissions by all the equipment of EDP Produção and EDP Distribuição were determined based on the quantification of the gas replaced in those items of equipment subject to maintenance.

The second stage of the inventory includes exhaustive identification of all SF_6 equipment and enclosed gas quantities, including sealed equipment. This will allow for the determination of residual emissions, based on the application of emission factors established by international conventions. This survey, as well as the implementation of leak minimisation measures in the distribution network, are the object of one of the programmes of EDP Distribuição Environmental Quality Promotion Plan (Portuguese acronym PPQA) 2002-04.

SF_6 emissions - EDP in Portugal [1]

	kg
EDP Produção	30.4
EDP Distribuição	39.15
Total	69.55

[1] Based on the replaced amount in equipment subject to maintenance.

By the end of 2003, the Spanish authorities had not yet started the negotiation process of the NAP, which will cover HidroCantábrico thermoelectric power stations.

Total CO_2 emissions - HidroCantábrico

Specific CO_2 emissions from generating units - HidroCantábrico [1]

[1] Excluding electricity produced by Trillo nuclear power station, of which HidroCantábrico holds 15.5% and has no management control.

The significant reduction of HidroCantábrico's CO_2 specific emissions reflected the full operation during 2003 of the Castejón natural gas combined cycle power station.

>> 1.2 Renewable energies and energy efficiency

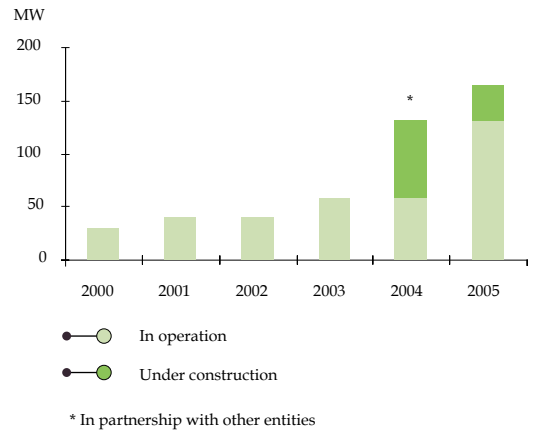
Renewable energies and cogeneration

The exceptional hydrological conditions seen in Portugal in 2003 allowed EDP to make intensive use of its installed hydroelectric capacity. Hydroelectric generation exceeded thermal generation and accounted for 54% of EDP's total, more than twice 2002 figures.

Electricity generated from biomass increased by about 2% following efficiency and management improvement measures introduced at Mortágua biomass power station.

EDP wind-power capacity in Portugal continued to grow. The new Serra do Barroso (18 MW) and the upgraded Cabeço da Rainha (6 MW) wind farms came into operation, contributing to a 14% increase of wind-powered electricity generation. EDP has a further 71 MW of aeolic capacity currently under construction in Portugal.

Wind-powered installed capacity - EDP in Portugal



* In partnership with other entities

Increasing small-scale hydroelectric power generation, the new Lagoa Comprida station came into operation and Labruja station, near Viana do Castelo, was acquired.

In the large-scale hydroelectric power stations area, the comparative Environmental Impact Study of the Baixo Sabor e Alto Côa hydroelectric power stations, entered its public discussion stage, which will be concluded only at the beginning of 2004. Studies went ahead to evaluate the increase of the power of the run-of-river power stations in Douro river hydrographic basin.

Electricity generation from renewable sources

MWh

	2003	2002	2001
Portugal			
Wind	128 355	112 785	90 570
Biomass	38 323	37 482	18 476
Hydro	196 343	149 850	189 231
Hydro (>10 MW)	14 668 557	7 186 419	13 208 167
IPH	1.33	0.75	1.19
Spain			
Hydro	100 001	-	-
Hydro (>10 MW)	588 971	-	-
Wind	35 941	-	-
Brazil			
Hydro	15 756 491	-	-

One of EDP's objectives is to increase cogeneration. In 2003, the company proceeded with the revision of new projects. Electricity supplies by SOPORGEN were very regular during 2003, unlike ENERGIN that faced several operation problems only solved by the end of the year.

Energy generation in cogeneration plants

	2003	2002	2001
Portugal (*)			
Maximum installed capacity (MW)	111.1	111.1	67
Net electricity production (GWh)	679	589	423
Steam production (TJ)	4 038	3 658	1 747
Brazil			
Maximum installed capacity (MW)	133	-	-
Net electricity production (GWh)	174	-	-
Spain			
Maximum installed capacity (MW)	392.6	-	-
Net electricity production (GWh)	1 546	-	-

(*) Excludes Barreiro power station.
Includes electricity supplied to industrial customers and to EDP network.

Demand side management

EDP Distribuição has been promoting demand side management measures among its customers. These measures are based on the provision of electrically efficient solutions and on the disclosure of rational use of energy practices.

During 2003, EDP Distribuição organized the EDP Award, which distinguishes projects involving efficient electricity use. Traditionally directed to the industrial sector, the Award was open, for the first time, to services and other activities, and saw a record number of applications.

EDP Award

The EDP Award is designed to reward customers that, through electrically efficient methods and processes, have obtained significant improvement in energy efficiency and productivity.

Applicants must show that at least one of the following results has been achieved:

- Increased energy efficiency as a result of demand side management measures;
- Improvement of product/service quality;
- Reduction of the unit cost of generation or activity;
- Electricity system optimisation or improvements to working conditions or to the external environment.

EDP also signed a protocol with the Non-Governmental Organisation Quercus to develop the ECOCASA project, designed to encourage energy efficiency by residential customers. Further information is available at www.ecocasa.org.

Within the scope of the co-operation protocol with the Portuguese Energy Agency (Portuguese acronym ADENE) a number of studies were concluded on electric technologies to support solar systems for heating and on electric vehicles.

The disclosure of information on energy efficiency included a brochure on domotics sent to about 2 600 electricians.

Objectives

2004: EDP's participation in the *Greenlight* programme. *Greenlight* is a voluntary programme set up by the European Commission, under which private and public organisations undertake to adopt advanced technologies to reduce own lighting energy consumption.

>> 1.3 Air emissions

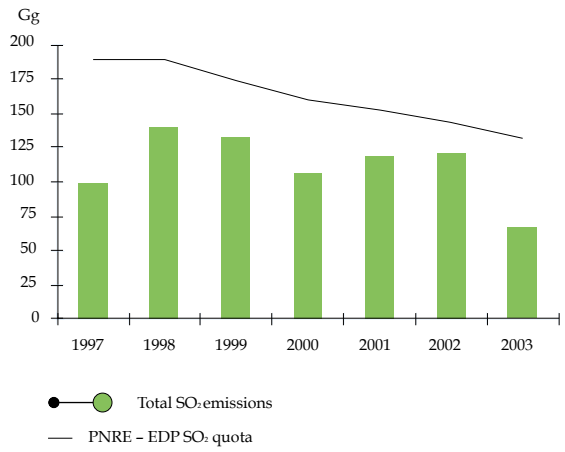
Directive 2001/80/EC on large combustion plants was transposed to Portuguese law in August 2003. It establishes the need to draw up a new National Emissions Reduction Plan (Portuguese acronym PNRE) to replace PNRE 1996-2003, which came to an end in 2003. Throughout the year EDP played an active part in the early stages of the preparation of the new plan. Formal approval is expected during the first half of 2004 and will affect Sines power station.

By using coal and fuel oil of increasingly lower sulphur content, EDP has been able to ensure compliance with its legal obligations, even in years of poor hydraulicity. In order to adapt Sines power station to the new legal requirements, an Environmental Impact Study was conducted on the technological option for flue gas desulphurization.

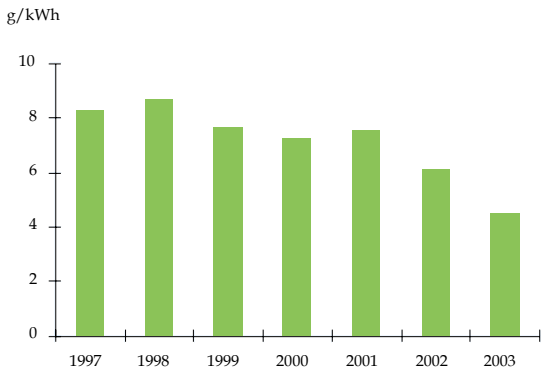
The introduction of primary NOx reduction measures at Sines power station, concluded in 2002, led to a reduction of about 50% of its emissions. A new set of emission reduction measures were adjudicated in the beginning of 2003, and are expected to reduce a further 30% to the current emission levels.

During 2003 specific particulate emission rose slightly. This was due to the exceptional hydraulicity, which gave rise to a very irregular operation regime of the thermoelectric power stations, increasing the start-up period, during which electrostatic precipitators are not in operation.

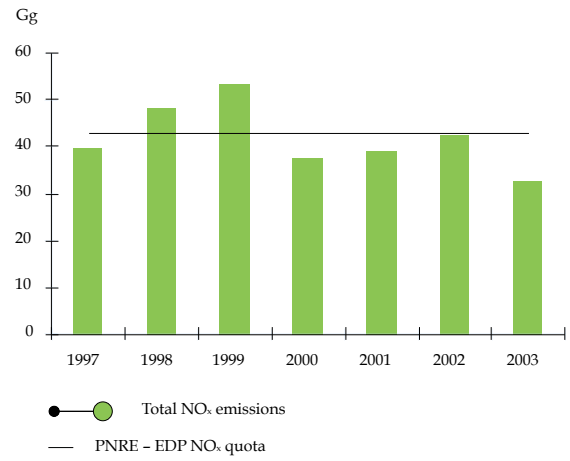
Total SO_2 emissions - EDP in Portugal



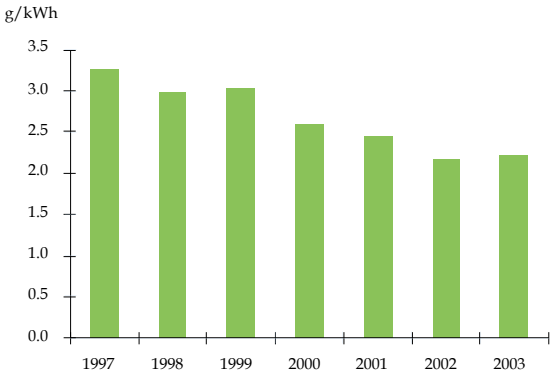
Specific SO_2 emissions from thermal power stations - EDP in Portugal



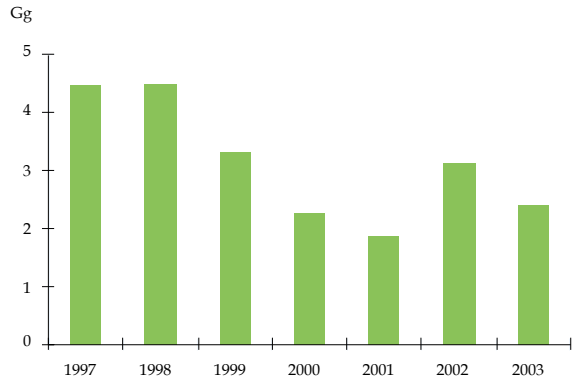
Total NO_x emissions - EDP in Portugal



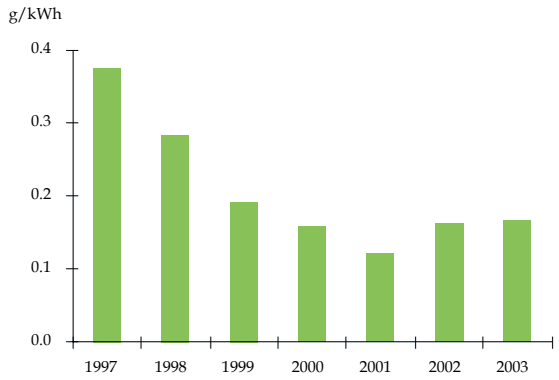
Specific NO_x emissions from thermal power stations - EDP in Portugal



Total particulate emissions - EDP in Portugal



Specific particulate emissions from thermal power stations - EDP in Portugal



The first phase of a minority pollutants emission characterisation programme – heavy metals, volatile organic compounds, dioxins and furans – begun in 1999, was also concluded in 2003. The results show that the fuels used give rise to emissions below the typical figures reported for this type of unit. A second phase of the programme will begin in 2004 with a view to obtaining additional pollutants characterisation, both in the flue gas and in the various forms of particulate matter.

