



edp
SPAIN

A WORLD
FULL
OF ENERGY

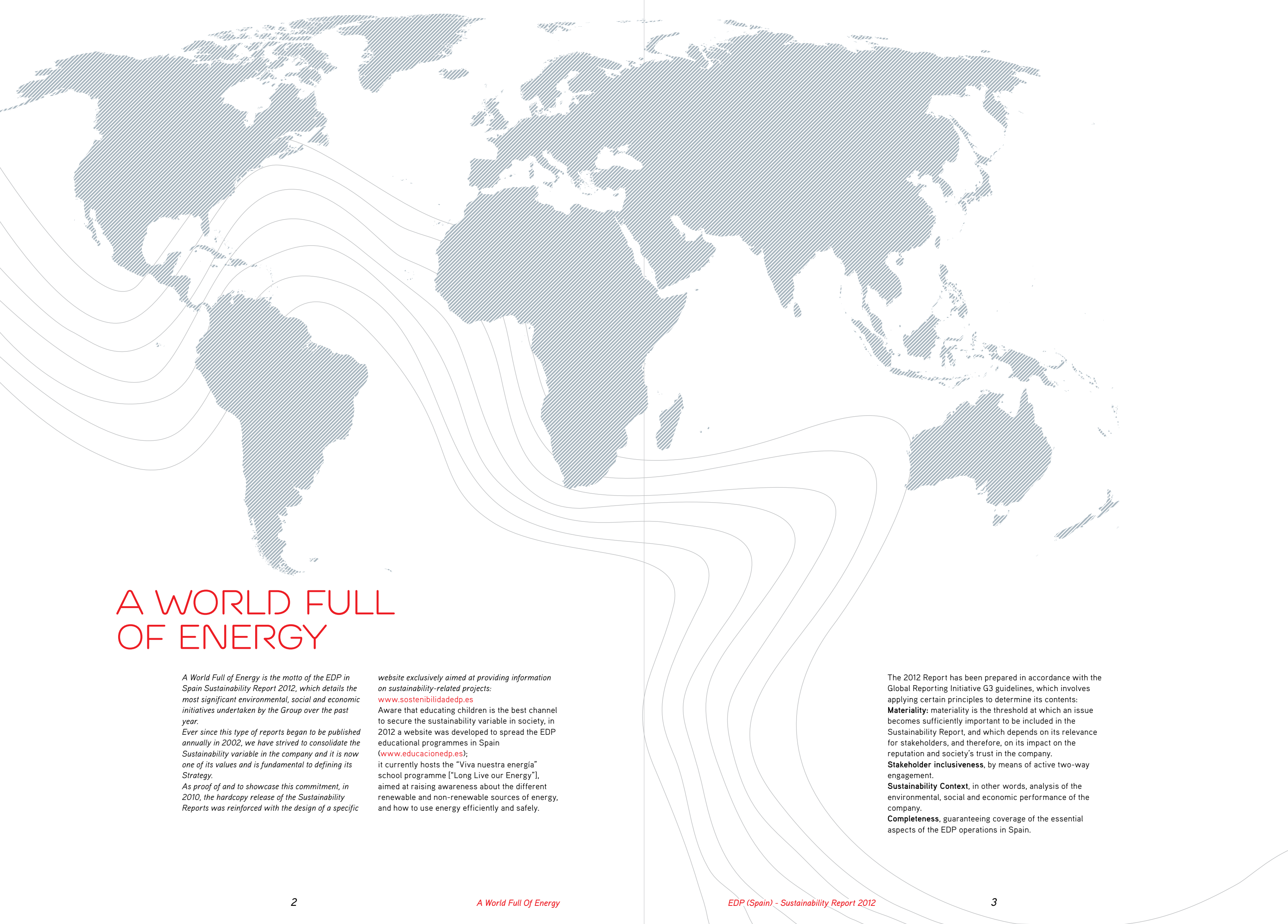
SUSTAINABILITY REPORT 2012



A WORLD FULL OF ENERGY

—
edp
SPAIN

Please contact the EDP
Environmental, Sustainability,
Innovation and Quality Division
in Spain regarding any query
relating to this Report and its
contents by sending an email to
medioambiente@edpenergia.es



A WORLD FULL OF ENERGY

A World Full of Energy is the motto of the EDP in Spain Sustainability Report 2012, which details the most significant environmental, social and economic initiatives undertaken by the Group over the past year.

Ever since this type of reports began to be published annually in 2002, we have strived to consolidate the Sustainability variable in the company and it is now one of its values and is fundamental to defining its Strategy.

As proof of and to showcase this commitment, in 2010, the hardcopy release of the Sustainability Reports was reinforced with the design of a specific

website exclusively aimed at providing information on sustainability-related projects:

www.sostenibilidadedp.es

Aware that educating children is the best channel to secure the sustainability variable in society, in 2012 a website was developed to spread the EDP educational programmes in Spain (www.educacionedp.es);

it currently hosts the "Viva nuestra energía" school programme ["Long Live our Energy"], aimed at raising awareness about the different renewable and non-renewable sources of energy, and how to use energy efficiently and safely.

The 2012 Report has been prepared in accordance with the Global Reporting Initiative G3 guidelines, which involves applying certain principles to determine its contents:

Materiality: materiality is the threshold at which an issue becomes sufficiently important to be included in the Sustainability Report, and which depends on its relevance for stakeholders, and therefore, on its impact on the reputation and society's trust in the company.

Stakeholder inclusiveness, by means of active two-way engagement.

Sustainability Context, in other words, analysis of the environmental, social and economic performance of the company.

Completeness, guaranteeing coverage of the essential aspects of the EDP operations in Spain.



LETTER FROM THE CHAIRMAN

FOR THE TENTH YEAR RUNNING, THE EDP GROUP IN SPAIN HAS VOLUNTARILY PRODUCED THE ANNUAL SUSTAINABILITY REPORT AND IN KEEPING WITH THE GLOBAL REPORTING INITIATIVE PRINCIPLES. IT IS YET AGAIN A FURTHER EXAMPLE OF THE COMMITMENT TO SUSTAINABLE DEVELOPMENT IN THE AREAS WHERE WE OPERATE.

SUSTAINABILITY IS ONE OF THE VALUES UNDERPINNING THE CULTURE OF THE EDP GROUP AND ITS THREE DIMENSIONS - SOCIAL, ECONOMIC AND ENVIRONMENTAL - DETERMINE THE COMMITMENTS DEFINING THE STRATEGY OF THE GROUP: COMMITMENT TO INDIVIDUALS AND CLIENTS, TO PERFORMANCE AND TO THE ENVIRONMENT.

In this context, the following stand out as milestones for the year:

- The more than 658,000 supply points powered by our grids recorded the best quality of the sector in Spain, a parameter measured using the TIEPI (System Average Interruption Duration Index), which, with a value of 28 minutes, was the best ever in the history of the Group for the fourth year running.
- We consolidated our position as the second natural gas distributor, with over one million supply points connected to our networks and with over 55,000 GWh supplied.
- In 2012, different measures arising from the Work Environment Survey conducted among our employees in 2011, such as the "Be a Leader" programme, were implemented in order to improve the whole workforce's commitment to and involvement in the company's strategy. At the end of the year, the process began to negotiate the II Group Collective Bargaining Agreement for companies in the electricity sector, with regular meetings between the parties to progress towards finding common ground and reaching a final agreement.
- The EBITDA of the EDP Group in Spain was down 12% on the previous year, a drop that could be considered to be moderate given the current economic climate.
- We renewed the certification of our Environmental Management System in accordance with the ISO 14001 standard in 97% of the installed capacity, in 100% of the electricity distribution business and in all the activities of the gas sector.
- The company's R&D&i strategy was updated, continuing with four priority lines for the electricity sector (high availability and flexible generation, energy storage and the grids of the future, smart energy and sustainable mobility) and three for the gas sector (security in the natural supply, energy efficiency and sustainability).
- We continued our commitment to respect and foster Human Rights, which is embodied in our adherence to the Global Compact, where our 2012 Progress Report was yet again included in the Advanced Level, the maximum possible score that recognises the degree of development of implementation of good practices in sustainable governance and management.

All these achievements are down to all the employees that EDP has in Spain. I would like to again thank them on behalf of the Board of Directors, and also extend those thanks to the General Supervisory Council and the Executive Board of the EDP Group, whose support has been fundamental to overcoming the challenges of this difficult year.

Manuel Menéndez Menéndez
Chairman

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**EDP SUPPLIES ENERGY
TO OVER 3,480,000
CUSTOMERS IN SPAIN**

DISTRIBUTED
ELECTRICITY | **9.003**
GWh

55.786 GWh
OF GAS SUPPLIED

11% ELECTRICITY
MARKET SHARE

The cornerstones of the EDP strategy in Spain are commitments to customers, to people, to sustainability and to results.

ECONOMIC OVERVIEW

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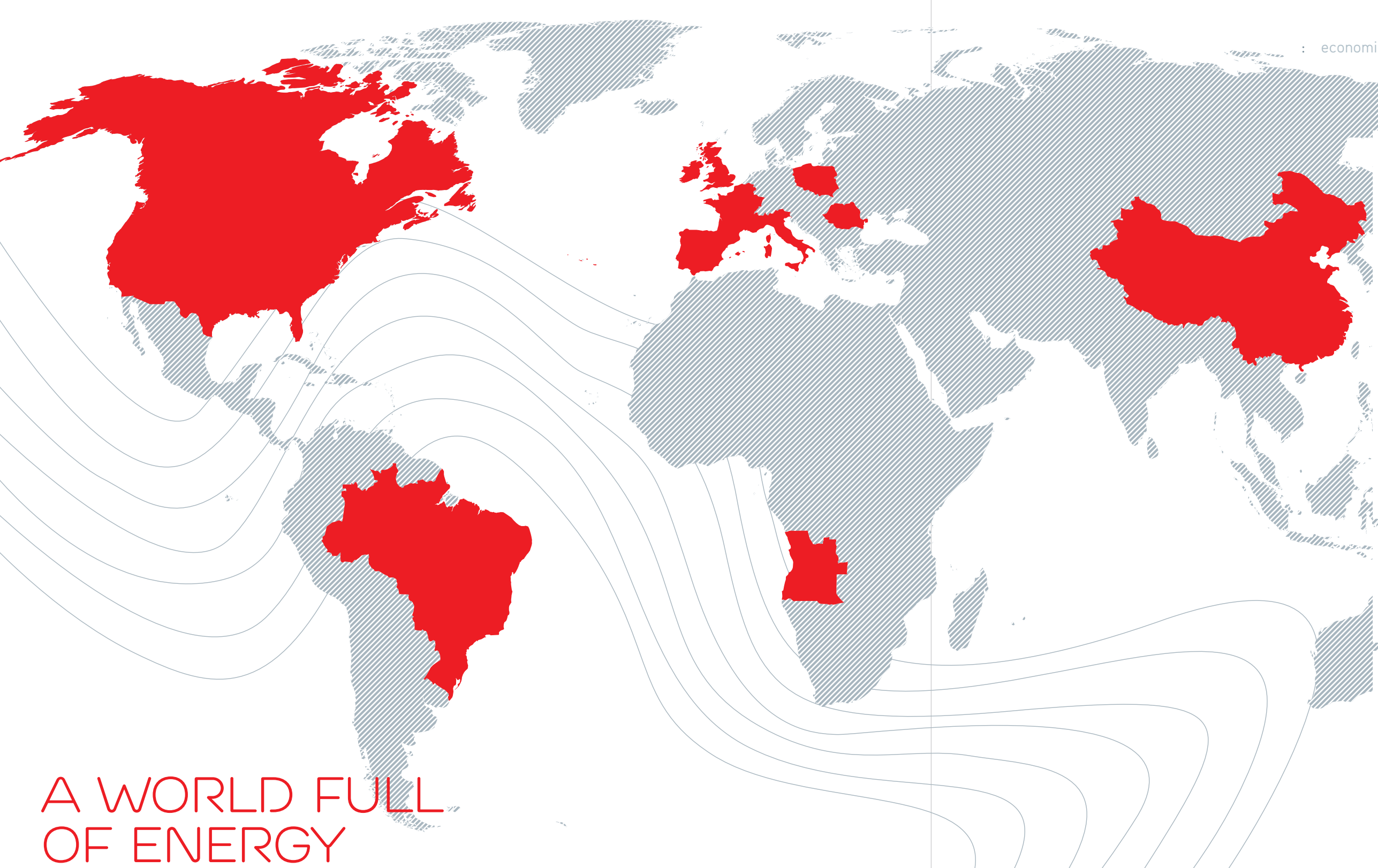
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EDP GROUP



A WORLD FULL OF ENERGY

EDP – Energías de Portugal, S.A. is a utility company in the energy sector, whose headquarters are in Portugal where it is the largest generator, distributor and supplier of electricity. It is also present in other countries.

EDP is the third largest electricity generator and one of the largest gas distributors on the Iberian Peninsula. EDP is also the third largest wind power operator worldwide with facilities on the Iberian Peninsula and in the United States, Brazil, France, Belgium, Poland, Rumania and Italy, and plans to develop new wind farms in the United Kingdom and Canada. EDP also has electricity generation, distribution and supply operations in Brazil and photovoltaic solar energy facilities in Rumania.

EDP is now a key player in the world energy scene and is present in 13 countries. It employs over 12,000 people around the world, and has over 9.8 million electricity customers and 1.3 million gas supply points. As of 31 December 2012, EDP had an installed capacity of 23.4 GW, generating nearly 54.7 TWh, 60% of which comes from wind farms and hydraulic power stations.