Fire extinguish systems using Halon – an ozone depleting substance - were replaced at the end of 2003. The equipment was inventoried, taken out of service and stored and will be eliminated by a licensed contractor during 2004.

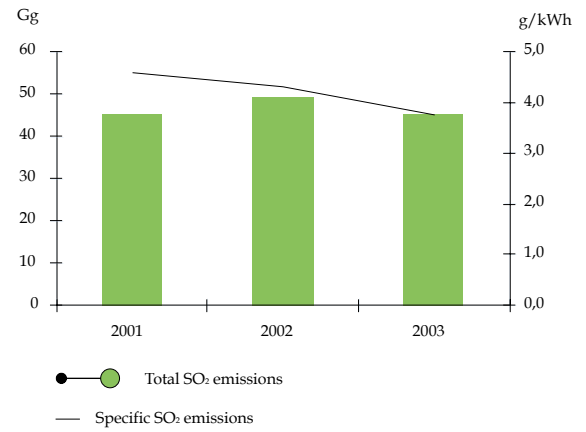
In Spain, the environmental authorities also decided to establish a national emission reduction plan under the terms of Directive 2001/80/EC. During 2003, the necessary information was collected from the companies in question, including HidroCantábrico.

HidroCantábrico has already planned the investment required to adapt its coal-fired thermoelectric power stations to the new requirements of the Directive, which is not therefore expected to have a negative effect on its forecast useful life. These investments will total € 146 million during the coming years.

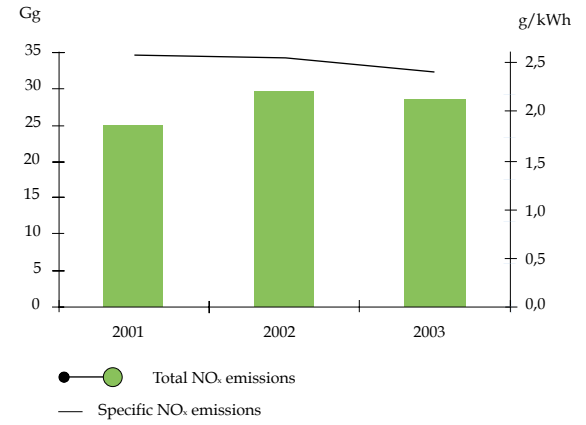
The average annual emissions of HidroCantábrico power stations have remained below the legal limits. The characteristic of the coals used by Aboño and Soto power stations allowed specific emission figures to be obtained similar to those of 2002. Castejón natural gas combined cycle plant, in operation since October 2002, also recorded emissions within the legal limits imposed by European legislation for new units.

Several measures were implemented at Aboño power station involving the electrostatic precipitators, with a view to optimising their operation.

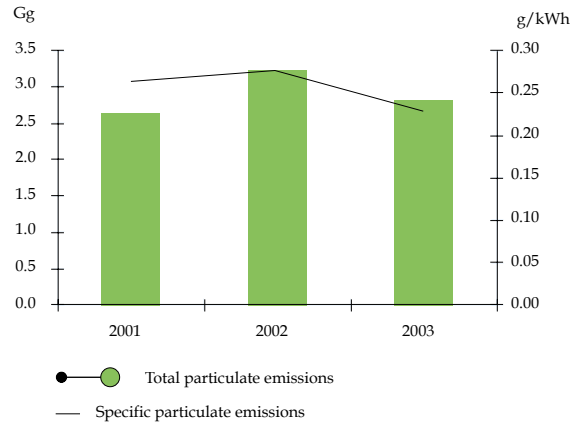
Total and specific SO_2 emissions from thermal power stations - HidroCantábrico



Total and specific NO_x emissions from thermal power stations - HidroCantábrico



Total and specific particulate emissions from thermal power stations - HidroCantábrico



In Brazil, the EDP Group's involvement in thermoelectric generation is small. Fafen natural gas cogeneration plant is fitted with low NO_x burners and the typical figures for this pollutant as measured at the plant are 48 ppm.

Enersul owns three small thermoelectric power stations, two of which are used only in case of emergency. No monitoring is currently undertaken of atmospheric emissions. Implementation of a gas emission monitoring system is planned for 2004 at Porto Murtinho power station, the only operating on a regular basis, in keeping with the conditions of the respective environmental licence.

>> 1.4 Air quality

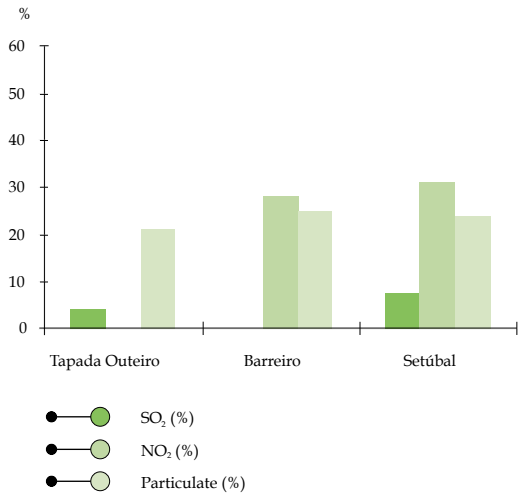
Integration of the private air quality monitoring networks into the National Measurement Network is one of the objectives of the Portuguese environmental authorities. This process implies harmonisation of the information collected and the increase of the availability and reliability of the data.

In this context, work continued on the overhaul of Barreiro and Setúbal thermoelectric power stations networks and a start was made to the definition of a specific quality control programme that will include the use of Labelec Mobile Air Quality Laboratory.

Work was also directed at integrating the monitoring network of Carregado power station into the new network of Ribatejo natural gas combined cycle power station, currently under construction. The new network will meet the monitoring needs of both plants. These measures implied long periods of non-availability of the Carregado network equipment and thus no data is available for 2003 in this power plant.

The operation of air quality monitoring networks allows EDP to monitor air quality in the vicinity of its thermal generation units. The level of atmospheric impact of these facilities on its surroundings is measured by the Air Quality Index.

Maximum of the Air Quality Index by monitoring network - EDP in Portugal [1] [2] [3]



[1] Air quality monitoring in the surroundings of Sines power station is undertaken by the CCDR-Alentejo.

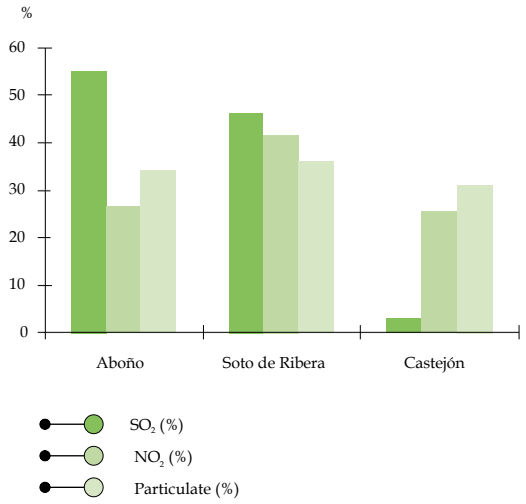
[2] Data from analysers with a working efficiency under 75% were not considered.

[3] The network of Carregado power station did not reach the minimum availability level owing to the in-depth overhaul undertaken during 2003.

In Spain, HidroCantábrico also operates air quality monitoring networks. Throughout 2003, the company continued with its network improvement plan, setting up new equipment at Aboño power station, improving communication and data processing and integrating the monitoring networks of Aboño and Soto power stations into a single management centre.

The figures recorded at all the power stations were lower than the limit figures established by law.

Maximum of the Air Quality Index by monitoring network - HidroCantábrico



>> 1.5 Hydro resources

EDP thermoelectric power stations in Portugal undertake continuous monitoring and regular analyses of specific parameters of their liquid effluents, in accordance with the requirements of the respective permits. In 2003 the results obtained were below the maximum limits established both by Portuguese legislation and by the specific permit conditions.

At Sines, for the third consecutive year, cooling water chlorination was suspended during the three winter months, as a result from chlorination optimisation biological studies.

EDINFOR's industrial printing business also generates liquid effluents. In 2003 the company begun the operation of a wastewater treatment plant in which the effluent is processed in order to comply with the parameters of the discharge permit.

Objectives

2004: Implementation of the liquid effluent monitoring plan at ENERGIN cogeneration plant.

HidroCantábrico continued with the environmental improvement plan of Aboño power station, that includes the construction, now under way, of a new wastewater treatment plant designed to improve the quality of the effluents discharged into the environment.

>> 1.6 Biodiversity and landscape

In April 2003, EDP Distribuição entered into a protocol with the Nature Conservation Institute (Portuguese acronym ICN), and two NGOs: the Portuguese Society for the Study of Birds (Portuguese acronym SPEA) and Quercus. The aim is to design measures to harmonise high and medium-voltage electricity networks with bird life. The protocol, which introduces a number of measures defined within the scope of the PPQA 2002-04 gave rise to the following activities:

- Analysis by EDP Distribuição of possible technical solutions that reduce the risk of electrocution and collision of birds, with a view to prepare a handbook of recommendations for the adaptation, design and construction of medium and high-voltage distribution lines;

- Progressive introduction of corrective measures in lines with higher bird life hazardous potential.

EDP Distribuição, ICN, Quercus and SPEA protocol

The protocol is based on two major studies:

Dispersal study: *Marking and Monitoring Birds with Priority Conservation Status*. The study, led by ICN, is designed to assess the interaction of threatened bird species with existing electricity lines in their vital areas of dispersal. Work began in 2003 with the marking and fitting of radio-tags to three young golden eagles.

Impact study: *Overall Characterisation of the Impacts of Overhead Electricity Distribution Lines on bird life in Portugal*. The study, led by Quercus and SPEA, is designed to identify and quantify wild bird mortality phenomena linked to medium and high-tension electricity lines. Begun in 2003, it has already allowed the identification of several lines with potentially stronger negative effect on bird life.

The efforts made by EDP Distribuição in the placement of white stork nesting platforms were found, in some cases, to be harmful both to network operation and to the birds themselves, which, as a result of their proximity to electrical structures, are often victims of collision and electrocution. With a view to minimising this problem, a campaign was undertaken between October and December 2003, with the authorisation of ICN, to transfer the nests to special platforms set beyond the area of influence of the network and to fix anti-landing devices on sensitive points to avoid the construction of new nests.

To minimise the impact on the freshwater ecosystems downstream from the hydroelectric power stations, EDP has carried out flow-optimisation studies and has assessed the need to maintain an environmental flow. Studies continued during 2003 on the waterfall of the river Ave, and are expected to cover also Penide and Cefra and Serra da Estrela hydro scheme in 2004.

In compliance with the minimisation measures established by the Environmental Impact Assessment process (Portuguese acronym AIA), monitoring programmes where developed with the support of EDP Produção EM, on the bat and the wolf populations at Alto do Talefe and Fonte da Quelha wind farms, both currently under construction.

In Brazil, EDP is associated with two large-scale hydroelectric power stations, Lajeado, already in operation, and Peixe Angical, currently under construction. Each power station has a number of Basic Environmental Programmes, under which close monitoring is undertaken of its impacts on biodiversity. Of the more than 30 programmes implemented at each power station, several are designed to preserve the fauna and flora of the region and have provided a significant increase of knowledge of the local biotic environment.

In electricity distribution activities in Brazil, procedures have also been implemented to minimise the impacts of the overhead lines, through marking the lines, redesigning the supports and placement of platforms for nests, to prevent nests to be built on the infrastructures.

>> 1.7 Waste

Industrial waste generated by EDP's activities is collected, stored and processed by licensed waste management contractors, preferably through recovery operations. This also applies to the waste generated by the industrial printing activities of EDINFOR, namely lubricating oil, inks and printing products.

During 2003, within the scope of EMS implementation at hydroelectric generation centres, selective collection and storage procedures were improved at Douro, Penide, Cefra and Serra da Estrela generation centres.

EDP Distribuição entered into a contract with a licensed operator for the collection and recycling of used concrete poles. The first stage, already underway, involves the recycling of accumulated poles and the selection of specific sites where, from now on, all unusable material will be stored prior to its transportation to recycling facilities. Within two to four years, this programme will allow effective management of this type of waste, putting an end to a situation that was at the root of complaints lodged by local communities. About 19 000 tonnes of poles accumulated from previous years were recycled in 2003.

Recycling used concrete poles

Maintenance of the electricity distribution network gives rise to significant quantities of concrete poles withdrawn from service every year, many of which unable to be reused.

In 2003, EDP Distribuição implemented new procedures to deal with the collection and recycling of this type of waste. Used poles are now collected and transported to specialised facilities, where they go through various fragmentation stages that separate their steel and concrete components.

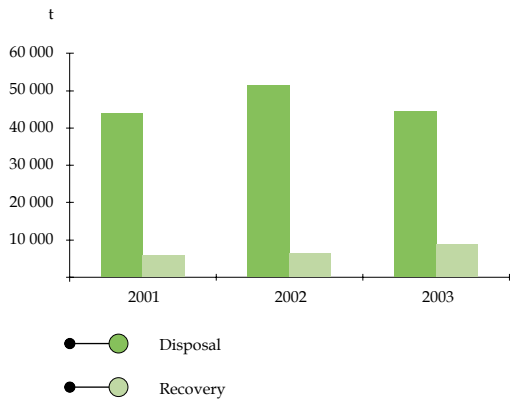
Concrete is crushed so as to allow reuse in applications such as pavements.

The rebars are pressed to remove any remaining concrete and recycled by the steel industry.

By-products and main categories of industrial waste produced by EDP in Portugal

	Quantity produced (t)			Final destination in 2003
	2003	2002	2001	
By-products				
Recovered coal fly ash	371 541	372 976	304 112	Recovery in the cement industry
Hazardous Industrial Waste				
Fuel-oil fly and bottom ash	1 054	4 115	2 907	Inertization followed by stabilization of phosphogypsum deposits
Used oil	343	245	317	Energy recovery
PCB containing equipment	33	51	34	Incineration in special facility
Light bulbs	13	55	n.d.	Recycling in special facility
Non-hazardous Industrial Waste				
Unrecovered coal fly ash	5 203	5 843	12 043	On-site deposition
Coal bottom ash	38 202	41 310	28 745	On-site deposition
Biomass ash	5 233	3 944	904	Recovery as fertilizer
Metallic scrap	2 920	2 078	4 391	Recycling
Total waste	53 002	57 641	49 341	

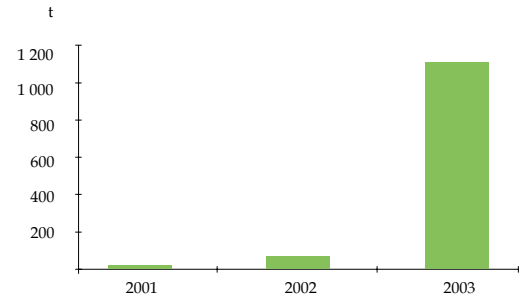
Industrial waste produced by EDP in Portugal



The programme of selective collection and recovery of urban waste, already implemented at the industrial facilities of EDP Produção and EDP Distribuição, was extended to other facilities. EDP Valor, which is charged to manage most administrative buildings of the EDP Group in Portugal, has implemented a selective collection system for used paper and computer consumables, that are now recovered through municipality circuits or via specialised contractors.

Similar procedures have also been implemented at ONI and EDINFOR buildings. There is a significant quantity of waste paper at the latter, generated by the printing and finishing units. Since these are recent procedures, quantified data is currently available only for paper and cardboard waste.

Selective collection and recovery of used paper at EDP facilities in Portugal



HidroCantábrico has its own industrial and urban waste minimisation and recycling plans. Aboño and Soto de Ribera coal-fired power stations hold special permits to perform energy recovery of used oil coming both from the company's activities and from licensed waste managers. In 2003, 2885 tonnes of used oils were recovered by HidroCantábrico by use as substitution fuel.

Main categories of industrial waste produced by HidroCantábrico[1]

	Quantity produced (t)			Final destination in 2003
	2003	2002	2001	
Hazardous Industrial Waste				
Used oil	64	64	48	Energy recovery at HC coal-fired plants
PCB containing equipment	85	47	21	Incineration in special facility
Non-hazardous Industrial Waste				
Coal fly and bottom ash	645 106	657 790	674 710	Recovery in the cement industry
Total waste	645 255	657 900	674 779	

[1] In Spain, recovered coal fly and bottom ash are classified as waste rather than as a by-product.

Different urban waste types are collected separately at HidroCantábrico, particularly paper, computer consumables, glass and packaging waste, though no quantification is yet available.

Waste generated by the activities of the EDP Group in Brazil comes essentially from the distribution business of Bandeirante, Escelsa and Enersul. Waste is separated and managed according to its classification in Brazilian legislation, and its treatment is undertaken by specialised contractors.

During 2003, Bandeirante and Enersul contracted specialised operators to dispose oil contaminated inert material and to recycle lead batteries. The withdrawal from service and special disposal of PCB containing capacitors continued at Bandeirante.

>> 1.8 Noise

Within the scope of EMS implementation at EDP Produção facilities, systematic evaluation of noise levels was introduced. During 2003, a number of non-compliance situations were detected and adequate minimisation measures are under review.

EDP Distribuição proceeded, within the scope of PPQA 2002-2004, with a noise-level monitoring programme. Noise-abatement corrective measures were introduced in four situations, one of which involving the construction of a new transforming station.

A number of sound-proofing measures were implemented at HidroCantábrico thermoelectric power stations, namely the acoustic insulation of equipment, the fitting of silencers on fans, or its replacement by more modern equipment.

In Brazil, Enersul substations are subject to annual noise monitoring procedures. In 2003, 87 substations were inspected, no case of non-compliance having been encountered.

Objectives

2004: Introduction of noise monitoring procedures at Bandeirante substations and surrounding areas.

>> 1.9 Electric and magnetic fields

In the telecommunications area, ONI has implemented a number of measures designed to ensure that its equipment is used under safe conditions and in accordance with European recommendations.

Electric and magnetic field monitoring efforts are focused on wireless transmission systems, particularly fixed wireless access systems, as they comprise a network of base stations, many of which located in urban areas, thus requiring the installation of antennas near residential or office blocks.

In 2003, ONI carried out a complete study on radiation effects and emission levels associated with this type of equipment. The results showed electromagnetic field levels well below the limit values defined in the Recommendation of the Council of the European Union. One metre away from the antennas, radiated power density is less than 1% of the limit values established in the Recommendation.

Monitoring the intensity of the electric and magnetic fields generated by the EDP Distribuição facilities continued in 2003, both through *in loco* measurements carried out by Labelec and by computerised analytic calculation.

EDP Distribuição lends considerable importance to this subject, once that it is extremely sensitive as far as public opinion is concerned. Every related information request or complaint (13 in 2003) is duly monitored and field levels are checked. All cases evaluated during the year were below the recommended limit values and no corrective measure was required.

>> 1.10 Compliance

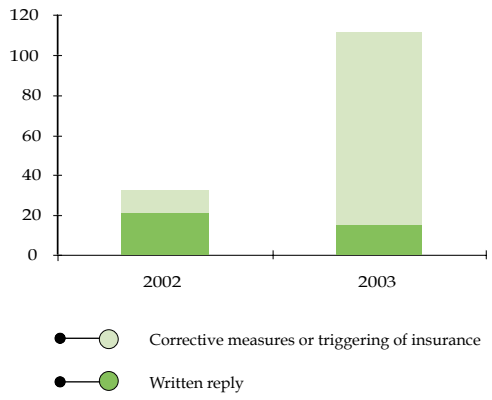
Two incidents of an environmental nature were reported during 2003 in respect of electricity generation activities in Portugal; an oil spill and a particulate emission situation. In the former, containment procedures were applied and the area was cleaned, no environmental damage having been recorded. The particulate emission situation led to property damage in the nearby residential area.

Ten administrative proceedings were brought against EDP for non-compliance with environmental legislation. In one of the cases, the company paid the respective fine and a decision is awaited in the others. With regard to the two proceedings brought in 2002, one led to the acquittal of the company and a decision is awaited in the other.

EDP environmental departments recorded a total of 111 environmental related complaints. The increase was the result of the large number of complaints (93) in respect of the said release of particulate matter. These complaints are under review by the insurance company and it cannot yet be ascertained how many will give rise to payment of compensation.

In the electricity distribution area, complaints of an environmental nature are mainly related to noise, visual impact and concerns regarding possible effects of electromagnetic fields on human health. The complaints gave rise to monitoring procedures, and to the preparation of written replies. No compensation payments have been made.

Environmental related complaints recorded by EDP in Portugal [1] [2]



[1] During 2003, 93 complaints received at the end of the year are being reviewed by the insurance company.

[2] Information provided by electricity distribution and generation.

There were no incidents or complaints of an environmental nature in the electricity generation and distribution activities of HidroCantábrico.

The company recorded two administrative proceedings in electricity generation activities (exceeding the particulate emission limit and increase of the temperature of the water environment at Soto) and a further five linked to distribution activities (occupation of public domain without prior authorisation).

>> 2. Social performance

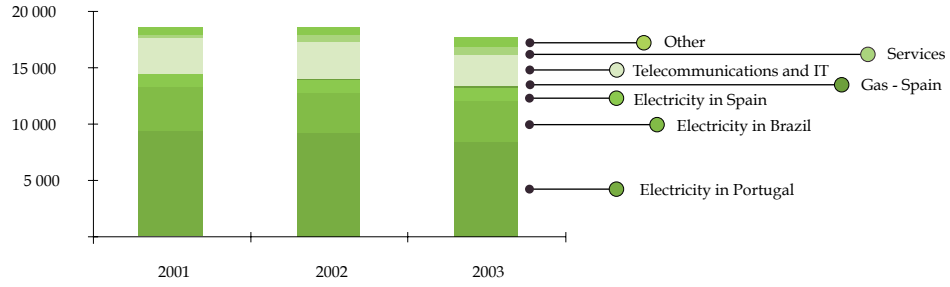
>> 2.1 Employment

As a result of the process of internationalisation of EDP's business, its employees are now largely distributed in two regions: the Iberian Peninsula and South America. The larger part of the company's human capital is to be found in the electricity sector, particularly in distribution business.