As regards its performance in sustainable development, in its three environmental, social and economic aspects, EDP was awarded the same score as the leading company in the electricity sector on the Dow Jones Sustainability Index.

SUSTAINABILITY INDEXES AND RATINGS WHERE EDP IS PRESENT



Portugal

7,194	Employees
5,884,442	Electricity Customers
318,552	Gas Customers
10,542	Installed Capacity (MW)*
18,460	Net Generation (GWh)
38%	Generation from renewable sources**
44,655	Electricity Distribution (GWh)
7,323	Gas Distribution (GWh)

Spain

1,972	Employees
1,048,430	Electricity Customers
772,322	Gas Customers
6,193	Installed Capacity (MW)*
16,086	Net Generation (GWh)
36%	Generation from renewable sources**
9,003	Electricity Distribution (GWh)
55,786	Gas Distribution (GWh)

USA/Canada

291	Employees
3,637	Installed Capacity (MW)*
9,937	Net Generation (GWh)
100%	Generation from renewable sources**

Brazil

2,776	Employees
2,933,967	Electricity Customers
2,058	Installed Capacity (MW)*
8,448	Net Generation (GWh)
100%	Generation from renewable sources**
24,923	Electricity Distribution (GWh)

Poland/Rumania

66	Employees
540	Installed Capacity (MW)*
912	Net Generation (GWh)
100%	Generation from renewable sources**

France/Belgium

35	Employees
371	Installed Capacity (MW)*
816	Net Generation (GWh)
100%	Generation from renewable sources**

United Kingdom

28	Employees
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Italy

19	Employees
40	Installed Capacity (MW)*

China

1	Employee
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* MW EBITDA
** includes hydraulic, biomass and wind power.

EDP IN SPAIN

96
3.1

The EDP Group in Spain is a set of companies belonging to EDP-Energías de Portugal S.A., Sucursal en España, which is the majority shareholder with a stake of **96.60%**; the rest of the share capital basically belongs to Liberbank, S.A. (**3.13%**). The parent company of the Group is Hidroeléctrica del Cantábrico S.A., whose corporate headquarters is in Oviedo, Asturias. The core activity of these companies is the generation (hydraulic, thermal, nuclear, wind, solar or any other alternative source of power), storage, distribution, transport, supply and marketing of electricity and gas, along with any other activity related to the above or arising from them in the energy field.

The gas business was developed with the acquiring of the majority shareholder stake (95%) in Naturgas Energía Grupo, S.A., along with a small stake (15.5%) in EDP Renovables to strengthen the generation of electricity from renewable sources.

Since 1920, when Sociedad Anónima Hidroeléctrica del Cantábrico - Saltos de Agua de Somiedo was set up, the Group has been at the forefront of the energy industry in Asturias. It currently has there a gross installed capacity to generate electricity over 2,800 MW and over 22,000 kilometres of lines to supply energy to customers. EDP Spain is therefore responsible for nearly 88% of the region's supplies and 91% of the overall electricity demand in Asturias.

Furthermore, EDP's track record in the gas sector in Spain would begin in the Basque Country. That happened in 2003 when the Basque Government decided to privatise Naturcorp, a publicly-owned undertaking made up of four gas companies (Gas de Euskadi, Bilbogas, Gasnalsa and Donostigas) that supplied natural gas in the autonomous community.

As regards electricity, in addition to the key presence in Asturias, and following the trends set by the liberalisation of the sector, EDP has spread its market to other Spanish regions since 1998. This has been carried out by means of investing in new electricity generation plants and constructing distribution facilities and opening commercial offices.

Since 2008, the gas business has also expanded, by means of purchasing other distributors, outside the Basque Country, and it currently has infrastructures in a further 7 autonomous communities.

EDP (SPAIN) IN FIGURES	UNIT.	2012	2011	2010
BUSINESS				
	Millions of euros			
Turnover	Millions of euros	4,358	4,233	3,714
Total assets	Millions of euros	7,694	7,991	7,978
ENERGIA				
Electricity generated	Net GWh	13,839	13,349	14,076
Electricity distribution lines	km	22,986	22,552	22,560
Gas distribution lines	km	9,875	9,690	
Energy distributed	Electricity GWh	9,003	9,553	9,363
Energy supplied	Gas GWh	55,786	48,447	
Energy marketed	Electricity GWh	19,520	20,591	20,532
Energy marketed	Gas GWh	27,665	28,259	
Supply quality	TIEPI in hours	0.47	0.65	0.77
EMPLOYEES AND CUSTOMERS				
Number of employees (as of 31 December)	Nº	1,645	1,679	1,666
Number of customers (electricity supply points)	Nº	1,707,011	1,690,533	1,677,858
Number of customers (gas supply points)	Nº	1,780,431	1,781,711	
INSTALLED GENERATION CAPACITY (GROSS MW)				
Ordinary regime		3,855	3,855	3,855
Special regime		1,380	1,302	1,177
MARKET SHARES				
Electricity generation	%	6.4	6.0	6.1
Electricity distribution	%	3.6	3.8	4.0
Gas distribution (out of conventional demand)	%	20.1	18.4	
Electricity commercialisation	%	11.2	12.1	12.1
Gas commercialisation	%	9.9	10.8	

ECONOMIC PERFORMANCE

The EBITDA of the EDP Group in Spain in 2012 was down 12% on the previous year, a downturn deemed to be moderate in a climate noted for a drop in demand (which is down to 2005 levels), the large share of the special regime, the lower production margins and the regulatory amendments. The strategic decisions related to the hedging policy between the commercialisation and generation businesses, the high efficiency and availability of the generation portfolio to use the market opportunities, the rigour of the regulated activities, and the cost control policy and synergies with the EDP Group have allowed the consequences of the complicated climate to be mitigated.

PROFIT AND LOSS ACCOUNT	2012	2011	2010
Turnover	4,358	4,233	3,714
EBITDA	593	676	564
Net profit (EAT)	131	217	83
Cash-flow (EAT+depreciation)	389	483	322
Non-financial investments	157	185	242

FINANCIAL DATA	2012	2011	2010
Net financial debt	2,631	2,536	2,708
Leverage	48%	47%	50%

The following stand out as milestones for the year:

Despite the drop in demand, net electricity generation increased by 3.7% (2.4% in terms of thermal generation alone), with the flexibility and availability of the generators being noteworthy as back up to the intermittent generation using renewables.

The energy distributed by our grids fell by 5.7%, mainly due to the downturn in demand in the high voltage segment, which plays a major role in our market.

For the fifth year running, the best service quality was achieved in the history of the Group and was much lower than the average for the Spanish electricity sector. This parameter is measured using the TIEPI (System Average Interruption Duration Index) and its value stood at 28 minutes.

EDP has consolidated its position as the second natural gas distributor in Spain, with a 15% increase in the gas distributed.

We have achieved a market share 11% of the electricity liberalised market, much higher than our natural stake, and 10% on the gas liberalised market, with a customer portfolio whose general degree of satisfaction is around 74%.

The energy sector has been impacted by significant regulatory reform aimed at combating the pricing shortfall of the gas and electricity systems, which has affected the performance of the energy companies in general, and ours in particular.

ETHICS

RECOGNITIONS

The Ethisphere Institute has included EDP on its list of the most ethical companies in the world in the electricity sector, highlighting the transparency practices in its operations and the management of its relations with its stakeholders. The Ethisphere Institute is an international think tank dedicated to creating, promoting and disseminating best practices in business ethics, corporate social responsibility, anti-corruption and sustainability.

In its most recent list, the 6th in its history, more than 100 countries and companies and organisations from over 36 business sectors took part. The methodology for this analysis includes analysing the Codes of Ethics, investments in innovation and business practices in sustainability and social responsibility, taking into account the opinion of the scorecards of international benchmark organisations, peers in the sector, the supplier chain and the customers themselves. The list of the most ethical companies is available at: <http://ethisphere.com/wme>



CODE OF ETHICS

The values of a company are expressed in the routine performance of its employees, in keeping with generally agreed ethical practices. However, to foster transparency and dissemination, increasingly more organisations are opting to formalise these practices in a Code of Ethics. Furthermore, that formalisation is a means for the conduct of the company to be assessed and compared, both internally and externally. Codes of Ethics thus become a management tool to establish and voice the corporate values, accountabilities, obligations and ethical challenges of the organisation; and act as conduct guidelines for the employees and facilitate decision taking if there is any dilemma regarding how to act. The Code of Ethics of EDP in Spain, available from the company's website,

www.edpenergia.es, defines the principles of conduct relating to compliance of legislation, transparency, honesty and integrity, work environment, development of the human capital of the group, human rights, non-discrimination and equal opportunities, corruption and bribery, private transactions in the work place, relations with shareholders, with customers and with suppliers, and the environment and sustainability. There is a communications channel called "Canal Ético" [Ethics Channel], which is available through the www.edpenergia.es website, where people can voice any concerns regarding infringements of this Code, along with queries and other issues that may arise from its application.

The Ethics Committee of the EDP Group is entrusted with handling the complaints and implementing the necessary corrective and preventive measures. An independent arbitrator, the Ethics Ombudsman, has been appointed to handle any incident, whether or not there are grounds, prior to its reaching the Committee. The Ethics Ombudsman is responsible for receiving all the complaints regarding alleged infringements of the Code and Ethics, instructing, documenting and submitting the different processes to the Ethics Committee, and overseeing each one of the proceedings until they are settled, and being the point of contact with the claimant, whenever necessary and appropriate.

This independent figure therefore guarantees the anonymous, comprehensive and objective study of all the grievances received, minimising "interferences" that can undermine the necessary processes to define whether or not there are grounds for each case. The Ethics Ombudsman is appointed by the Ethics Committee, at the proposal of its Chair, for a term of four years. Given the geographical spread and the different companies that make up the EDP Group, each company and each territory has a representative of the Ethics Ombudsman, whose main task is to carry out an initial assessment of each process reported and to establish whether or not all the formal requirements are met prior to forward it to the general processing of the ethics grievances.



GLOBAL COMPACT

The ethical conduct and best practices in sustainability and social responsibility of the Group are reflected in specific initiatives, including adherence to the United Nations Global Compact, which brings the practices of the Company in line with the UN principles concerning labour and human rights, environmental management and the fight against corruption.

This adherence implies the annual review of the management habits of the Company, based on self-assessment, and reports it in a transparent Communication on Progress (CoP). The CoP is available for public consultation in the Publications section of the Sustainability website, www.sostenibilidadedp.es, as well as on the website of the Spanish Global Compact Association (ASEPAM) and on the UN Global Compact website.

The EDP Spain Communication on Progress has been included in the Advanced Level, the maximum possible rating, as recognition for the degree of development and implementation of best practices in sustainable governance and management. Furthermore, several of these best practices have been documented on the ASEPAM website, as they are considered to be examples for the other signatories of the Pact in their corporate social responsibility strategy. Both the reports and the Best Practices are available at: www.pactomundial.org



INTEGRITY

The EDP Group in Spain has a Financial Reporting Internal Control System that is updated and monitored on line using international Internal Control standards. This system, known as the SCIRF in the Group, implements controls to prepare first-rate financial information, assesses the inherent risks to the financial information and

conducts controls to offset the error risks. It thus improves the efficiency and effectiveness of the processes, improves the external and internal reporting of financial information and shores up confidence and credibility, not only of the shareholders of the company, but also of all its stakeholders.

The Risk Control and Internal Audit Department is tasked with conducting the independent and objective assessment of the activities of the Group and of its SCIRF Internal Control System. In 2012, special mention should be made of the "Review of the existing control to prevent environmental crime in EDP Spain", as part of the model to prevent criminal legal risks. Therefore, the procedures and controls defined in the distribution and generation installations of the organisation were analysed. Furthermore, the responsibility model in place was analysed to guarantee compliance of environmental legislation, the duties of the Environmental Division, and the running of the Environmental Management System (EMS) for those plants with certification; for the plants that do not have a fully implemented and certified EMS, their control mechanisms in place were examined.

FREE COMPETITION

EDP Spain carries out operations regulated by the Administration (transporting and distributing gas and electricity). Therefore, pursuant to the Electricity Sector Act and the Hydrocarbon Sector Act, it has both Codes of Conduct in place that guarantee the independence of those operations, non-discrimination, competence and the efficient operating of the market. As regards these themes, there were no legal proceedings brought in 2012 regarding the electricity activity, even though 3 proceedings from previous years were still underway (2 administrative litigations and an official request for information): an action brought for denying unconditional and full access to the Supply Points Information System (SIPS), an action brought for alleged cartel behaviour contrary to Article 1 of the Spanish Competition Act 15/2007 and Article 101 of the TFEU (Treating on the Functioning of the European Union) and proceedings to analyse the change of supplier procedure followed by the supply company.

STAKEHOLDERS

THE STAKEHOLDERS OF A COMPANY ARE ALL THOSE COLLECTIVES THAT ARE DIRECTLY OR INDIRECTLY AFFECTED BY ITS OPERATIONS AND, IN THE SAME WAY, THEY MAY INFLUENCE ITS DEVELOPMENT. IT IS THEREFORE IMPORTANT TO ENSURE ONGOING DIALOGUE WITH THE STAKEHOLDERS, IN ORDER TO DISCOVER THEIR EXPECTATIONS AND DEMANDS TO INTEGRATE THEM IN THE BUSINESS STRATEGY.