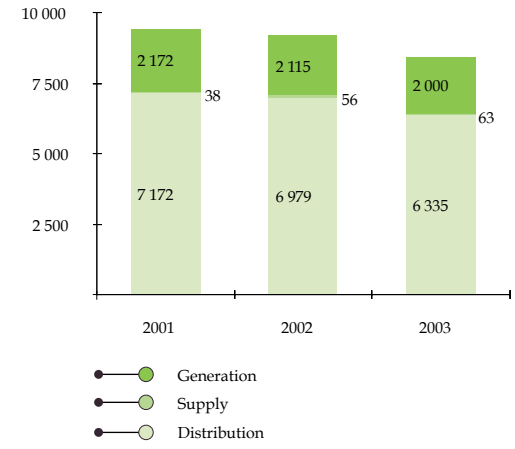
As part of the Group's business optimisation process, EDP launched a programme to support human resources restructuring in the period 2003-04, in order to bring them into line with the needs of the company within the new framework of a liberalised market.

EDP intends to cut its staff by 1 200, having reached agreement during 2003 with 626 employees. At the same time, the company provided a support programme to help in the search for new jobs, in setting up own business, and in support of active retirement. More detailed information on the restructuring plan can be found in the Institutional Section of the EDP Annual Report and Accounts 2003.

Nr. of employees by business area



Nr. of employees in the electricity sector in Portugal



Of the total of 9 615 employees covered by ACT, only 2% are on temporary contract, the remainder being permanent employees.

Worker committees meet periodically with the company management. 82% of the employees are union members. During 2003, 0.05 days/worker were lost through strikes.

The average age of the EDP employees continues to be high (45). Within the scope of the staff rejuvenation policy, the company continued to make efforts during 2003 to attract young skilled personnel, particularly through participation in various career and employment fairs, especially those organised by universities. Of the personnel taken on in 2003, 78% were aged less than 34.

Employee age pyramid

The great majority of the EDP staff consists of men, the percentage of women amounting to just 17%. This figure falls to 8% in senior management.

EDP's core business is traditionally a male area and, despite the fact that the company has no discriminatory practices, new staff taken on continues to be predominantly of the male gender. During 2003, a total of 96 new employees was taken on, of whom 23% were female. This figure, higher than the company's average, shows a slight tendency towards improving the gender balance of EDP staff.

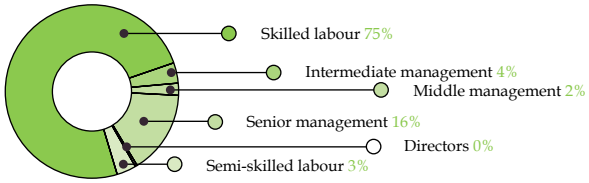
A total of 7 315 spontaneous job applications were registered via the company's website, a figure significantly higher than in 2002, increasing EDP's image as a benchmark company and coveted employer.

Employee turnover stood at 1.4%, excluding all cases of retirement (2.0% excluding only early retirements). This figure, fairly low for the electricity sector, is lower than in 2002 and reflects EDP's capacity to retain its human capital.

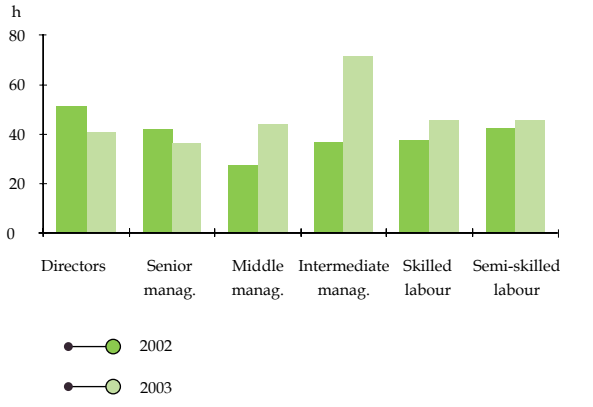
>> 2.2 Training

Staff training is increasingly one of the critical success factors of the EDP Group. The training plan for 2003 was directed at two priority areas: technical area – engineering, economy and management, information systems, and foreign languages, particularly English and Spanish – and behaviour area.

Breakdown of training time by professional category



Average training time by professional category



Average training time per employee was 44 hours, considerably higher than in 2002 (38.2). Training involved 3 321 employees, totalling 141 000, hours of which about 101 000 were given by MRH, the Group's company specialised in training. The direct cost of training was about € 3.1 million, similar to the figure for 2002.

The focus continued to be on the use of new technologies to support training, through the preparation of an adaptive e-learning platform, considered to be a prime instrument of the future. During 2003, training was already provided by means of e-learning in the area of electric risk prevention.

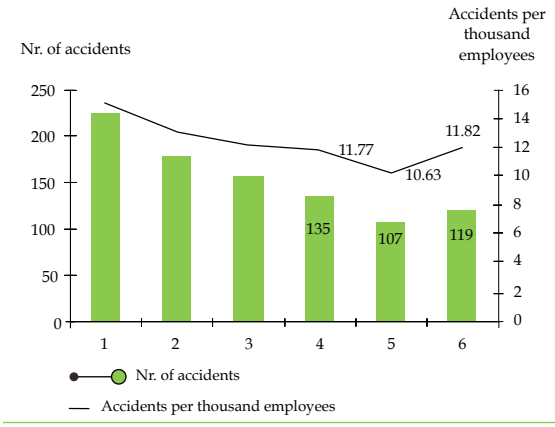
>> 2.3 Health and Safety

Within the scope of the EDP Group's Safety Policy, renewed in 2002, the activities undertaken during the year in this area were directed at the implementation of operational procedures with a view to consolidating a health and safety management system based on OSHAS 18 001 Standard. This standard is compatible and can be integrated with the ILO (International Labour Organisation) code.

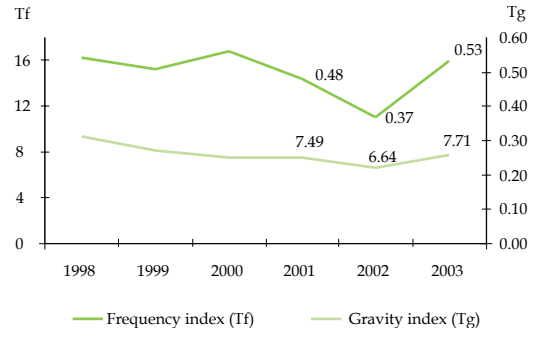
EDP won the 2003 Henrique Salgado Prevention and Risk Management Award instituted by Tranquilidade insurance company to distinguish best practice regarding industrial safety and health.

In 2003 there was a slight increase of the number of accidents compared to the previous year. This was due to extremely adverse conditions for electricity network operation, as a result of the severe weather conditions in early winter and of the devastating wave of forest fires in the summer. There was also an unfortunate fatal accident.

Total work-related accidents and incidence per thousand employees



Work-related accidents frequency (Tf) and gravity (Tg) indexes



2003 Henrique Salgado Prevention and Risk Management Award

In 2003 EDP won, for the third time, the Henrique Salgado Prevention and Risk Management Award.

Organized by Companhia de Seguros Tranquilidade and now in its 6th edition, the award is designed to distinguish best corporate practice in the area of industrial safety and health.

In 2003, EDP submitted its work on *Consolidation of the Safety Culture – Prevention of the Electric Risk*, including a number of initiatives developed within the scope of the new Safety Policy, namely:

- Approval of the Electric Risk Prevention Handbook;
- Institution of the Certificate of Competence and Safety Passport management mechanisms.
- e-learning training course in Electric Risk Prevention.

Objectives

2005: Extending the Certificate of Competence and the Safety Passport to every EDP's service providers in Portugal.

>> 2.4 Community

As part of the company's sponsorship principles, EDP undertook a vast number of initiatives during 2003, of which attention is called on the following:

- In the cultural area – EDP Art Award, currently divided into two categories: EDP Grand Prize for renowned artists; and EDP New Artists Prize for new talents. Several exhibitions were organised, some in partnership with other institutions such as Serralves Foundation;
- In the social area – Support to the ANDDEM - National Sports Association for the Mentally Handicapped athletics team and to Casa de Betânia association that promotes family and social integration of mentally handicapped youths and adults;

- In the sports area – Sponsorship of the City of Oporto Festivals Race, of Portugal Half Marathon and of Lisbon Half Marathon. More than 35 000 athlets took part in the latter event.

EDP also supports, on a regular basis, the Youth Symphony Orchestra and the Portuguese National Ballet Company, of which it is the sole sponsor.

Since 2001, EDP donates the sum traditionally set aside for Christmas gifts to a project of social merit. In 2003 the company supported the initiatives of the Life and Peace Community in Lisbon and Caritas in Setúbal, directed at the homeless. This support was not restricted to the pecuniary side, but also included the voluntary involvement of company employees.

EDP Group companies also undertook a large number of initiatives involving the communities living around its facilities. In this connection the focus is on the support provided to cultural, sports and recreational associations, the allocation of IT material to social welfare institutions and the support to fire brigades. With a view to providing greater knowledge of its activities, EDP takes part in meetings of technical nature and encourages visits to its generation facilities, particularly wind farms, which received more than 2 000 visitors throughout 2003.

EDP volunteers help Christmas with the homeless

The 15th *Christmas with the Homeless*, organised by the Life and Peace Community welcomed about 2 000 people in Lisbon.

This year, the initiative was able to rely on the help of EDP. The company encouraged the active participation of its employees and was represented at the highest level at the Christmas supper.

About 80 employees and their families were involved. In addition to their support to the organisation of the supper, the EDP Group employees donated about 100 tonnes of clothes collected at the company's facilities around the country.

Objectives

2004: Definition of a system of systematic collection and analysis of data in respect of the total support and sponsorship granted by the EDP Group in Portugal, to allow more effective disclosure of information of this kind.

Set up in 1996, the HidroCantábrico Foundation is a public-interest entity whose aim is to encourage activities of a cultural, academic, sports and social nature.

In the social area, the focus in 2003 is on the co-operation with Caritas and the Red Cross and, in the cultural area, on its sponsorship of the Jazz Festival at Bueño where one of the company's thermoelectric power stations is located, in addition to a series of concerts in various townships of Asturias.

HidroCantábrico Foundation also encouraged sports, through its sponsorship of the Asturian Sail Week and took part in conferences and in conventions with universities.

In Brazil, Bandeirante went ahead with the Bandeirante Education Community project, providing 21 000 school kits in addition to promoting health and protection of the environment at schools.

Bandeirante was noted as an example of a socially responsible company by the Ethos Institute of Companies and Social Responsibility, as a result of its activities within the scope of the programme to fight hunger in Brazil. During 2002, the company drew up a plan to collect food in exchange for energy-efficient lamp bulbs.

Escelsa focused on partnerships with local communities, particularly support to educational projects directed to protection of the environment and accident prevention. During 2003, the company organised several training courses for children and adolescents through the ACES (Community Action of Espírito Santo) Projects and the Adolescent and Trainee Programme.

Escelsa wins COGE Foundation award

The COGE (Corporate Management Committee) Foundation, is an institution of a technical and scientific nature that, since 2001, has awarded prizes to successful measures and projects of electricity companies.

In 2003, Escelsa won in the 2nd category (Social Responsibility Measures) out of a total of 60 projects submitted by 30 companies in the sector.

Among other objectives, this prize is designed to reward successful projects in "People Development, Social Responsibility Programmes, Measures directed at the Environment, and Safety and Occupational Health Management".

>> 3. Economic performance

EDP Group's 2003 EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation) amounted to € 1 827 billion, an increase of 22.7% over 2002.

This growth was driven, in the first place, by the change in the Group's consolidation perimeter, particularly as a result of the contributions made by HidroCantábrico, Escelsa and Enersul. EDP Produção and EDP Distribuição also made a significant contribution as a result of restraining operating costs and of the increase of Gross Profit, respectively. ONI had a positive impact as a result of the increase of revenue and of the discontinuation of the mobile phone business.

Economic and financial highlights

thousand euros

	2003	2002	2001
Turnover	6 977 520	6 386 558	5 650 374
Operating Profit	905 742	648 704	673 332
Net income	381 109	335 216	450 795
Operational investment [1]	1 067 951	1 479 976	1 359 572
Financial Investment	181 760	966 434	479 737
Net Assets	18 650 669	18 125 190	16 233 093
Own Funds	5 298 007	5 494 182	6 096 758
Financial Liabilities	7 492 709	7 994 076	5 799 124
Market capitalisation	6 270 000	4 770 000	7 320 000
Earnings a share (Euro)	0.127	0.112	0.150
Payout Ratio [2]	70.8%	80.5%	75.2%

[1] Considering 100% of the operational investment of the consolidated companies
[2] Dividend distributed in respect of the previous year / Net income for the previous year

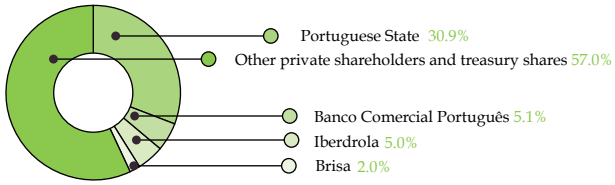
As the same time as it creates value for its shareholders, EDP is also concerned to create value for other stakeholder groups: employees, suppliers and community in general.

The present section is designed to quantify the direct economic impact of EDP on these stakeholders. A detailed review of the company's financial performance is available for consultation in the Financial Section of EDP Annual Report and Accounts 2003.

>> 3.1 Investors

EDP made a start in 1997 to the privatisation of its share capital. About 70% of the company is now held by private shareholders, the majority small investors.

Simplified shareholder structure



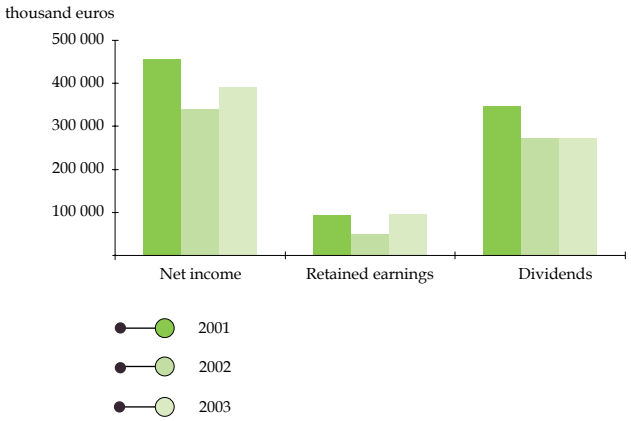
EDP is listed on Euronext Lisbon and on the New York Stock Exchange. At the end of 2003, the company accounted for about 15% of the PSI 20, Portugal's main stock market index, and was one of seven Portuguese companies included in the Euronext 100 index.

During 2003, EDP shares appreciated by 31.4%, outperforming the average of its main European counterparts.

EDP shares are currently among the most liquid of the Portuguese market, and an average of 6 million shares were traded everyday during 2003.

EDP has followed a sustainable dividend distribution policy, based on sharing with its shareholders a significant part of the value created by the company, in keeping with the specific conditions both of the company and of the market.

Net income, retained earnings and dividends



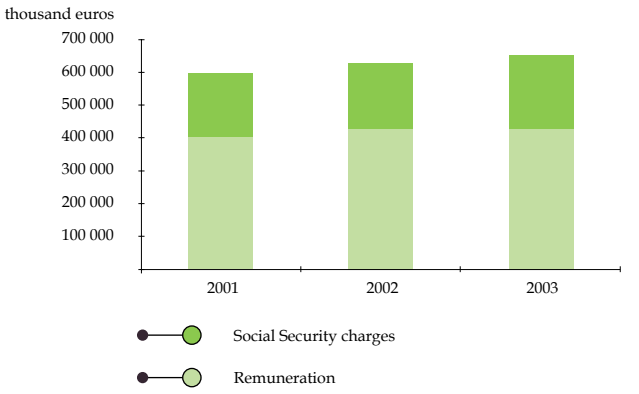
>> 3.2 Employees

The companies controlled by EDP currently employ over 17 000 people on the Iberian Peninsula and in Brazil.

EDP has social benefit plans that include pension complements and the provision of medical care to workers in service, retired personnel and pensioners.

In 2003, total staff costs amounted to €646.6 million, of which about 35% were accounted for by social security charges.

Staff costs



In accordance with the EDP articles of association, a part of the profit of the Group companies is distributed to employees in the form of profit-sharing, in accordance with criteria that are defined each year.

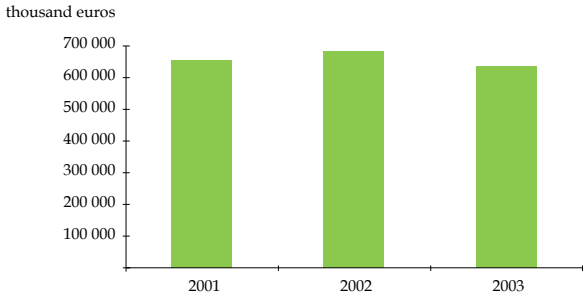
>> 3.3 Suppliers

In 2003, the operational investment of the EDP Group amounted to € 1 068 million, a decrease of 18.4% compared to 2002.

Heavy investment was made in increasing electricity generation capacity in Portugal, particularly in the construction of the new Ribatejo natural gas combined cycle power station, the upgrading of Venda Nova hydroelectric power station and the construction of new wind farms. At EDP Distribuição investment was directed at the enlargement and improvement of the distribution network. There were also significant investments in new aeolic capacity at HidroCantábrico and in fixed telecommunications operations in Spain by ONI.

During 2003, EDP bought supplies and services worth about € 632.5 million.

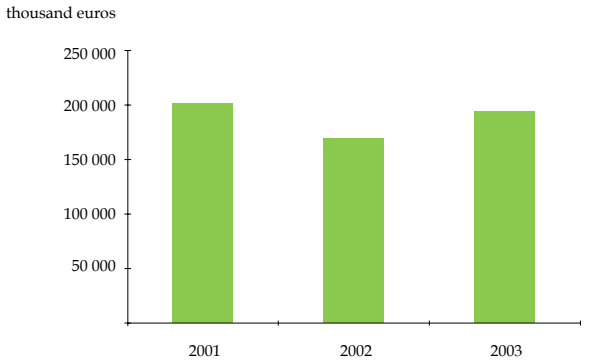
Third-party supplies and services



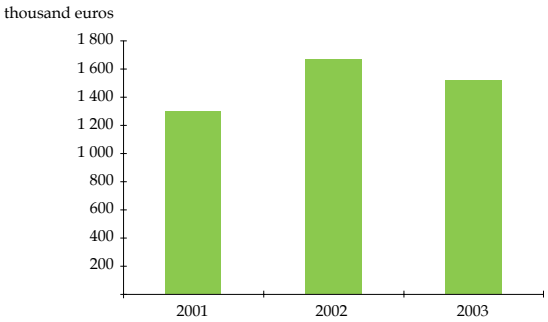
>> 3.4 Community

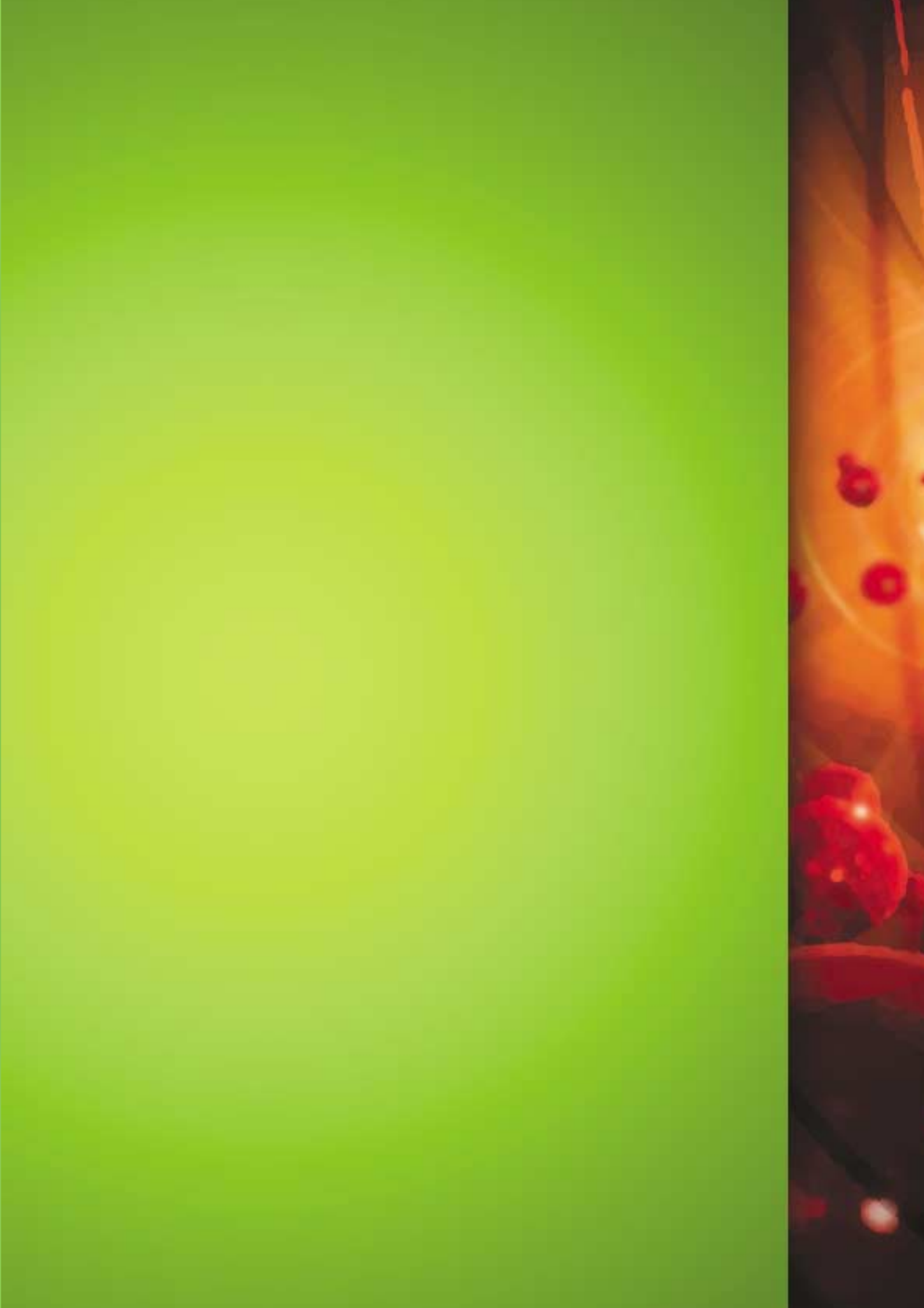
The community in general also benefits directly from the results of EDP's business. In addition to resources generated by its compliance with its tax obligations, EDP also grants direct financial support to initiatives organised by the civil society, relevant to the social, cultural, scientific or sports development of the community.