Employers, suppliers and customers are the essence of any company and therefore stand out as the first-tier stakeholders. In addition, the energy supply is considered to be a regulated and basic service, which implies that the Administration and Regulatory Bodies, whose decisions directly affect the strategy of the group, are another of the main stakeholders, as are the shareholders (EDP-Energías de Portugal, S.A., Sucursal en España and Liberbank, S.A.) Finally, the environmental impact of the electricity generation plants and electricity and gas distribution facilities means that Society, both generally and specifically in the communities where we are present, is likewise a stakeholder for the company.

EDP (Spain) has dissemination and disclosure tools common to all its stakeholders, such as the corporate website www.edpenergia.es, the sustainability website www.sostenibilidadedp.es, MaPA – Manual of Best Environmental Practices www.mapaedp.com, along with the website to develop education initiatives www.educacionedp.es. Furthermore, the Ethics Channel (available from the company website: www.edpenergia.es) is a two-way means of communication available for all stakeholders.

DISSEMINATION, DISCLOSURE AND COMMUNICATION WITH THE STAKEHOLDERS

Stakeholders	Dialogue Actions	Dissemination and disclosure actions
EMPLOYEES	<ul style="list-style-type: none"> HR Kiosk to manage HR data and the performance assessment. Work Climate Improvement Plan (Biennial survey and communication channel on corporate intranet). Negotiating table of the II Group Collective Bargaining Agreement. Annual training planning. EDP university and online campus. Be a Leader Programme. Coaching Programme. Support for PhD students. LEAN programme. Workers' Council and Peer committees. 	<ul style="list-style-type: none"> "We are EDP" meeting to present the results and Senior Management strategy to all employees. Weekly management meeting. Implementation of the new corporate Intranet. EDP On magazine. EDP On corporate radio television. +energías newsletter. Remarks tool, platform for workers to exchange contents. Skipper, platform to control the management data of our facilities (operation, maintenance and the environment).
SUPPLIERS	<ul style="list-style-type: none"> Supplier Contact Centre Suppliers area on Corporate Website. Quality assessment of contracted products and services. RePRO to register and assess suppliers. Preventive Performance assessment. 	<ul style="list-style-type: none"> Half-yearly forum on PRL and MA continuous improvement in the Network Department. Environmental Manuals by business unit (End-of campaign Review in thermal power stations, Pruning and Felling Manual for HT Lines).
CUSTOMERS	<ul style="list-style-type: none"> Commercial Offices and Delegations. Customer Service Centre. Market Surveys. Customer satisfaction survey. 	<ul style="list-style-type: none"> E-mail shots and advertising. Billing and related information. Empresa & Energía newsletter. Asturias International Trade Fair (FIDMA). Taking part in forums.
ADMINISTRATION AND REGULATORY BODIES	<ul style="list-style-type: none"> Regulation Department, International Relations and Resources Department. Sectoral working parties (UNESA, SEDIGAS, COASHIQ). OMEL. 	<ul style="list-style-type: none"> Regular management information.
SHAREHOLDERS	<ul style="list-style-type: none"> Corporate Government General Meeting of Shareholders. 	<ul style="list-style-type: none"> Report on Financial Statements. Regular management information.
SOCIETY	<ul style="list-style-type: none"> Biennial Sustainability Survey and implementation of plan of action. EDP HC ENERGÍA foundation, working with institutes and society. Institutional Relations and Resources Department. 	<ul style="list-style-type: none"> EDP Group Annual Sustainability Report (included in the Annual Financial Report). EDP in Spain Sustainability Report. Global Compact Communication on Progress. EMAS Environmental Statement. Participation in forums and platforms. "Viva nuestra energía" [Long Live Our Energy] School Education Programme.

ORGANISATION



INTRODUCTION

Hidroeléctrica del Cantábrico is the parent company of the EDP Group in Spain, whose core business consists of producing, distributing, transporting and marketing electricity and gas.

In terms of **generating** electricity, EDP (Spain) has over 5,200 gross MW of installed capacity between thermal power stations, co-generation plants, hydraulic power stations and wind farms (15.5% of EDP Renovables in Spain).

Co-generations, apart from generating electricity, use the heat from the process to meet the demand for thermal energy, mainly in the form of steam, of an industrial partner. These facilities come under the **Special Regime**; while the conventional coal-fired and combined cycle plants that burn natural gas, along with the hydraulic power plants, are considered to be **Ordinary Regime** facilities. The **Special Regime** includes those plants with installed capacity of less than 50 kWe,

whose electricity is generated through high-efficiency cogeneration or the use of renewable energy or waste as the main source of energy, allowed them to be temporarily competitive on a free market. All the generating facilities freely sell their electricity on the market and the energy is transported to the consumption points using the mains grids.

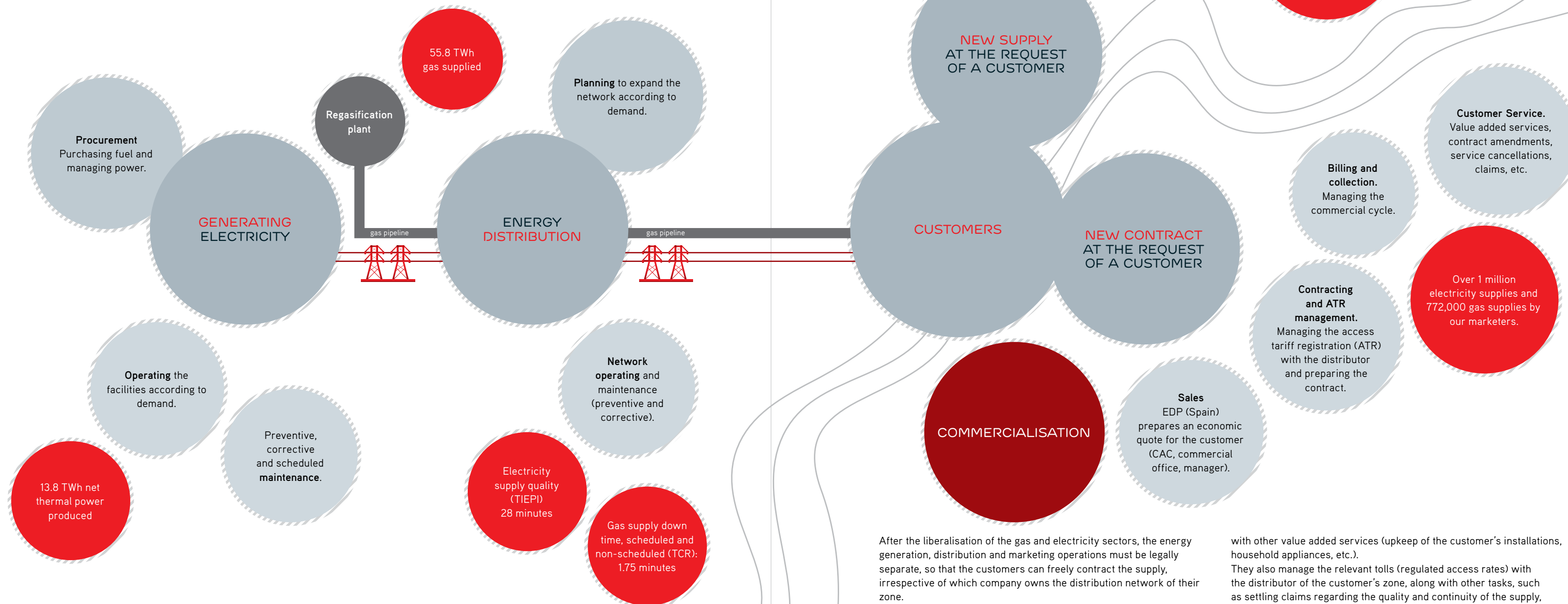
EDP (Spain) has nearly 23,000 km of overhead and underground lines. The **Distribution** Department is tasked with their operation and maintenance to guarantee the supply quality to our customers. Thus, in 2012 the company posted its best ever supply quality index for the fifth year running. In the gas business, unlike the electricity

business, there are no generation plants but rather the natural gas is extracted from gas fields and transported along gas pipelines to the consumption points.

EDP transports the natural gas from the delivery points of Enagás, the common carrier for the high pressure gas network in Spain, to the consumption point in the best safety and quality conditions.

Therefore, the **Distribution** Department designs projects, constructs and maintains the natural gas distribution and transport infrastructures.

EDP (Spain) has nearly 9,000 km of gas networks, and just as in the electricity division, the **Distribution** Department is tasked with their operation and maintenance.



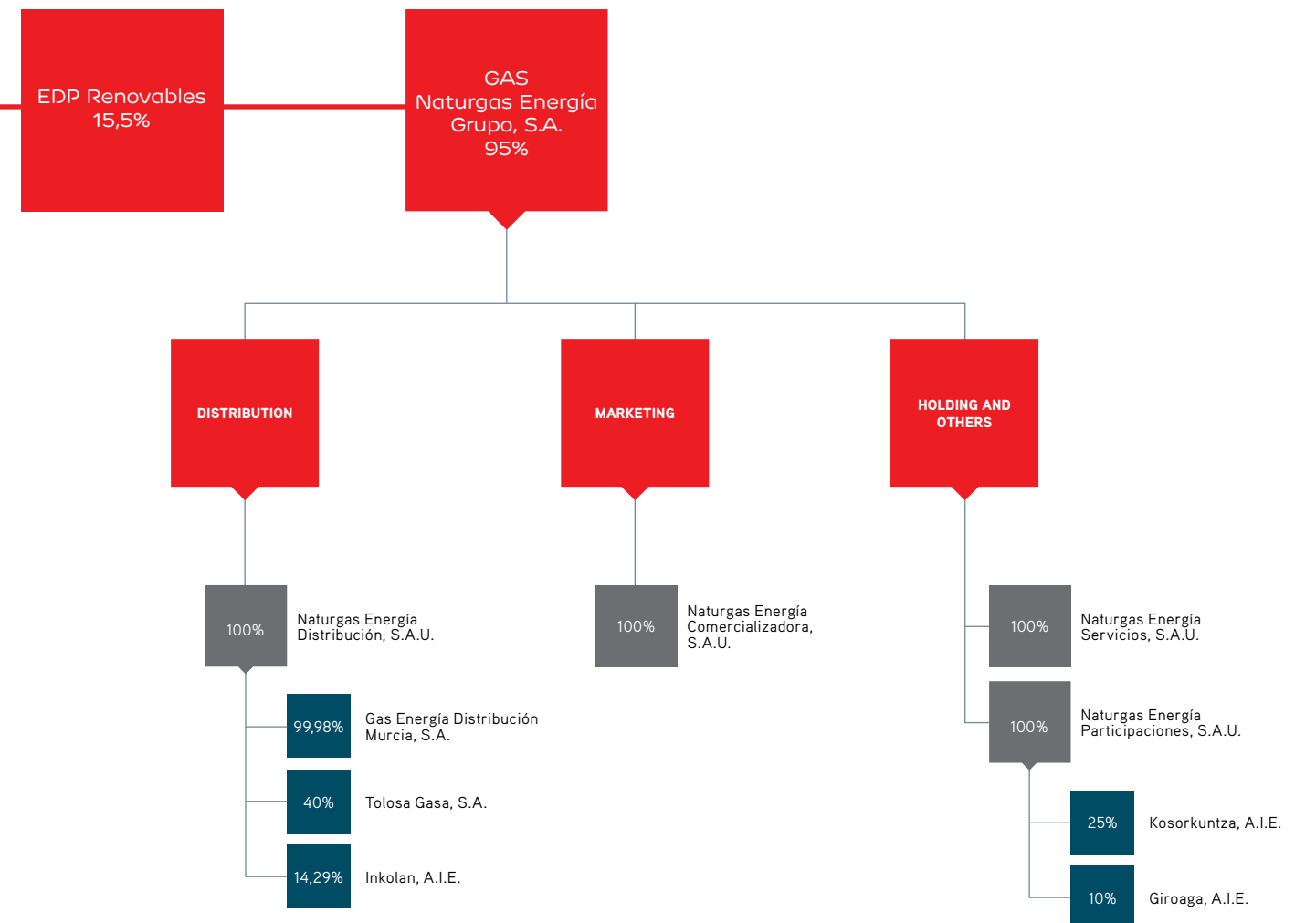
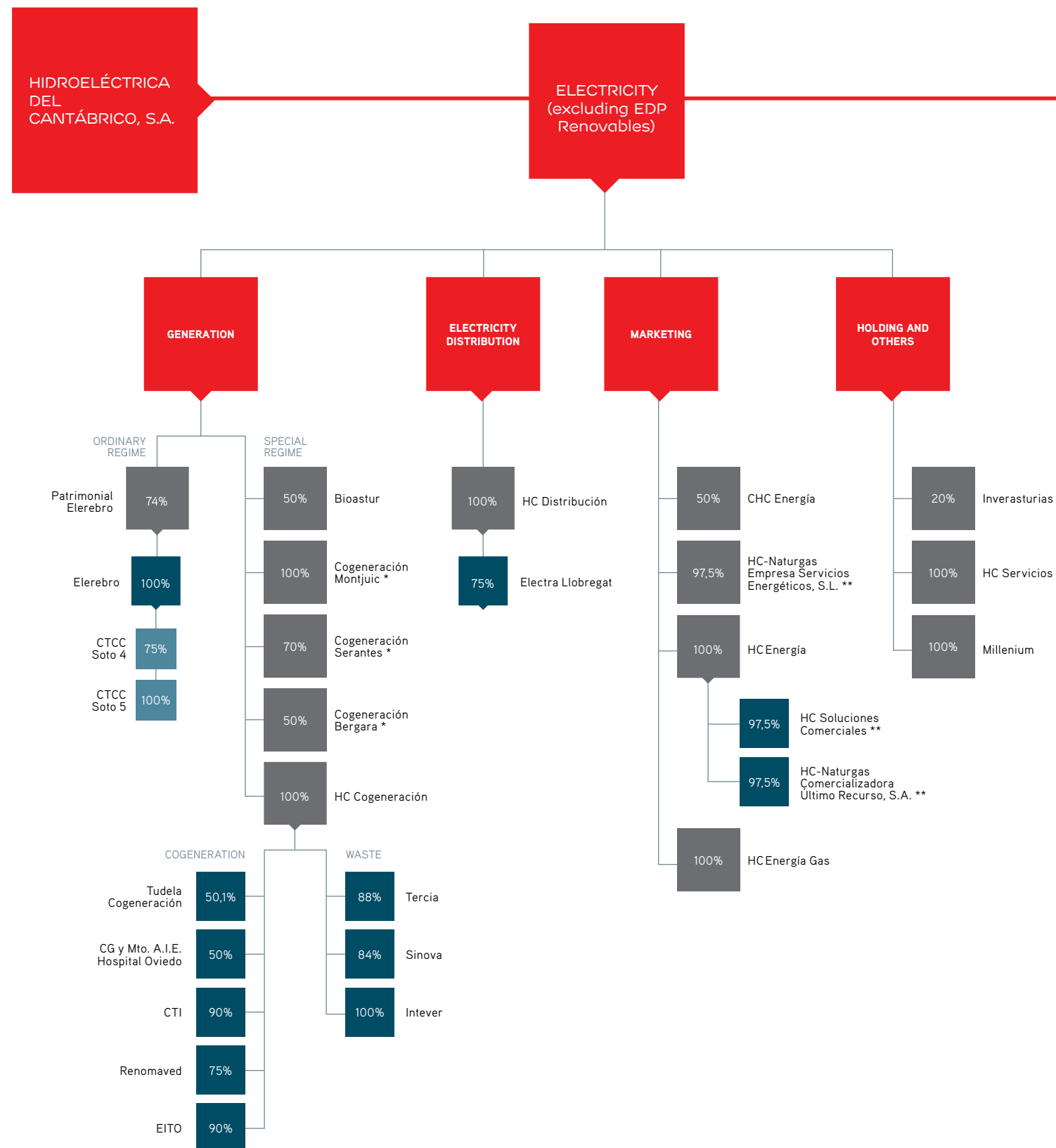
After the liberalisation of the gas and electricity sectors, the energy generation, distribution and marketing operations must be legally separate, so that the customers can freely contract the supply, irrespective of which company owns the distribution network of their zone. Therefore, **marketing** companies were set up which negotiate the economic terms and conditions of the supply with the customer, along