Income tax



Donations





>> FACILITIES

>> Contents

>> EDP ELECTRICITY GENERATION PLANTS IN PORTUGAL

LEGEND

- HYDROELECTRIC POWER STATIONS ⩽ 10MW
- HYDROELECTRIC POWER STATIONS > 10MW
- WIND FARMS
- BIOMASS POWER STATIONS
- THERMOELECTRIC POWER STATIONS
- GAS FIRED COGENERATION POWER STATIONS

>> Thermal power stations in Portugal

>> Characteristics

	Tapada do Outeiro[1]	Carregado	Setúbal	Sines	Barreiro	Alto Mira[2]	Tunes	Mortágua
Type of power plant	Steam turbine	Steam turbine	Steam turbine	Steam turbine	Steam turbine	Gas turbine	Gas turbine	Steam turbine
Installed capacity (MW)	47	710	946	1 192	56	132	197	9
Gas treatment	Electrostatic precipitators	Electrostatic precipitators	Electrostatic precipitators	Electrostatic precipitators	None	None	None	Electrostatic precipitators
Combustion modifications	None	None	None	Low NOx burners in all generation units	None	None	None	None
Wastewater treatment	Physical & chemical: coagulation/ flocculation/ sedimentation	Physical & chemical: coagulation/ flocculation/ sedimentation	Physical & chemical: coagulation/ flocculation/ sedimentation	Physical & chemical: coagulation/ flocculation/ sedimentation	Physical & chemical: coagulation/ flocculation/ sedimentation	None	None	None
Environmental Management System	None	ISO 14 001 Dec. 2000	ISO 14 001 Oct. 1999	ISO 14 001 Sep. 2001	ISO 14 001 Nov. 2000	None	None	None

>> Operational data

		Tapada do Outeiro	Carregado	Setúbal	Sines	Barreiro	Alto Mira	Tunes	Mortágua
Net electricity generation (MWh)		- 613	1 091 210	1 834 193	9 473 055	194 918	- 98	26 573	38 323
Steam generation (TJ)		n.a.	n.a.	n.a.	n.a.	1 671	n.a.	n.a.	n.a.
Fuel consumption	**Fuel oil (t)**	82	159 220	446 569	6 740	100 988	n.a.	n.a.	n.a.
	Diesel (t)	n.a.	n.a.	n.a.	n.a.	n.a.	339	11 432	n.a.
	Coal (t)	n.a.	n.a.	n.a.	3 479 060	n.a.	n.a.	n.a.	n.a.
	Natural gas ($Nm^3 \times 10^3$)	n.a.	130 959	n.a.	n.a.	n.a.	n.a.	n.a.	798
	Forest waste (t) [3]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	89 704
Gross water consumption (m^3)		23 183	790 000	460 302	1 629 393	594 010	n.a.	n.a.	69 223
Cooling water (m^3) [4]		57 816	357 200 000	228 490 200	1 209 285 000	44 645 450	n.a.	n.a.	15 000

>> Environmental data

Air emissions [5]

	Tapada do Outeiro [6]	Carregado	Setúbal	Sines	Barreiro	Alto Mira	Tunes	Mortágua
SO_2 (kt)	-	4.26	10.34	49.72	1.894	0.00	0.05	0.00
NO_x (kt)	-	2.22	4.92	23.83	1.192	0.00	0.04	0.13
CO_2 (kt)	-	784	1400	8440	317	1	31	1.7
Particulates (kt)	-	0.12	0.25	1.94	0.068	n.av.	n.av.	0.03

Wastewater

	Tapada do Outeiro	Carregado	Setúbal	Sines	Barreiro	Alto Mira	Tunes	Mortágua
Waste stream (m^3)	1 528	143 000	204 746	1 022 393	162 789	n.a.	n.a.	n.av.
Suspended solids (mg/l)	33. 656	12.453	14.483	12.480	16.811	n.a.	n.a.	n.av.
Iron (mg/l)	0.198	0.270	0.390	0.040	0.176	n.a.	n.a.	n.av.
Copper (mg/l)	0.006	0.005	0.007	0.005	0.255	n.a.	n.a.	n.av.
Zinc (mg/l)	0.040	0.046	0.069	0.040	0.060	n.a.	n.a.	n.av.
Nickel (mg/l)	0.033	0.026	0.092	0.150	0.020	n.a.	n.a.	n.av.
Vanadium (mg/l)	0.227	0.234	0.339	0.050	0.056	n.a.	n.a.	n.av.
Chromium (mg/l)	0.005	0.004	0.003	0.010	0.003	n.a.	n.a.	n.av.
Oils and grease (mg/l)	0.204	n.av.	0.593	0.110	0.181	n.a.	n.a.	n.av.
Hydrocarbons (mg/l)	0.135	n.av.	0.606	0.330	0.128	n.a.	n.a.	n.av.

Waste

	Tapada do Outeiro	Carregado	Setúbal	Sines	Barreiro	Alto Mira	Tunes	Mortágua
Non-recovered coal fly ash (t)	n.a.	n.a.	n.a.	5 202.7	n.a.	n.a.	n.a.	n.a.
Coal bottom ash (t)	n.a.	n.a.	n.a.	38 202.3	n.a.	n.a.	n.a.	n.a.
Fuel oil fly and bottom ash (t)	0.0	443.3	607.7	n.a.	3.1	n.a.	n.a.	n.a.
Biomass ash (t)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5 233.0
Used oil (t)	0.0	14.7	21.5	30.7	1.9	0.0	0.4	1.6
Metal scrap (t)	0.0	104.5	197.8	291.5	26.7	0.0	0.0	20.9
PCB containing equipment (t)	0.00	2.19	0.00	0.00	1.77	0.00	0.00	0.00

By-products

	Tapada do Outeiro	Carregado	Setúbal	Sines	Barreiro	Alto Mira	Tunes	Mortágua
Recovered coal fly ash (t)	n.a.	n.a.	n.a.	371 540.6	n.a.	n.a.	n.a.	n.a.

n.a. - Not applicable

n.av. - Not available

(1) The de-activation of the plant's last group, due in 2002, was delayed until the end of 2004

(2) The power station was shut down on June 30, 2003.

(3) Includes forest waste, pine and eucalyptus bark and other types of biomass.

(4) Total water consumed in the facility.

(5) Total SO_2 calculated on the basis of fuel characteristics; NOx and particulate calculated on the basis of monitoring data; CO_2 calculated on the basis of fuel characteristics for coal, and on emission factors for other fuels;

(6) The power station worked only eight hours in 2003. Emissions not recorded.

>> Gas fired cogeneration power stations in Portugal

>> Characteristics

	Soporgen	Energin
Type of power plant	Cogeneration	Cogeneration
Installed capacity (MW)	67	43.7
Gas treatment	n.a.	n.a.
Wastewater treatment	(1)	water-oil separation
Environmental Management System	None	None

>> Operational data

	Soporgen	Energin
Net electricity generation (MWh) (2)	426 622	251 883
Steam generation (TJ)	1 782	2 257
Natural gas consumption ($Nm^3 \times 10^3$)	112 957	89 023
Gross water consumption (m^3)	n.av.	n.av.
Cooling water (m^3)	n.av.	n.av.

>> Environmental data

Air emissions (3)

	Soporgen	Energin
SO_2 (kt)	n.a.	n.a.
NO_x (kt)	0.201	0.075
CO_2 (kt)	239	188
Partículates (kt)	0.009	0.006

Wastewater

- Wastewater treated at SOPORCEL sewage treatment plant.
- ENERGIN wastewater monitoring system not yet implemented.

Waste

	Soporgen (4)	Energin
Used oil (t)	-	0.03
Metal scrap (t)	-	0.00
PCB containing equipment (t)	-	0.00

n.a - Not applicable
n.av.- Not available
(1) Wastewater is sent to SOPORCEL treatment plant.
(2) Includes electricity supply to industrial customers and to the EDP network.
(3) Total SO_2 calculated on the basis of fuel characteristics; NO_x and particulate calculated on the basis of monitoring data; CO_2 calculated on the basis of emission factors.
(4) SOPORGEN's waste is managed by SOPORCEL.

>> Binding system hydroelectric power stations in Portugal

>> Characteristics

		Flooded area (ha)	Reservoir useful capacity (hm^3)	Installed capacity (MW)	Environmental Management System
Cávado-Lima	Alto Lindoso	1 050	347.9	630	Under assessment
	Touvedo	172	4.5	22	Under assessment
	Alto Rabagão	2 212	550.7	68	Under assessment
	Vila Nova/Venda Nova	391	92.1	90	Under assessment
	Vila Nova/Paradela	380	158.2	54	Under assessment
	Salamonde	237	55.0	42	Under assessment
	Vilarinho das Furnas	344	69.7	125	Under assessment
	Caniçada	579	144.4	62	Under assessment
Douro	Miranda	122	6.4	369	Under assessment
	Picote	244	13.4	195	Under assessment
	Bemposta	405	20.0	240	Under assessment
	Pocinho	829	12.0	186	Under assessment
	Valeira	795	13.0	240	Under assessment
	Vilar-Tabuaço	670	95.5	58	Under assessment
	Régua	850	12.0	180	Under assessment
	Carrapatelo	952	15.6	201	Under assessment
	Torrão	650	77.9	140	Under assessment
	Crestuma-Lever	1 298	22.1	117	Under assessment
Tejo-Mondego	Caldeirão	66	3.5	40	Under assessment
	Agueira	1 930	216.0	336	Under assessment
	Raiva	230	12.0	24	Under assessment
	Cabril	1 965	615.0	108	Under assessment
	Bouçã	500	7.9	44	Under assessment
	Castelo do Bode	3 480	902.5	159	Under assessment
	Pracana	550	95.6	41	Under assessment
	Fratel	750	21.0	132	Under assessment

>> Operational data

	Cávado-Lima	Douro	Tejo-Mondego
Net electricity generation (MWh)	2 672 953	8 578 314	2 712 756

>> Environmental data

Waste

	Cávado-Lima	Douro	Tejo-Mondego
Used oil (t)	6.4	90.3	12.0
Metal scrap (t)	98.5	21.8	31.3
PCB containing equipment (t)	0.00	2.61	0.03

>> Non-binding system hydroelectric power stations in Portugal

>> Characteristics

		Flooded area (ha)	Reservoir useful capacity (hm^3)	Installed capacity (MW)	Environmental Management System
North	Lindoso	-	0.2	44.1	None
	Ermal	-	21.2	11.2	Implemented
	Varosa (Chocalho)	69.6	12.9	25.0	None
	France	5	0.1	7.0	None
	Penide I e II	69	0.5	4.9	Implemented
	Guilhofrei	163	20.4	4.0	Implemented
	Ponte da Esperança	-	21.2	2.8	Implemented
	Senhora do Porto	23	1.1	8.8	Implemented
	Cefra	0.5	0.1	1.1	Implemented
	Freigil	3.3	0.1	4.6	None
	Aregos	-	-	3.1	None
	Caniços (ETE)	-	-	0.9	None
	Labruja	-	-	0.9	None
Centre	Sabugueiro I	240	15	12.8	Implemented
	Desterro	1.6	-	13.2	Implemented
	Ponte de Jugais	-	-	20.3	Implemented
	Vila Cova	-	-	23.4	Implemented
	Santa Luzia	246	50.5	24.4	None
	Sabugeiro II	64.6	5.1	10.0	Implemented
	Riba-Côa	5.6	-	0.1	None
	Pateiro	0.3	-	0.3	None
	Ribafeita	2	0.1	0.9	None
	Drizes	3	0.2	0.2	None
	Pisões	-	-	0.1	None
	Figueiral	0.5	-	0.2	None
	Rei de Moinhos	2.5	-	0.8	None
	Ermida	-	-	0.4	None
	Lagoa Comprida	-	-	0.6	None
Tagus	Belver	28.6	7.5	80.7	None
	Póvoa	23.6	19.7	0.7	None
	Bruceira	11	4.1	1.6	None
	Velada	1	0.4	1.9	None
	Caldeirão	-	-	0.2	None