with other value added services (upkeep of the customer's installations, household appliances, etc.). They also manage the relevant tolls (regulated access rates) with the distributor of the customer's zone, along with other tasks, such as settling claims regarding the quality and continuity of the supply, managing metering equipment, reading consumption meters, etc.

CORPORATE STRUCTURE

After the liberalisation, Hidroeléctrica del Cantábrico, S.A. and Naturgás Energía Grupo, S.A. legally separated its energy generation, distribution and marketing operations in the case of electricity, and the distribution and marketing in the gas sector, as shown in the following table.

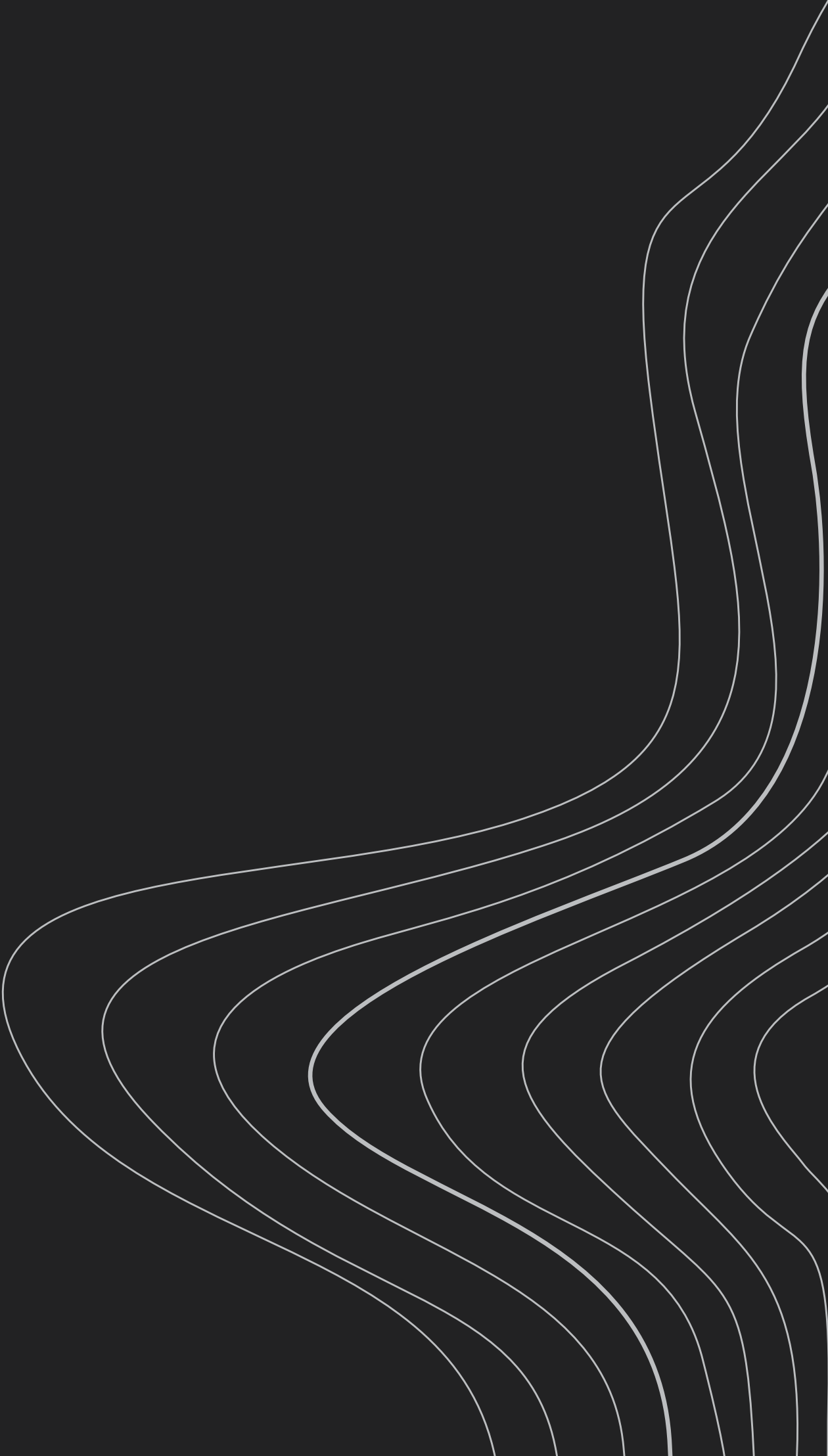
Furthermore, in the case of the electricity sector, Hidroeléctrica del Cantábrico, S.A., has set up two joint-ownership ventures to manage the Salime Hydraulic Power Plant, of which it holds 50%, and to manage the Trillo Nuclear Power Station, where it has a 15.5% stake.



* Cogenerator entirely owned by Millenium, which in turn is 100% owned by HC Energía Gas.
 ** Stake held 50% by the Hidrocantábrico Group and 50% by the Naturgas Group.

The gas transport companies were sold to Enagas in February 2013.

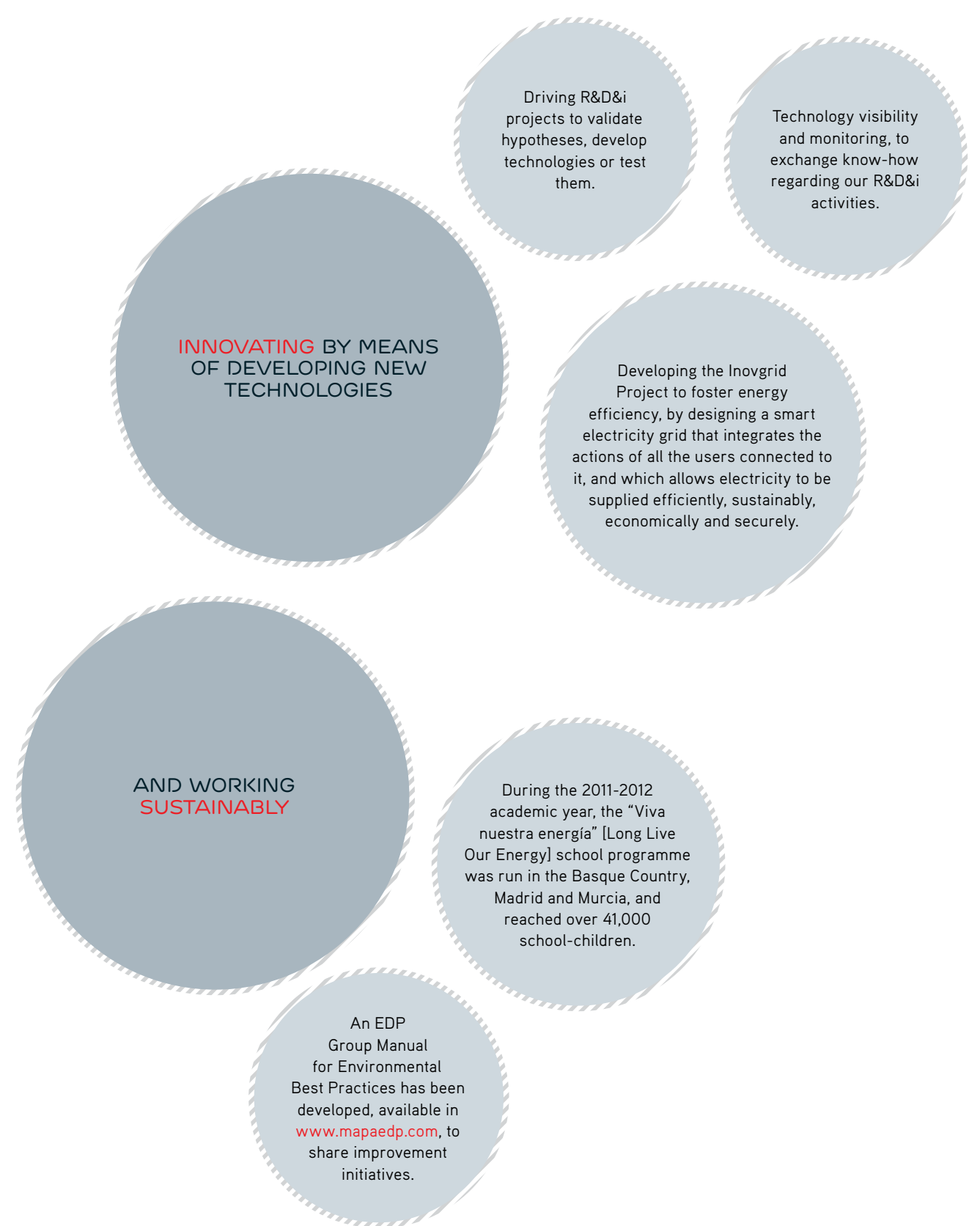
STRATEGY



VISION

"TO BECOME A GLOBAL ENERGY COMPANY AND A LEADER IN CREATING VALUE, INNOVATION AND SUSTAINABILITY".

This objective has been further consolidated in 2012.



VALUES

Our VALUES underpin the way we implement our vision.

Excellence in the way we act

The EDP Group took first prize in the Excellence in the Workplace Award 2012 in the Large Corporations category (over 1,000 employees) and was also nominated in the industry and energy sector.

Initiative in the way we act and think

In 2012, Lean had been part of the Group's culture for 6 years, helping to consolidate business, create value and increase performance capacity.

Trust from shareholders, customers, suppliers and other stakeholders

EDP has been named as one of the 3 most ethical companies worldwide in the electricity sector, not only for adopting ethics and sustainability best practices in all its business areas, but also due to its contribution to the whole of its value chain and society in general, by fostering the exchange of values of integrity, accountability and transparency.

Sustainability to improve the standard of living of current and future generations

In 2012, EDP continued to be in an outstanding position on the Dow Jones Sustainability indexes, both worldwide and European, and achieved its best score ever (87 points), the highest in the electricity sector and of the utilities super sector.

Innovation to create value in the areas where we operate

EDP in Spain launched the IV Grants for PhD students, aimed at the Group's graduate employees who wish to study for a PhD and whose research work is in line with the innovative projects of interest for the company.

COMMITMENTS

The Group's strategy is deployed in the following UNDERTAKINGS:

Customers

We look at things from our customers' perspective every time we take a decision.

One of the cornerstones of EDP in Spain's quality policy is knowing the requirements and expectations of our customers, with our management aimed at ensuring their needs are met.

We listen to our customers and answer in a straightforward and transparent way.

The Customer Service Centre processed an average of over 162,000 calls a month in 2012.

We are always ahead of our customers and foresee their needs.

We were the first company to launch a gas+electricity dual product (joint billing, joint maintenance services, etc.).

People

We combine professional rigor and ethical conduct with enthusiasm and initiative, with a special emphasis on team work.

EDP in Spain has designed a leadership model to consolidate the leadership competences and conduct of the employees.

We stimulate the development of competences and merit.

We run annual coaching programme to share know-how and proven management experiences, by executing practices that help to develop the professional capacities of an employee, guided by a manager, along with other programmes such as "Ser Líder" [Be a Leader] and "Plan de apoyo de Doctorandos" [PhD Grant Programme].

We believe that the work-life balance is fundamental for success.

EDP in Spain has held Family Responsible Company certification since 2011.

Sustainability

We take on board the environmental and social responsibilities arising from our operations, thus contributing to the development of the regions where we are present.

The work of the EDP HC ENERGÍA Foundation and of the Institutional Relations and Resources Department of the gas sector seeks to care of the environment, foster culture or support grassroots sport initiatives, activities aimed at the sustainable development of the environment where the company operates.

We sustainably reduce the specific greenhouse gas emissions of the energy that we produce.

Since 2002, the group's production mix has progressively changed, making way for the combined cycles and for renewable energies, which already accounted for 59% of the installed power by 2012.

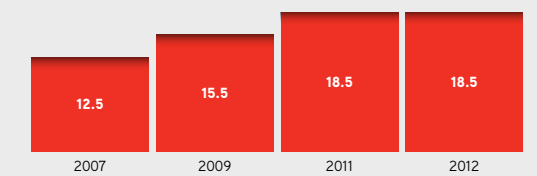
We pro-actively seek energy efficiency.

In 2010, EDP in Spain set up an energy efficiency service company (HC Naturgas Empresa de Servicios Energéticos, S.L.), which can help to achieve a more efficient management of energy.

Results

We fulfil the commitments that we assume with our shareholders.

DIVIDEND PERFORMANCE
(c€/share)



We lead by means of our capacity to anticipate and execute.

Our gas and coal generators have been adapted to the new availability and flexibility requirements to optimise their stake in the current electricity market (over 50 start-ups of the coal generators and nearly 300 of the gas generators in 2012).

We require excellence in everything we do.

For the fifth year running, EDP in Spain obtained its best ever electricity supply quality index, both for its traditional market in Asturias and in the new territories, with a value of 28 minutes, much lower than the sector's average.

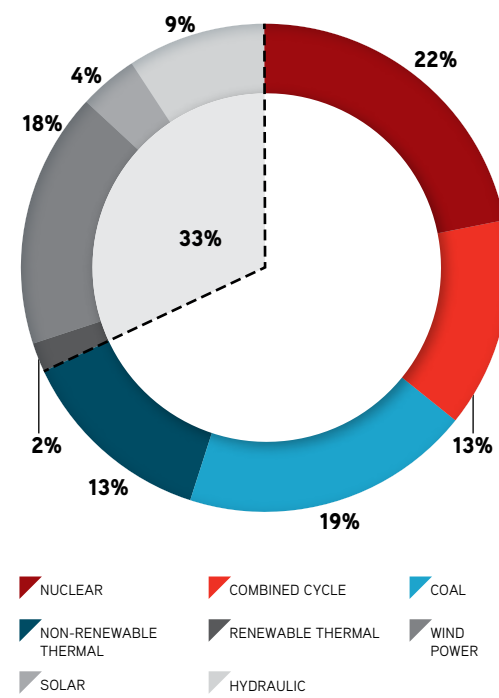
CURRENT CHALLENGES AND OPPORTUNITIES

In an adverse climate dominated by the macro-economic crisis affecting the whole Iberian Peninsula, the situation of the energy sector in Spain was characterised in 2012 by a series of adverse developments that will be the opportunity to drive further the efficiency and profitability of the different assets of the Group.

CHALLENGES

• A drop in energy demand to 2005 levels. High installed capacity, which provides a broad coverage margin of demand, where renewable energies already account for 33%.

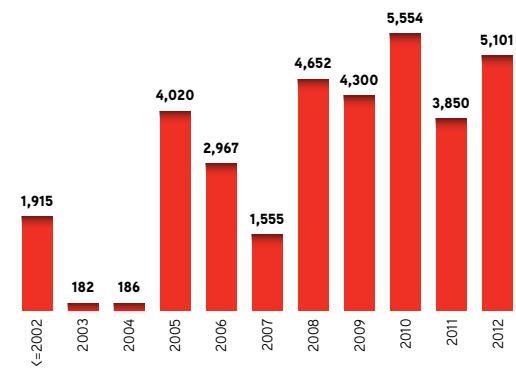
COVERAGE OF DEMAND BY TECHNOLOGY 2012



• Therefore, a thermal gap (demand to be covered by diesel, gas and coal power stations) that has fallen to 2005 levels, which has meant combined cycles operating at under 1,500 hours/year.

• Low prices in the pool, as result of the installed capacity surplus for the existing demand. New mismatch between the costs of the electricity system and the revenue collected from the tariff (tariff deficit).

ANNUAL AMOUNT GENERATED OF THE ELECTRICITY TARIFF DEFICIT (M€)



The electricity tariff deficit accumulated at the end of 2012 stood at over €25,500 million, out of which EDP continues to finance €24 million.

• New regulatory measures aimed at lowering the tariff deficit that have impacted the results of the utility companies (see Chapter on Administration and Regulatory Bodies).

OPPORTUNITIES

ELECTRICITY GENERATION

Availability and Flexibility

Ensuring the sustainability of the combined cycles, maximising its flexibility and efficiency.

Ensuring high availability of the hydraulic power stations.



Ensuring the sustainability of the coal-fired power stations, by analysing the regulatory and environmental needs to guarantee their medium-term operating.

Achieving a return on the operating of the special regime facilities.

GAS AND ELECTRICITY DISTRIBUTION

Rigorous development of the regulated activities

Ensuring sustainability of the gas tariff deficit.

Supplying gas to the customers, including the promotion of new facilities, their development and constructing, thus seeking the ongoing satisfaction of the customers, by conducting prior testing and regular inspections, along with addressing and solving emergencies and meter readings.

Innovating in the management of the networks, by capitalizing on the Innovgrid project that provides the grids with smart equipment and information, capable of automatic energy management and improving the quality of the service.

Maintaining the service quality, where we lead the Spanish electricity sector.



COMMERCIAL

Optimising the portfolio

Embracing the additional liberalisation of the domestic market to expand the portfolio.

Capitalising on the key accounts and corporate portfolio and expanding the range of value added services.



Developing micro-generation and energy efficiency services.

Consolidating the back-office infrastructure to ensure the success of the businesses.

Ensuring rigor in the management of the credit and energy risk.

STAGES OF THE STRATEGY

This was the last year of the second stage (2009-2012) of the Strategy defined by EDP in Spain in 2005 and based on three core areas: orientated growth, maximum efficiency and controlled risk.

Over recent years, the objective has been to run and optimise the investments in the first period, a priority that was not fully fulfilled given the macro-economic climate and the new regulations affecting the energy sector.

MILESTONES AND PRIORITIES IN 2012

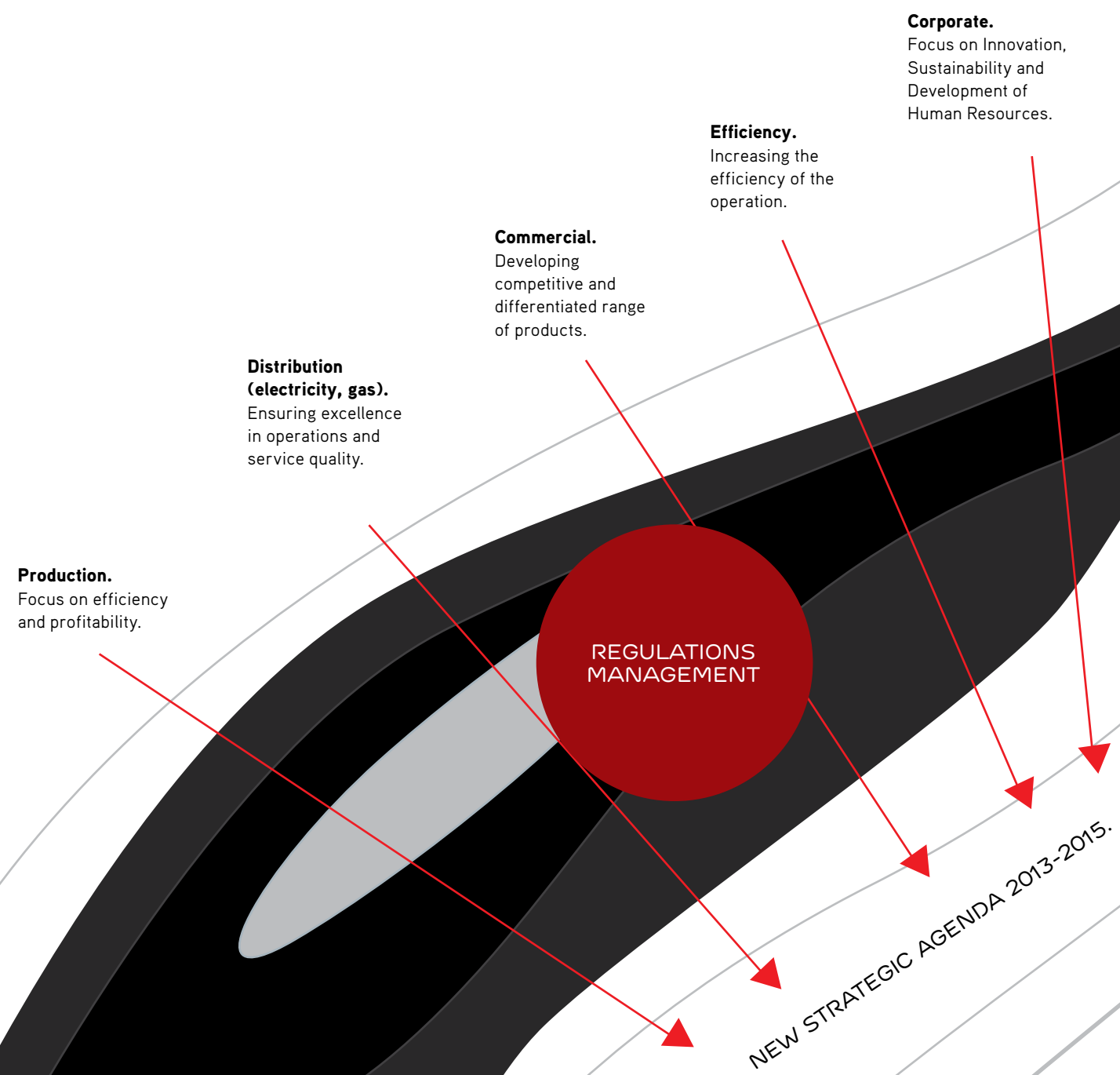
ORIENTATED GROWTH	
Consolidating remuneration for electricity distribution, taking into consideration both new investments and the appropriate remuneration of existing assets.	The distribution EBITDA dropped by 29% as the result of the remuneration impairment established in Royal Decree 13/2012.
Retaining the Group's gross margin, seizing incremental business opportunities, cutting costs and boosting productivity.	The Group's gross margin fell by 12%, a drop that can be considered to be moderate given the poor climate in 2012.
Expansion of the school programme "Viva nuestra energía" ["Long Live Our Energy"] to other regions: Madrid and Murcia.	Over 41,000 students took part in the "Viva nuestra energía" programme during the 2011-2012 academic year.
PRIORITIES	MILESTONES

CONTROLLED RISK	
Keeping the environmental variable at the core of the business model, which involves renewing environmental management system certification for generation (97% of the installed capacity) and 100% of distribution (electricity and gas) and 100% of the marketing of gas.	Once the management system certificate had been renewed, an Environmental Best Practices Manual was produced to disseminate and share initiatives among all the business units and partner companies (www.mapaedp.com).
Expanding the EDP (Spain) Prevention of Occupational Risks Management System, pursuant to the OHSAS 18001:2007, to different areas of the electricity business and renewing the existing ones in the gas business.	The Prevent Management Systems, pursuant to OSHAS, were certified in Aboño and Soto de Ribera Thermal Power Stations, the Hydraulic Power Station Ventures, and in the Electricity Distribution Maintenance and Operations Department in Asturias. The certificates were renewed in all the gas business facilities and centres.
PRIORITIES	MILESTONES

MAXIMUM EFFICIENCY	
Optimising the shared back office in Spain.	After the systems were unified in 2011, the processes were optimised in 2012 in order to subsequently proceed to its homogenization.
Renewing Lean teams, developing standards to measure the impact of initiatives and consolidating the Lean portal (as a space for exchanging initiatives).	The Lean teams have continued to be renewed and nearly 500 visits from all regions to the LEAN portal were logged in January 2013.
New Networks Master Plan 2012-2016 (strengthening external networks, automation and remote control, modernising old substations and setting up a plan to replace meters).	Investment in grids in 2012 to the tune of 70 million euros, with the construction of the Gijón Port and Gijón Norte substations being particularly noteworthy. Investments to the tune of 50 million euros of the gas transport and distribution networks.
Updating the collective bargaining agreement for the electricity business in EDP (Spain), thus bringing it into line with the new economic context and the changeable nature of the business.	Once the negotiating of the collective bargaining agreement of the electricity business was underway, there was a special emphasis on great workforce flexibility and mobility.
Designing and developing actions to improve the weaknesses of employee satisfaction (promotion, communication, leadership) to allow us to achieve an overall level of satisfaction of 80% in 2013.	In 2012, EDP in Spain embarked on the first leadership action with the implementation of the "Ser Líder" [Be a Leader] programme.
Maximising portfolio profitability by managing pricing policies, increasing dual contracts and rigorously managing credit risk.	13% increase of B2B dual customers in 2012.
PRIORITIES	MILESTONES

2012-2015 STRATEGY

A new shareholder (China Three Gorges) joining the EDP Group, the regulatory changes in the Iberian Peninsula, the renewal of the company's management team require the strategic agenda of the business units for 2013-2015 to be reconsidered:



Given that these are the strategic challenges that we are facing (greater operational efficiency and improving processes, greater cost control, continuity in selecting and introducing best practices, regulatory management and growing rigor in the selection of investment projects), a series of initiatives have been defined that we can embrace, including:

Pro-active management of the regulatory risks

By means of analysing monitoring indicators and support from the business units.