>> Operational data

	North	Centre	Tagus
Net electricity generation (MWh)	251 518	334 775	314 586

>> Environmental data

Waste

	North	Centre	Tagus
Used oil (t)	1.4	0.9	1.8
Metal waste (t)	0.0	0.0	50.0
PCB containing equipment (t)	0.18	0.00	0.00

>> Windfarms in Portugal

>> Characteristics

	Location	Implementation area (ha)	Nr. of generators	Installed capacity (MW)
Fonte da Mesa	Serra Meadas (Lamego/Resende)	305	17	10.2
Pena Suar	Serra Marão (Amarante/V. Real)	205	20	10.0
Cabeço da Rainha	Serra Alvelos (Oleiros/Sertã)	80	17	16.0
Cadafaz	Serra Lousã (Góis)	60	17	10.2
Serra do Barroso	Serra do Barroso (Boticas)	300	9	18.0

>> Operational data

	Fonte da Mesa	Pena Suar	Cabeço da Rainha	Cadafaz	Serra do Barroso
Net electricity generation (MWh)	22 476	25 255	36 397	31 048	13 179

>> Environmental data

Waste

	Fonte da Mesa	Pena Suar	Cabeço da Rainha	Cadafaz	Serra do Barroso
Used oil (t)	1.7	0.0	0.0	0.0	0.0
Metal scrap (t)	0.0	0.0	0.0	0.0	0.0

>> Distribution network in Portugal

>> Characteristics

Substations	
Nr.	377
Installed capacity (MVA)	13 450
Nr. of transformers	661
Transforming stations	
Nr.	52 217
Installed capacity (MVA)	14 750
Overhead lines	
High voltage (km)	7 259
Medium voltage (km)	52 405
Low voltage (km)	98 023
Underground lines (km)	
High voltage (km)	361
Medium voltage (km)	11 551
Low voltage (km)	24 963

>> Operational data

Electricity balance (GWh)	
Electricity delivered to distribution network	**42 207**
Own consumption	79
Losses	3 259
% Losses [1]	8.6%
Total electricity sales	**38 869**
Sales to binding system	34 821
Sales to non-binding system	4 048

[1] Excludes very high-voltage network losses

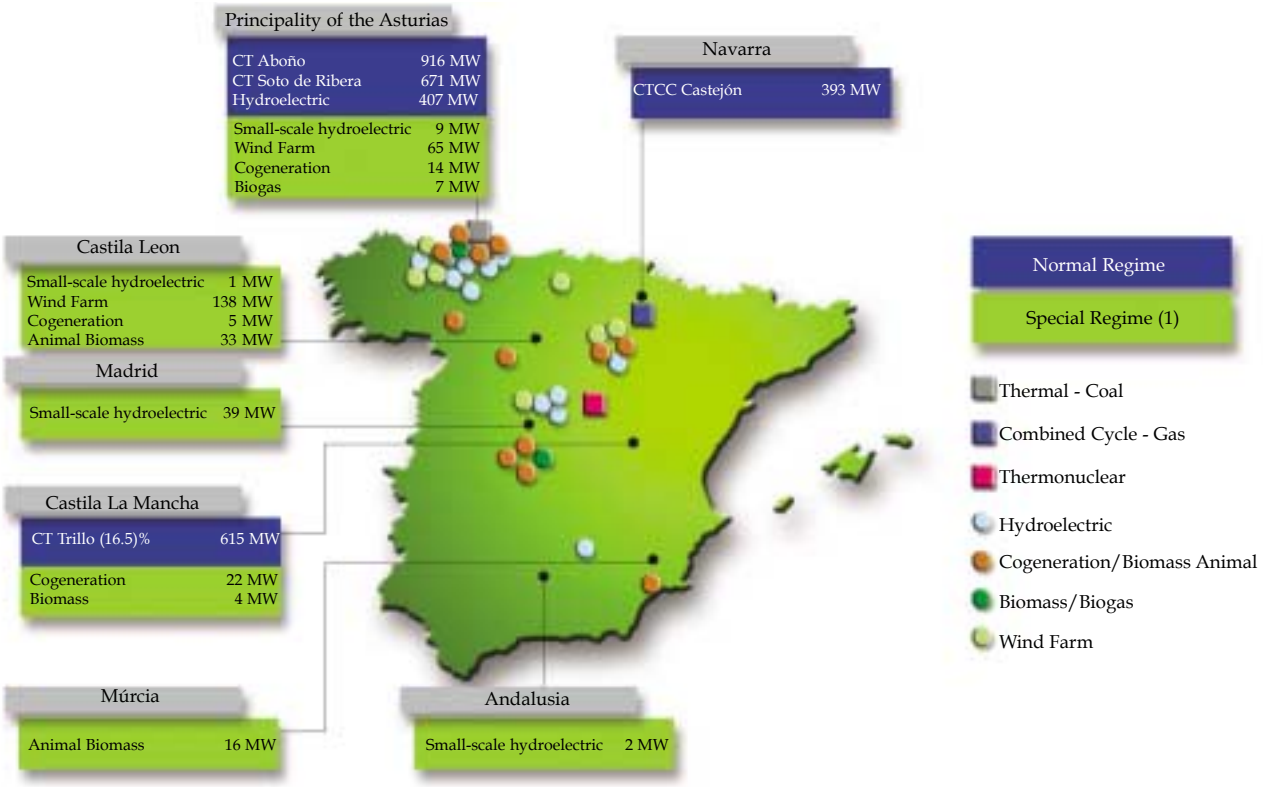
>> Environmental data

Waste	
Used oil (t)	155.9
Metal scrap (t)	2 077.0
Public light bulbs (t)	13.1
PCB containing equipment (t)	26.30

Network Areas of EDP Distribuição

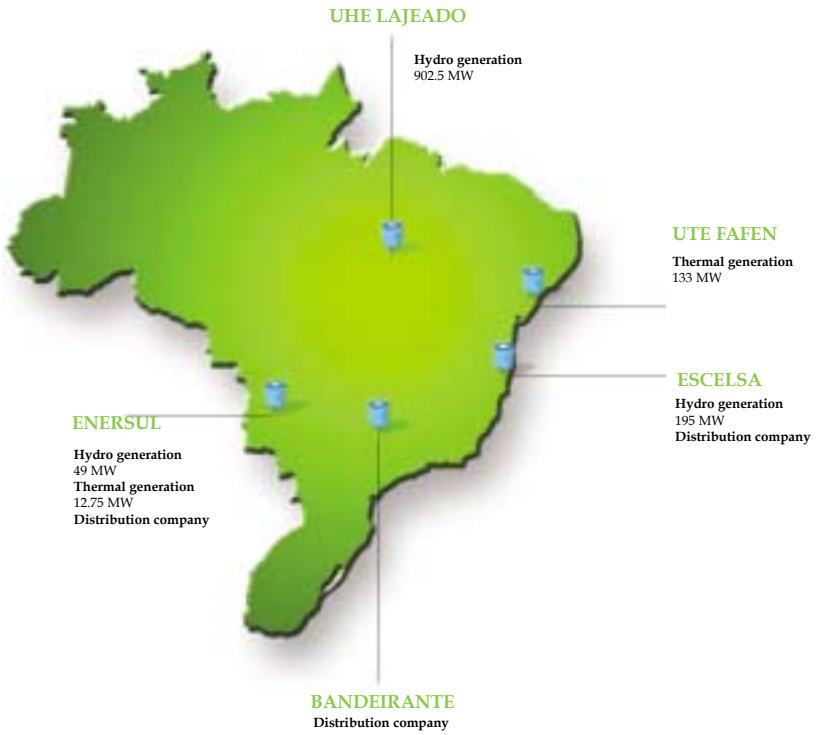
>> EDP ELECTRICITY GENERATION PLANTS IN SPAIN AND BRAZIL

>> HidroCantábrico generation facilities



(1) For the Special Regime 100% of the participated projects are considered

>> EDP Brazil facilities



>> Thermal power stations - HidroCantábrico

>> Characteristics

	Aboño	Soto de Ribera	Castejón
Type of power plant	Steam turbine	Steam turbine	Combined cycle
Installed capacity (MW)	916.2	671.6	392.6
Gas treatment	Electrostatic precipitators	Electrostatic precipitators	n.a.
Combustion modifications	Low NO_x burners	None	Low NO_x burners
Wastewater treatment	None	Physical and chemical: coagulation/flocculation/ sedimentation/neutralisation	Physical and chemical: Water-oil separation and neutralisation
Environmental Management System	None	None	None

>> Operational data

		Aboño	Soto de Ribera	Castejón
Net electricity generation (MWh)		6 572 726	3 917 991	1 546 287
Fuel consumption	**Fuel oil (t)**	902	17 776	n.a.
	Diesel (t)	614	1 184	n.a.
	Coal (t)	2 088 442	1 776 223	n.a.
	Natural gas (Nm^3x 10^3)	n.a.	n.a.	270 457
	Blast furnace gas (Nm^3x 10^3)	2 884 216	n.a.	n.a.
	Coke battery gas (Nm^3x 10^3)	144 548	n.a.	n.a.
Gross water consumption (m^3)		828 000	568 133	53 000
Cooling water (m^3)		592 876 800	81 322 378	2 800 000

>> Environmental data

Air emissions

	Aboño	Soto de Ribera	Castejón
SO_2 (kt)	23.57	21.78	0.03
NO_x (kt)	17.10	11.09	0.23
CO_2 (kt)	7 429	3 812	608
Particulates (kt)	1.61	1.17	0.00

Wastewater

	Aboño	Soto de Ribera		Castejón
		Liquid effluents	Rainwater	
Waste stream (m^3)	n.av.	669 308	54 605	40 223
Suspended solids (mg/l)	-	5.00	5.00	21.00
Iron (mg/l)	1.75	< 0.1	< 0.1	0.11
Copper (mg/l)	-	< 0.8	< 0.8	< 0.2
Zinc (mg/l)	-	< 0.2	< 0.2	< 3
Nickel (mg/l)	-	< 0.14	< 0.58	< 0.2
Aluminium (mg/l)	1.80	-	-	0.35
Vanadium (mg/l)	-	-	-	-
Chromium (mg/l)	-	< 0.16	< 0.16	< 2
Oils and grease (mg/l)	16.80	< 2	< 2	< 20

Waste

	Aboño	Soto de Ribera	Castejón
Coal fly and bottom ash (t)	276 397.0	368 709.0	n.a.
Used oil (t)	24.0	8.8	0.6
PCB containing equipment (t)	0.00	0.08	0.00

n.a. - Not applicable
n.av. - Not available

>> Hydroelectric power stations - HidroCantábrico

>> Characteristics and operational data

	River	Entered into service	Nr. Groups	Installed capacity (MW)	Net electricity generation (MWh)
La Malva	Somiedo	1917(2) and 1924(2)	4	9.1	39 981
Riera	Somiedo	1946(2) and 1956(1)	3	7.8	31 689
Miranda	Pigüeña	1962	4	64.8	201 175
Proaza	Trubia	1968	2	48.0	71 635
Priañes	Nora	1952(2) and 1967(1)	3	18.5	46 028
Tanes	Nalón	1978	2	245 (pumping)	156 454
Salime HC	Navia	1954	4	79.0	167 056
La Barca	Narcea	1967(2) and 1974(1)	3	56.1	103 077
Florida	Narcea	1952(2) and 1960(1)	3	7.6	28 331

>> Environmental data

Waste

	Used oil (t)	PCB containing equipment (t)
La Malva	0.0	0.0
Riera	0.0	0.0
Miranda	1.4	0.0
Proaza	0.0	0.0
Priañes	1.2	0.0
Tanes	0.0	0.0
Salime HC	0.0	0.0
La Barca	0.7	0.0
Florida	0.0	0.0