Innovation, sustainability and human resources

Modelling metering management of the marketers and production in special regime and distributed generation.

Development of the sustainability programme, by designing new communication channels for our stakeholders.

Development of an integral human resources management programme.

New attractive and differentiated commercial range

New channels, value added products and services for the corporate and key accounts segment.

Development of new products for "smart grid" customers.

Improving efficiency and profitability

Analysis of the medium-term feasibility of the thermal generators:
 • Bringing the coal generators in line with the new Industrial Emissions Directive that will qualify its operating post-2015.

• Adapting the combined cycles to the situation of the new market, with lower margins, and where instead of a continuous operation as they were designed for, they are required flexibility to operate with numerous start ups and shut downs.

Identifying synergies between the electricity and gas businesses and, specifically, optimising the joint operating of the distribution network, both of different business units (gas and electricity) and different territories (Spain and Portugal).

Assessing and optimising the profitability of the investments in electricity distribution network, pursuant to the new remuneration regulations.

Benchmarking with other companies of the sector to import best practices to our businesses.

Improving the back-office processes and activities, which are essential for successful business outcomes (growth and customer loyalty).

Implementation of the third stage of the OPEX programme (cost reduction).



OVER 100,000 STUDENTS
TOOK PART IN THE VIVA
NUESTRA ENERGIA SCHOOL
PROGRAMME

PRESENT IN
AUTONOMOUS
REGIONS

5

+ 650 CENTRES
VISITED SO FAR

Viva Nuestra Energía (Long Live Our Energy) is an educational initiative focused on developing learning workshops where the school children can learn about the source of energy and get some energy efficiency tips and recommendations to use energy more safely.



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CUSTOMERS



INTRODUCTION

EDP NOW HAS OVER 1,600,000 ELECTRICITY SUPPLY POINTS AND OVER 1,700,000 GAS SUPPLY POINTS IN SPAIN.

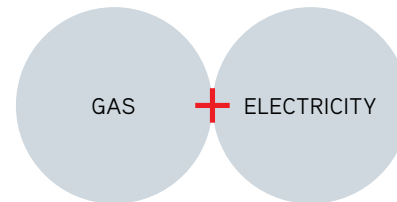
EDP in Spain has a quality system implemented and certified according to the ISO 9001 standard for electricity generation and gas and electricity distribution and marketing operations, which guarantees that its processes are focused on customer satisfaction.

As regards its **electricity business**, over 650,000 supply points are connected to our distribution grids, which meant over 9,000 GWh of electricity being distributed in 2012. This figure was significantly down on the 2011 due to the impact of the economic crisis on high voltage customers, which are a key part of the Group's market.

With respect to its **gas business**, there are more than 1 million supply points connected to our networks, which supplied over 55,000 GWh in 2012 and positioned the Group as the second distributor of natural gas in Spain (with a market share of 20%).

The other supplies are customers of our marketers, which managed over 19,500 GWh of electricity (meaning a market share of over 11%) and 27,600 GWh of gas, with a share of nearly 10%.

The Group has developed a sales strategy among corporate and domestic consumers based on a **dual offer**



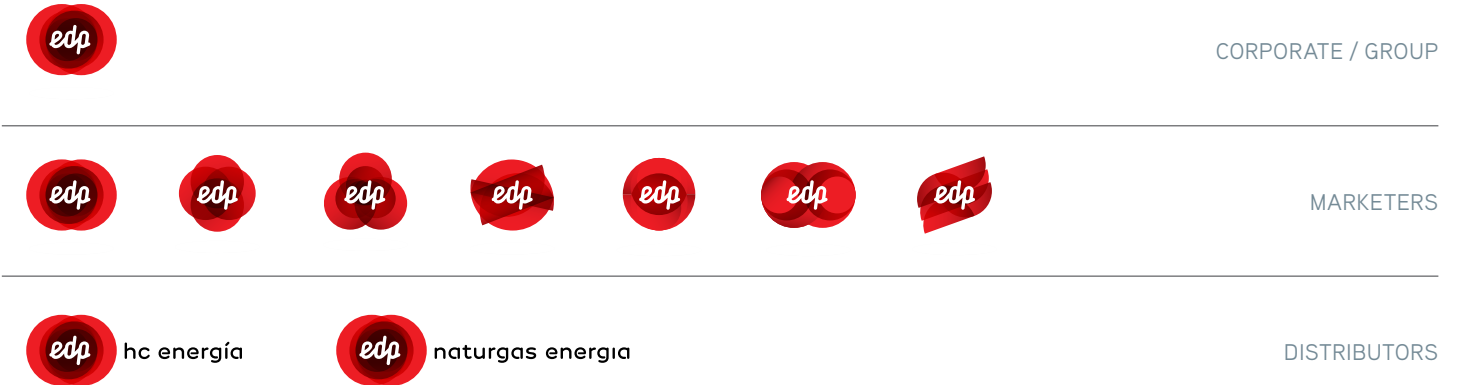
with valued added services, both in the established areas and new areas of expansion.

	UNIT.	2012	2011	2010
ELECTRICITY DISTRIBUTION				
Supply points		658,581	656,119	651,001
Energy distributed	GWh	9,003	9,553	9,363
GAS DISTRIBUTION				
Supply points		1,008,109	993,851	983,873
Energy distributed	GWh	55,786	48,447	45,644
ELECTRICITY MARKETING				
Supply points		1,048,430	1,034,414	1,026,857
Energy marketed	GWh	19,519	20,591	20,532
GAS MARKETING				
Supply points		772,322	787,860	823,792
Energy marketed	GWh	27,665	28,259	29,809
OVERALL ELECTRICITY SUPPLY POINTS		1,707,011	1,690,533	1,677,858
OVERALL GAS SUPPLY POINTS		1,780,431	1,781,711	1,807,665

In the Corporate and Key Accounts segment, where the strategy is focused on obtaining efficient coverage of generation and on optimising the customer portfolio, the level of satisfaction was over 72%, both for gas and electricity supplies.

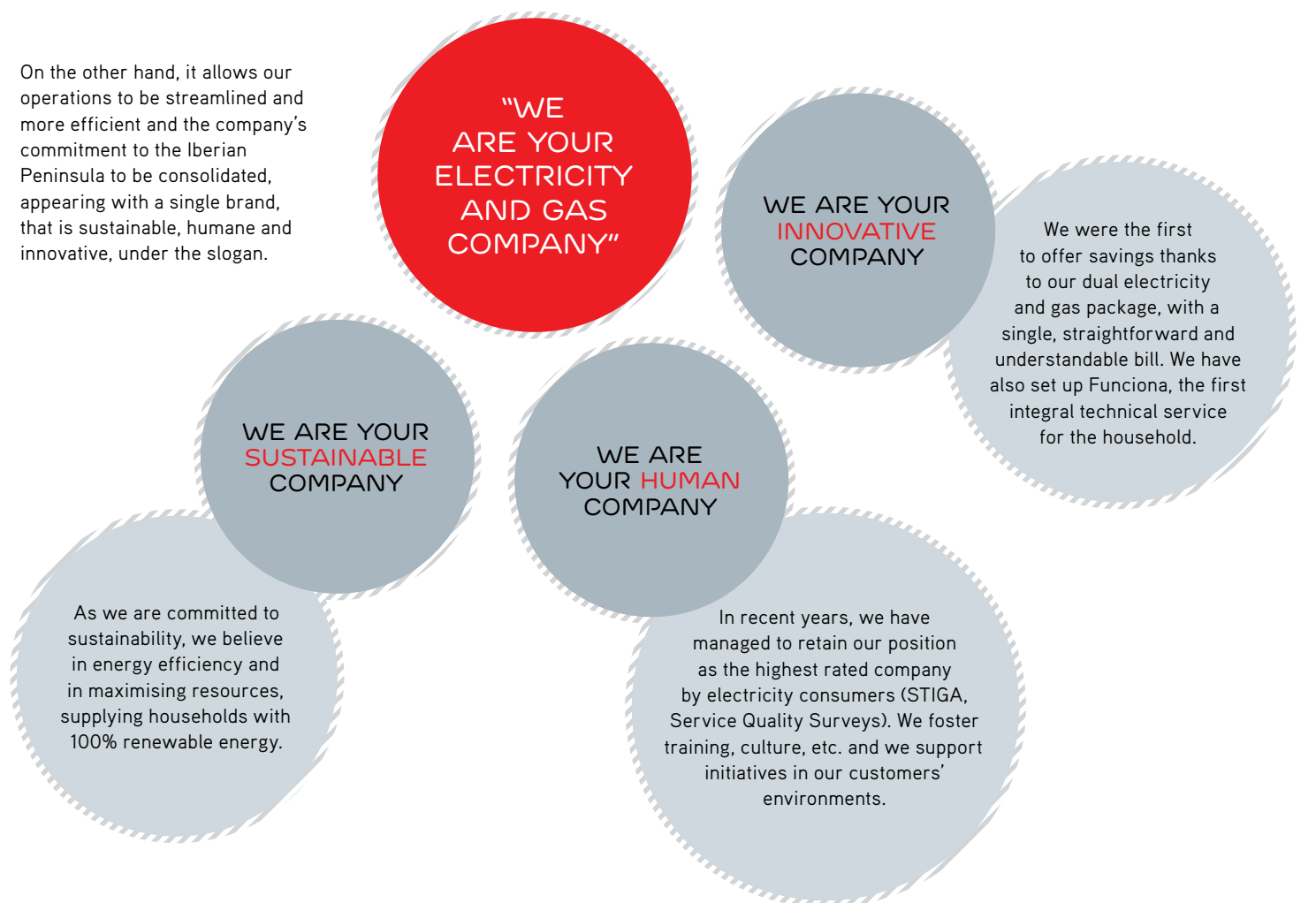
NEW BRAND

In 2013, the Group has unveiled a corporate brand using the EDP brand in the commercial relationships with their customers (gas, electricity and services marketing), as has been the case in the other countries where it is present; the HC Energía and Naturgas Energía brands, which had been previously used for this activity, will only be used for the regulated activities, in other words, for the electricity distribution and gas distribution.



This change ensures compliance of the Electricity Sector Act and the Hydrocarbons Sector Act, which requires companies to differentiate in terms of brand the marketing business from the electricity and natural gas distribution undertakings.

On the other hand, it allows our operations to be streamlined and more efficient and the company's commitment to the Iberian Peninsula to be consolidated, appearing with a single brand, that is sustainable, humane and innovative, under the slogan.

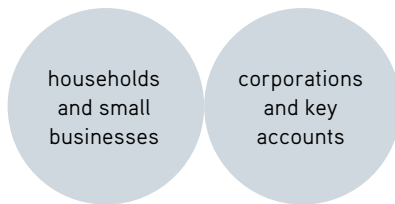


COMMUNICATION CHANNELS

Two-way and direct dialogue with such an important stakeholder to the company as customers are, is ducted through different channels specifically designed to optimise communication with each of the segments into which the operations are classified: households and businesses (B2C, Business to Customer), corporations and key accounts (B2B Business to Business).

CUSTOMER SERVICE CENTRE

With two toll-free and separate lines:



They operate non-stop **24 hours a day and 7 days a week**. Assistance is offered in Spanish, Catalan and Basque to overcome language barriers. The Centre offers assistance for gas and electricity customers.

línea edp
900 907 000
www.edpenergia.es

Over 162,000 calls were received on average every month in 2012.

WEBSITE www.edpenergia.es

In 2012, the EDP in Spain web portals notched up over **2,800,000 visits** and over **323,000 customers** registered through the customer area of the website. Registered customers can perform on-line formalities including changing data, amending contracts and request gifts from the customer loyalty points programme.

In 2013, and under a single brand, the Group is launching a new website unifying the customer area for marketing energy (electricity and gas) to the customers in Spain.

In 2010, a specific website was unveiled to disseminate, raise awareness and educate in areas related to sustainability and innovation, showcasing the specific projects in which EDP has been involved in Spain; as a continuation of this new means of communication with our stakeholders, in 2012, a website with a focus on education was also developed. It currently is home the **"Viva nuestra energía" ["Long Live Our Energy"]** school programme, aimed at fostering responsible energy use and to disseminate the new renewable energy sources that coexist with the traditional sources.

www.sostenibilidadedp.es



COMMERCIAL OFFICES

In Asturias (Oviedo, Gijón and Avilés), the Basque Country (Bilbao, San Sebastián and Vitoria), Cantabria (Santander, Castro Urdiales, Torrelavega, Santoña and Reinosa), Murcia and Mérida, EDP provides face-to-face assistance for B2C customers (households and businesses), where they can process pre-contractual formalities, payments, complaints, registrations and amending contracts and services. In 2012, there were over 23,000 visits every month.

Since 2009, our offices have also had kiosks, known as "Zona EDP", where thanks to an intuitive navigation system users can perform different operations such as paying invoices by credit cards or printing out bank documents. Currently, in Asturias, there are kiosks up and running at the Oviedo, Gijón and Avilés commercial offices, and in the shopping malls of Los Fresnos Gijón, Parque Astur in Avilés, Calatrava in Oviedo and Parque Principado, in Siero; there are also kiosks at the Santander, Murcia, Mérida, Bilbao, San Sebastián and Vitoria commercial offices, and in the Max Center (Bilbao) and La Bretxa (San Sebastián) shopping malls. In total, over 7,000 operations are performed at the Zona EDP kiosks every month.



Commercial Office, Oviedo

FIDMA

EDP attends the Asturias International Trade Exhibition (FIDMA) every year. The Funciona challenge was the 2012 slogan where visitors took part by jumping up and down to generate kWh, thanks to a special floor that enables power to be saved. By the end of the fair, the **100,000 kWh** set as the challenge were generated and a cheque for that value was handed over to the Cocina Económica project. The emphasis at the trade fair was to interact as actively as possible with the visitors. An Efficient Home was therefore set up, where actors performed some energy saving everyday actions, with tips that they shared with the audience.

There were specially designed activities for children and they could have fun on the bouncy castles located outside the pavilion and join in the activities run by **"Viva nuestra energía" ["Long Live Our Energy"]** characters. In 2012, the EDP (Spain) pavilion was visited by over 80,000 people and 7,000 children took part in the children's workshops.

80
7

COMMERCIAL DELEGATIONS

EDP has Commercial Delegations throughout Spain with 66 managers to offer support to the industrial customers (B2B: key accounts and corporations, customers with annual consumption over 200 MWh). Every quarter, the B2B customers are sent the Empresa y Energía newsletter, a magazine covering topical energy issues and articles on sustainability, renewables and new technologies.



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ENERGY EFFICIENCY

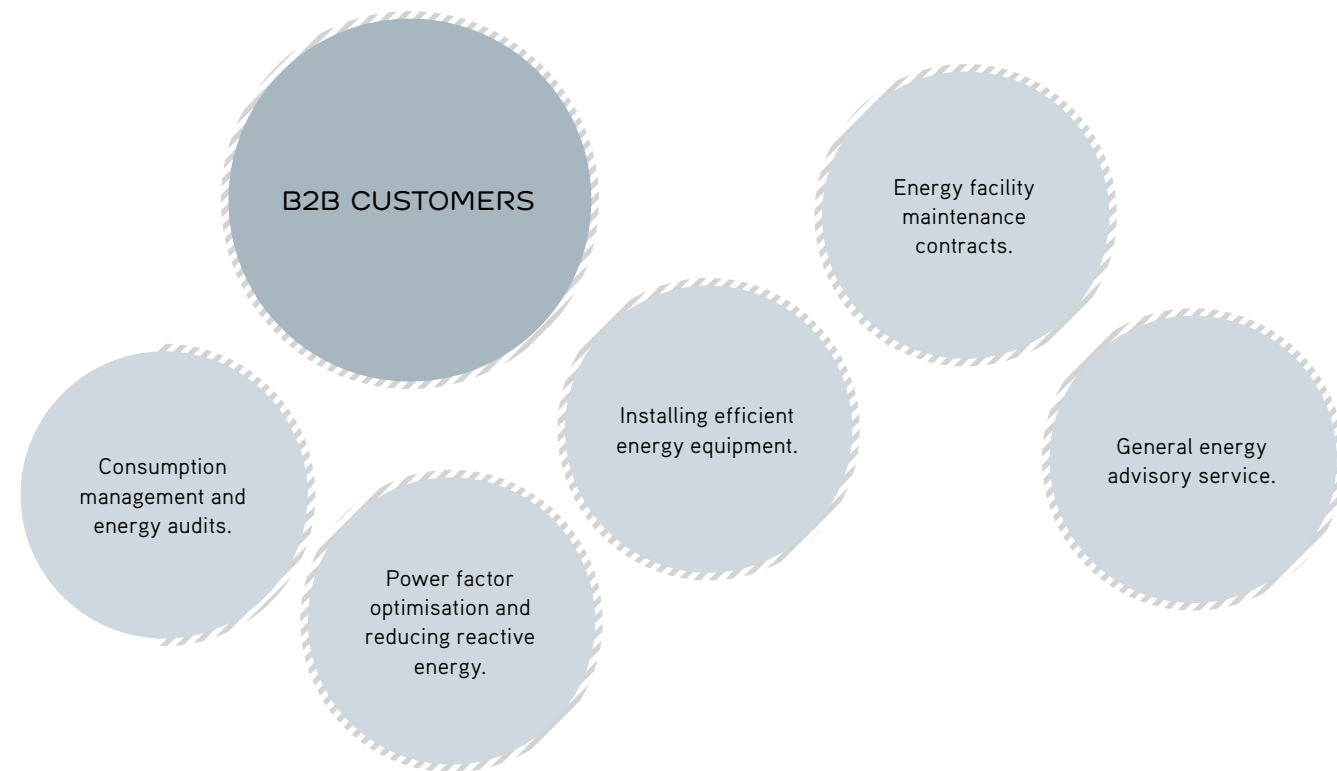
Even though 2012 was not very favourable for developing energy management services given the economic climate, EDP (Spain) implemented new initiatives aimed at the different customer segments.

CORPORATIONS AND KEY ACCOUNTS (B2B)

In order to appropriately advise our customers, training in energy efficiency was run for the whole commercial network in 2012. In addition, three new services were launched:

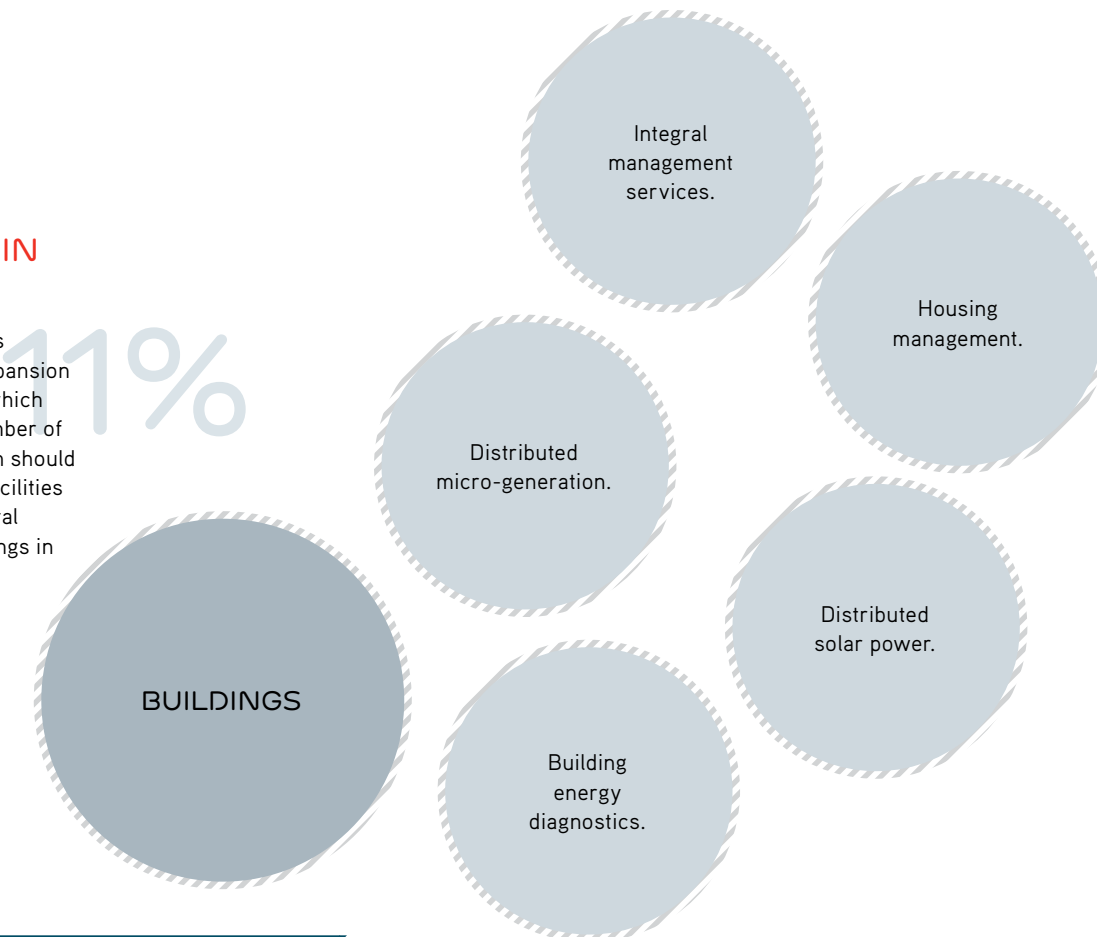
SERVICES		
ERM (gas measurement and regulation station) integral maintenance.	Service to replace conventional lamps for LED technology.	Service to install speed variators for electric motors.

Our portfolio of corporate permanent energy services was thus over 800 contracts.



ENERGY SERVICES IN BUILDING

In 2012, the commercial activity has intensified in this segment, with expansion towards new geographical areas, which has led to a 11% increase in the number of buildings managed. Special mention should be made of the transformation of facilities powered by coal and diesel to natural gas facilities, with the ensuing savings in emissions.



EDP NATURGAS ENERGIA NEW HEADQUARTERS

The new corporate headquarters is a benchmark in sustainable and bioclimatic architecture, which produces 60% fewer CO₂ emissions than an equivalent conventional building. The building, whose purchase and refurbishing involved an investment of over 17 million euros, is located in an area in the throes of urban renewal and has conserved its 1924 frontage in the Rationalist style. Savings and efficiency in the use of energy and water, minimum environmental impact during the useful life and construction phases, along with the recyclable nature of all of its construction components has turned a historical building into a new benchmark in terms of efficient and "smart buildings" in the capital of Bizkaia.

In the design of the work, functional value was given to the frontage maintenance, enabling an air chamber to be created between the old and new structure, which acts as a thermal regulator. This system will allow the heating or air-conditioning consumption to be cut throughout the building. In any event, when climate control is necessary, the energy required will come from the building itself, which has a gas electricity microgeneration plant and with a geo-thermal circuit (with over four kilometres of piping) installed in the basement, with columns that go down 125 metres deep. 90% of the 422 tons of steel used is recycled and, thanks to the selective demolition of the former interior, the 1,400 cubic metres of waste generated have been handed over to authorised companies for its recycling.

For the building, EDP has attained the highest category, Platinum, of LEED (Leadership in Energy and Environmental design) certification, a certification system for sustainable buildings set up in the USA at the end of the 1980s.

B2C SEGMENT

EDP (Spain) provides its domestic and small business segment different products and services aimed at saving on energy consumption, safe facilities and fostering the use of renewables.

Energy savings	
<p>Points Customer may redeem loyalty points for products that help to save energy and/or water.</p>	<p>Customer Area Reserved area where customers can access information on their contract, consumption, see their bills, redeem customer loyalty points, etc.</p>
<p>Powerhome Appliance that enables the contracted power to be optimised to the minimum needed, cutting the electricity bill and fostering energy savings. Over 100 appliances are installed.</p>	<p>Assess your consumption Online test to learn more about energy consumption.</p>
<p>Newsletter Information that the customers receive monthly, by email, with the main products and services available, saving, efficiency and sustainability tips. More than 2,600,000 sent out in 2012.</p>	<p>E-billing Free service providing paperless billing for the customers. We currently have over 270,000 contracts signed up. Since the e-billing campaign was launched, EDP (Spain) has undertaken to plant a tree for each new customer, a commitment that has already led to 130,000 trees to be planted.</p>

Safety of the facilities
<p>Funciona Maintenance services for gas and electric facilities and household appliances. Our marketers already have over 337,000 customers, to whom we annually send efficiency and saving tips. Furthermore, when contracting the electricity Funciona service, the customers receive a free low-consumption lamp. In 2012, we handed out over 16,000 lamps.</p>
<p>Efficiency households Website service where the customers can find household safety, efficiency and savings tips.</p>

Fostering energy renewables	
<p>Photovoltaic solar plan Service to install photovoltaic equipment.</p>	<p>Renove Plan Service to replace natural gas boilers by other more efficient ones with better performances. In 2012, nearly 500 installations were carried out.</p>
<p>Solar heating plan Service to install thermal solar panels for domestic hot water and heating.</p>	<p>Climate Control Plan Service to install Class A climate control units.</p>
<p>Source of the energy The whole of the supply of B2C customers come from highly-efficiency cogeneration and renewable energy sources (guarantees of origin).</p>	<p>DHW (Domestic Hot Water) Plan Service to replace the hot water boilers for other more efficient ones.</p>