>> Distribution network - HidroCantábrico

>> Characteristics

Substations

Nr.	27
Installed capacity (MVA)	4 239
Nr. of transformers	76

Transforming stations

Nr.	5 467
Installed capacity (MVA)	1 373

Overhead lines

High voltage (km)	1 355
Medium voltage (km)	4 492
Low voltage (km)	11 089

Underground lines (km)

High voltage (km)	8
Medium voltage (km)	785
Low voltage (km)	1 428

>> Environmental data

Waste

Used oil (t)	24.5
PCB containing equipment (t)	85.0

>> Thermoelectric power stations in Brazil

>> Characteristics and operational data

Company		Fafen	Enersul		
Facility		Fafen	Coxim	Corumbá	Porto Murtinho
Type of power station		Combined cycle	Gas turbine	Gas turbine	Gas turbine
Installed capacity (MW)		133	3	6	3.75
Fuel	Diesel (l)	n.a.	12 878	26 058	255 435
	Natural gas (Nm^3x10^3)	n.av.	n.a.	n.a.	n.a.
Net electricity generation (MWh)		174 000	30	61	10 497

>> Environmental data

- Detailed environmental data not available for these facilities.

n.a. - Not applicable.
n.av. - Not available

>> Hydroelectric power stations in Brazil

>> Characteristics and operational data

		River	Flooded area (ha)	Useful capacity of the reservoir (hm³)	Installed capacity (MW)	Net electricity generation (MWh)
Investco	**Lajeado**	Tocantins	63 000	298	902.5	4 456 503
Enersul	**Coxim**	Salto	-	-	-	2 247
	Mimoso	Pardo	1 520	70	30	207 648
	São João I	São João	-	-	1	2 718
	São João II	São João	-	-	1	2 368
	Costa Rica	Sucuriú	31		17	88 922
Escelsa	**Alegre**	Ribeirão Alegre	0.09	0.00	2.0	1 062
	Jucu	Jucu	1.59	0.01	4.4	14 612
	Fruteiras	Fruteiras	0.21	0.00	7.9	(undergoing remodelling)
	Rio Bonito	Sta Maria da Vitória	200.21	13.58	15.0	51 827
	Suíça	Sta Maria da Vitória	9.81	0.43	30.1	109 263
	Mascarenhas	Doce	419.4	18.7	131.0	745 122
	Viçosa	Castelo	3.54	0.03	4.5	8 023

>> Environmental data

- Detailed environmental data not available for these installations.

>> GLOSSARY

Accident frequency index (Tf) – Number of accidents leading to days off work per million hours worked.

Accident gravity index (Tg) – Number of days lost per thousand hours worked; does not include permanent disability and an item of 6 000 days for accidental death.

ACT – Portuguese acronym for Collective Bargaining Agreement.

ADENE – Portuguese acronym for the National Energy Agency.

Air Quality index – Highest value, as a percentage, of the limit value established in applicable legislation, for each atmospheric pollutant measured at the air quality monitoring stations.

Ash – Solid residue produced by burning fuel, derived from mineral impurities contained therein. May also contain unburnt fuel. Fly ash is a fine-grain ash contained in combustion gases. Bottom ash is a thick-grain ash accumulating at the bottom of the combustion chamber.

Biomass – Non-fossilised organic material of biological origin, which can be partially used as an energy resource.

Carbon dioxide (CO_2) – Colourless and odourless gas, a normal constituint of atmospheric air. In addition to its natural sources, human origin sources include burning fossil fuels, various industrial processes, and alteration of land use. Although it does not directly affect human health, it is greenhouse gas, contributing to global warming.

CCDR – Portuguese acronym for Regional Development Co-ordination Commission.

Cogeneration – Facility in which the energy released by a fuel is partly used to produce heat and partly to generate electricity. Also know as combined heat and power.

Combined cycle – Electricity generating facility comprising a gas turbine whose exhaust gases feed a heat recovery unit in which steam is generated to drive a second turbine.

DGE – Portuguese acronym for the national Directorate General of Energy.

Domotics – An integrated system that allows simple control using a single item of equipment of everything to do with a house. A system in which information technologies are used in a domestic environment.

EIA – Environmental Impact Assessment.

Electromagnetic fields – Non-ionizing radiation between 0 and 300 GHz, which includes static fields, extremely low frequency fields and radio frequency fields, including microwaves.

Employee turnover – Ratio between the average number of employees that enter and leave permanent positions and the total number of employees in permanent positions.

EMS - Environmental Management System. – Part of an overall management system. It includes the organisational structure, planning of activities, responsibilities, practices, procedures, processes and resources necessary to the development, implementation, revision and maintenance of an Environment Policy.

Environmental Impact Study – Set of documents and technical studies drawn up by the entity submitting a project. It includes, among other information, an identification and evaluation of the likely impacts, both positive and negative, that a project may have on the environment, and the measures designed to avoid, minimise or compensate the expected negative impacts.

ERSE – Portuguese acronym for the national Energy Sector Regulator.

Greenhouse gases (GHG) – Gases existing in the Earth's atmosphere that absorb and re-issue infrared radiation. They are caused both by natural processes and by human activity.

Hertz (Hz) – Frequency unit. 1 Hz is the frequency of a periodic phenomenon whose period is 1 second.

Hydroelectric Capability Index (ICH) – Indicator quantifying the deviation of the total value of hydroelectric power produced during a given period, in comparison with what would be produced under average hydrological conditions.

ICN – Portuguese acronym for the national Nature Conservation Institute.

ISO 14 000 Standards – Set of international standards of the International Organization for Standardization concerning environmental management systems.

Kyoto Protocol – Document adopted by all parties to the United Nations Framework Convention on Climate Change at the Kyoto Conference in Japan in December 1997. It establishes differentiated emission reduction targets for a number of greenhouse gases for the period of 2008 to 2012, for the countries listed in Annex B (developed countries).

Net electricity production – Total electricity generated minus the consumption allocated to its production, particularly by the power station auxiliary services and main transformers.

Nitrogen oxides (NO_x) – Gases consisting of one nitrogen atom and a variable number of oxygen atoms. Atmospheric pollutants formed by the oxidation of nitrogen at high temperature. One of the agents responsible for photochemical smog and acid deposition.

OHSAS 18 001 Standards – Standards forming part of the Occupational Health and Safety Assessment Series used to certify health and safety management systems.

Particulate – Atmospheric pollutant comprising finely divided material in suspension in the air.

PNAC – Portuguese acronym for National Climate Change Plan.

PNALE – Portuguese acronym for National Emissions Allowances Allocation Plan.

PNRE – Portuguese acronym for National Emissions Reduction Plan.

Polychlorinated biphenyls (PCBs) – Group of toxic and persistent chemical compounds of synthetic origin. Until their manufacture was banned in the late 1970s, they were used worldwide as insulating fluid in the electricity industry.

PPQA – Portuguese acronym for Environmental Quality Promotion Plan.

RQS – Portuguese acronym for Service Quality Regulation.

SPEA – Portuguese acronym for Portuguese Society for the Study of Birds.

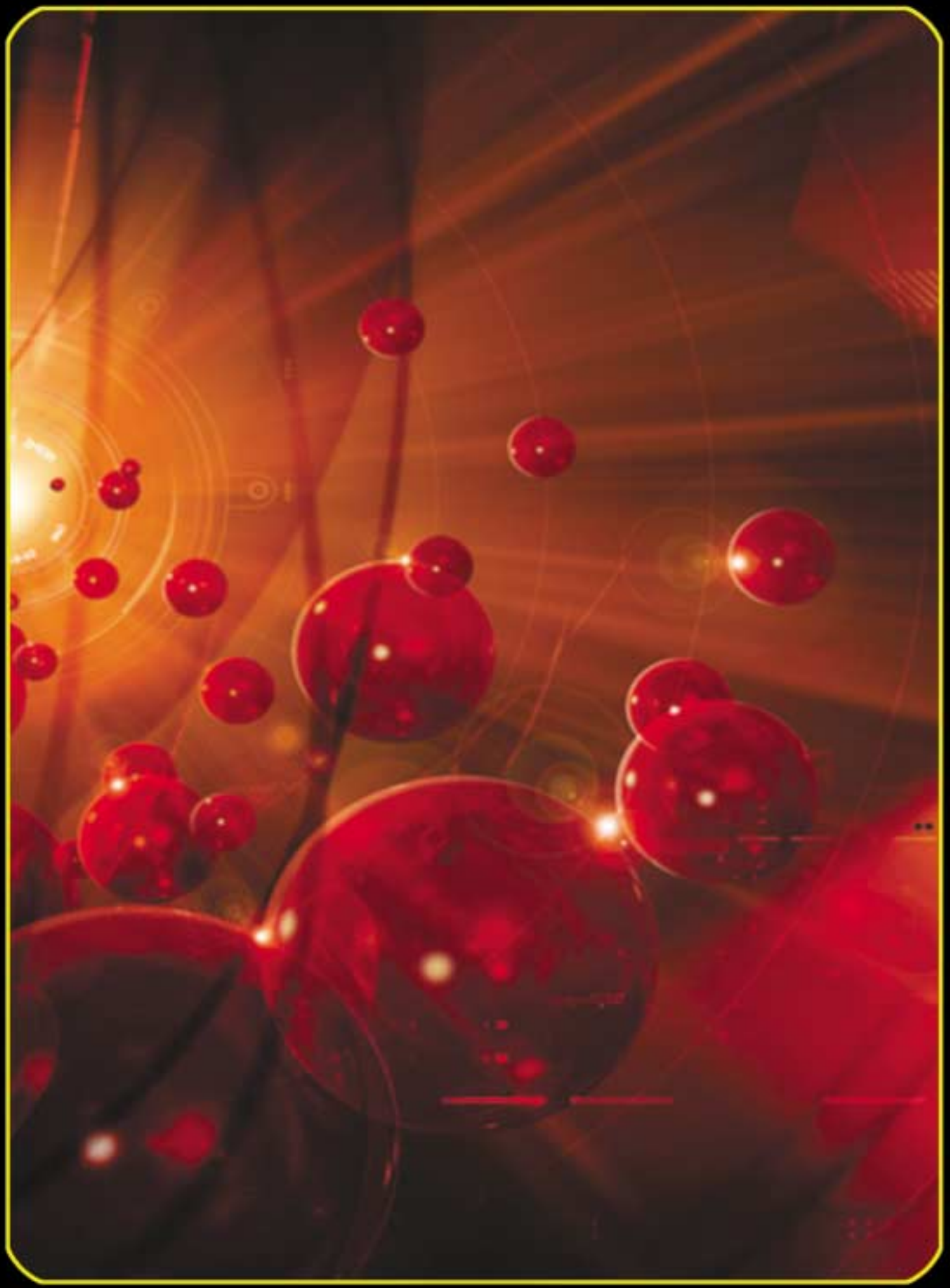
Sulphur dioxide (SO_2) –Atmospheric pollutant emitted by natural and human processes, such as the burning of fossil fuels and various industrial processes. It is one of the causes of acid deposition.

Sulphur hexafluoride (SF6) – Greenhouse gas, with a global warming potential of 23,900.

Watt (W) – Unit of power. 1 Watt is the power of an energy system in which 1 Joule of energy is uniformly transferred during 1 second.

Watt hour (Wh) – Unit of measurement of electricity produced or consumed. 1 Watt-hour is the energy required by operation of an item of the electric equipment with a power of 1 Watt during one hour.

Works accident – Accident occurring in the workplace and during working hours, directly or indirectly resulting in bodily injury, functional disorder or disease that causes death or reduces the person's ability to work or earn money.



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