GUARANTEES OF ORIGIN AND ELECTRICITY LABEL

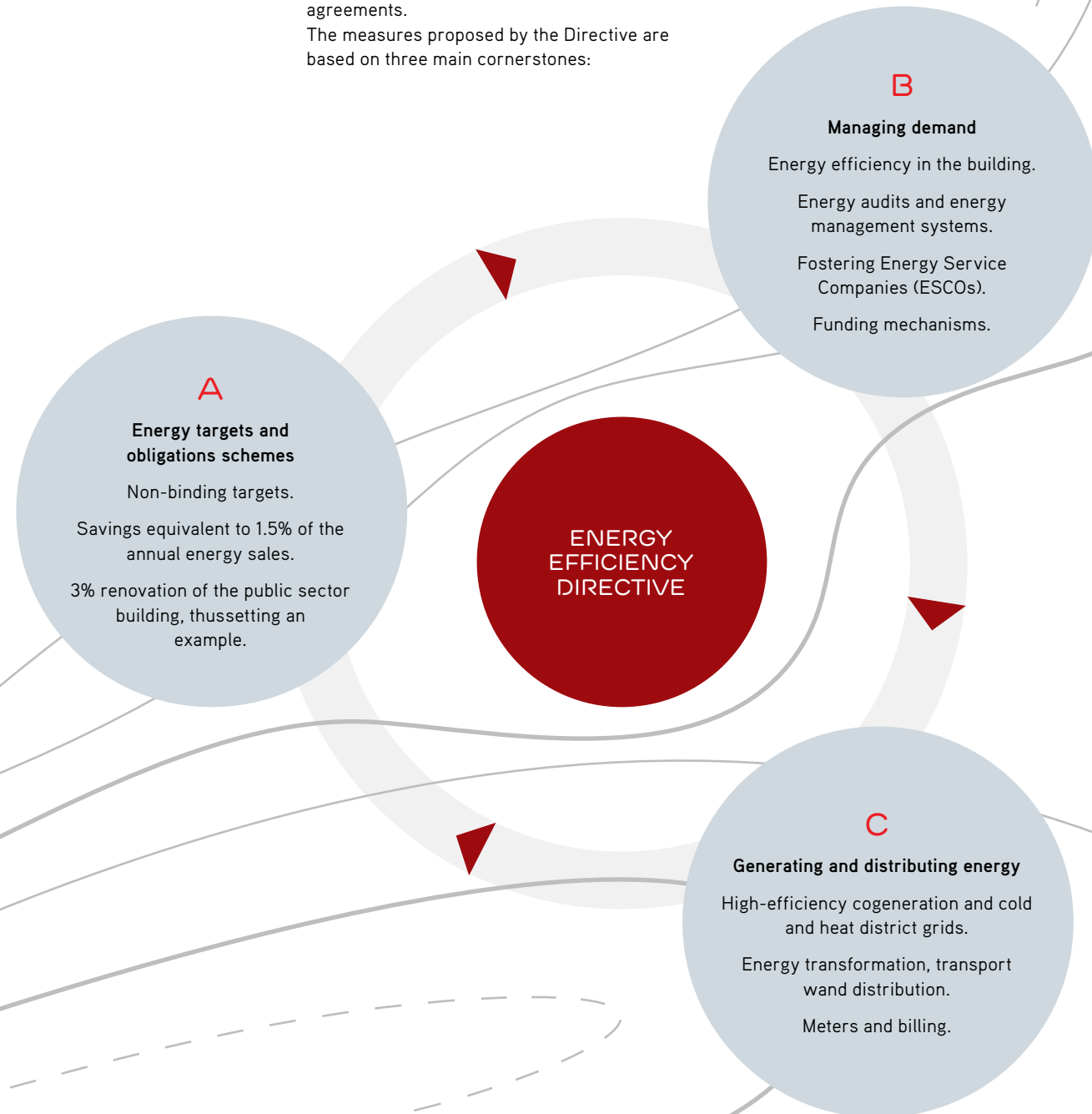
The Guarantees of Origin and Electricity Label (GDO) system informs consumers on the origin of the electricity they are supplied and its associated environmental impact. The EDP (Spain) marketers supply their customers with cleaner electricity than the national average, with high percentages of high-efficiency cogeneration or renewable energies in annual terms. Thus, in 2012, Hidrocarbónico Energía and Naturgas Energía Comercializadora supplied C label, compared to the national average, E label, to the whole B2C segment.

ORIGIN	MARKETER WITHOUT GDOS	HIDROCARBÓNICO ENERGÍA, S.A.U.	NATURGAS ENERGÍA COMERCIALIZADORA, S.A.U.
Renewables (pure + hybrids)	15.1%	49.5%	47.3%
High-efficiency cogeneration	2.2%	1.3%	1.4%
Cogeneration	9.5%	5.7%	5.9%
Natural gas combined cycles	19.3%	10.9%	11.3%
Coal	22.9%	13.6%	14.2%
Diesel/gas	5.0%	3.0%	3.1%
Nuclear	25.5%	15.2%	15.8%
Others	1.5%	0.8%	1.0%
CO₂ emissions (kg/kWh)	0.40 E	0.24 C	0.25 C
High activity radioactive waste (mg/kWh)	0.66 E	0.39 C	0.41 C

NEW ENERGY EFFICIENCY DIRECTIVE

The Energy Efficiency Directive, of 25 October 2012, seeks to help to ensure the achievement of the European Union's target of 20% reduction on the consumption of primary energy by 2020. It initially had a more ambitious approach, with high expectations, that were mitigated by lack of agreements.

The measures proposed by the Directive are based on three main cornerstones:



SMARTGRID: REPLACING ELECTRICITY METERS

Fostering energy efficiency requires having an electricity distribution grid that is capable of integrating all the actions of all users connected to it (generators, consumers and those performing both roles at the same time), in an attempt to provide more efficient, sustainable, affordable and safer electricity. This network was given the name of SmartGrid or Intelligent Network.

The legislation thus establishes that all electricity meters with a contracted capacity of up to 15 kW should be fitted with the new equipment enabling hourly discrimination and remote management by 31 December 2018.

EDP (Spain) has nearly 150,000 meters of this type installed and already over 63,000 are integrated in the Remote Management System. Thus, 130,000 readings were taken and more than 1,000 orders to modify power, disconnect and reconnect were performed in 2012.

In 2012, the Remote Management System integrated with the customer commercial application came into service. Apart from replacing the meters, this involved installing around 400 concentrators, equipment located in the transformation centres that manage communication, both "downstream" for

disconnecting, reconnecting and changes in power and "upstream" for the remote reading of the meters.

The concentrators also allow the capacity and load of the transformation centres to be measured, analyse logs, which is all aimed at improving and more efficiently planning the grid, as well as at extending the useful life of the equipment [smart-grid].

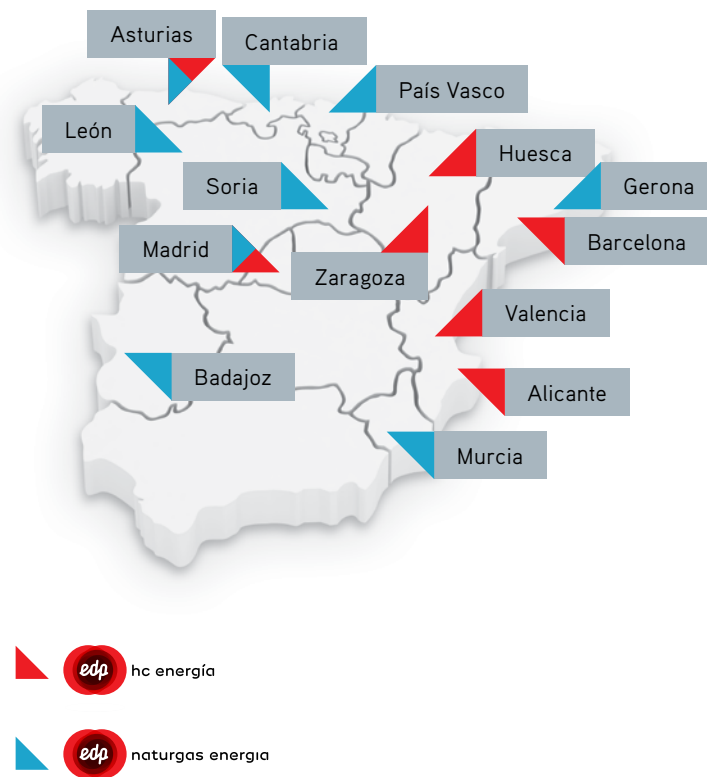
In the case of the customers under the Last Resort Tariff (TUR), the introduction of the Remote Management System is particularly significant, as those customers are billed monthly, even though the meters are read every two months. This meant that one out of every two bills had been estimated up until then. With the new system, those customers with a new meter and active remote management, that totalled over 82,000 supply points by the end of 2012, now have remote meter reading, thus avoiding the inconveniences of estimated billing.

In 2012, meters were replaced in Oviedo, Gijón, Avilés, Siero and Llanera and in 2013 it is planned to extend the campaign to Nava, Piloña and Noreña which will involve installing a further 230 additional concentrators.

QUALITY OF SERVICE

EDP in Spain began its electricity distribution operations in the Principality of Asturias. Since 1998, the company has implemented an expansion strategy to other autonomous communities, both by means of setting up own networks in territories not covered by other companies and by acquiring small distributors.

Our gas distribution business, where we are currently the second distributor nationally, has networks in the Basque Country, Asturias, Catalonia, Castilla-León, Madrid, Murcia, Cantabria and Extremadura.



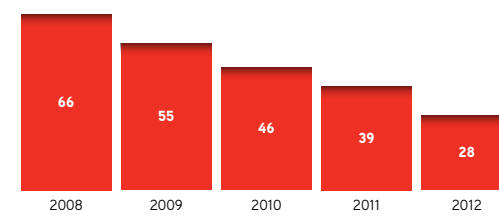
The two distribution operations are regulated businesses. Thus, the distributors collect the access tolls paid by the customers and declare them to the Spanish National Energy Commission (CNE), which is the entity tasked with settling them with the different players of the system, which include the distributor companies themselves.

ELECTRICITY DISTRIBUTION

As part of the remuneration for the electricity distribution activity, and in order to ensure a better service, two incentives are considered: one to improve the supply quality and the other to reduce grids losses.

The electricity supply quality is measured by means of two parameters: its continuity (interruptions and their duration) and the quality of the customer service and relations. Target values are set by legislation for those indicators and in the case of non-compliance, the distributor is required to compensate the customer. Continuity is defined by the TIEPI (System Average Interruption Duration Index, TIEPI in Spanish) indicator that measures the interruption time equivalent to the installed capacity. For the fifth year running, EDP HC Energía recorded its best-ever supply quality index, both for its traditional market and in the new territories, recording a value of 28 minutes in 2012, 11 minutes lower than in 2011, which was also a historical record. Despite this, around 5,000 supply points were logged where the legally established interruption maximum times were exceeded.

TIEPI EVOLUTION IN EDP ESPAÑA (minutes)



Both the TIEPI evolution and the lower percentages of energy losses recorded by our grids (4% in 2011, compared to the national average percentages that were around 9%) are proof of EDP HC Energía's investment endeavour each year in electricity infrastructures and which stood at 69 million euros in 2012.

The second parameter to determine the quality of the electricity supply is the quality of the customer service, which is measured by the time taken by the utility company to perform operations such as connections to the supply grid and equipment installation, reconnecting supply service following a cut-off due to a

non-payment, preparing quotes and carrying out electrical installations. In 2012, EDP HC Energía logged 734 instances of non-compliance of the time periods for connection and non-payment reconnections. The amount of compensation of each of them stood at 30 euros or 10% of the first full bill (whichever amount is higher).

GAS DISTRIBUTION

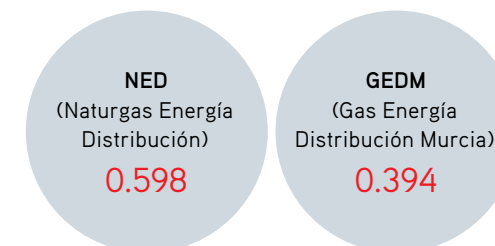
The quality of the natural gas (in terms of the composition and calorific value) must comply with those established in the Technical Management Standards of the System (standards that establish the relations between the different agents that access the gas system and that regulate the procedures in order to guarantee the continuity and safety of the gas supply). The transporter is responsible for ensuring that there are the necessary metering equipment to guarantee this quality.

The natural gas received by the transporter is odorised prior to being delivered to the distributor for its distribution; thus, any leak may be easily detected by the human sense of smell, when it reaches a much lower concentration (a fifth) than its lowest ignition point.

With respect to supply continuity, an interruption is considered to exist when the pressure of the gas delivered is lower to the legally-established limits. In this case, the utility company has to apply a 10% discount to the monthly bill according to the number of interruptions to the service and their duration.

EDP Naturgas Energía, in order to process all the new supply requests and deliver the gas in quality and safety conditions, invested over 50 million euros in gas distribution and transport infrastructures in 2012.

Gas network rupture index for EDP (Spain)



COMPLAINTS

Complaints received regarding the quality of service are duly considered to decide upon the best way to solve them and the improvements to be implemented. In 2012, the number of complains about the commercial cycle, and which were basically relating to the billing problems, dropped notably.

COMPLAINTS	2012	2011
Supply quality	5,571	4,342
Commercial Cycle	24,176	42,870
Valued Added Services	7,225	13,010
Others	554	1,013

These anomalies were mainly due to the fact that, in 2009, the Government, as a measure for households and businesses to have greater information about their consumption and thus encourage the introduction of savings measures, ordered the electricity sector to change its billing to monthly.

Yet this change did not modify the frequency of the meter reading, as the legislation established that the electricity distributors should bill one month with estimated data (based on the real consumption in the same period of previous years) and that the meters were read the following month and any necessary corrections to the estimate then carried out.

Therefore, neither of the two bills reflected the amount really consumed by the customer, which led to a significant number of complaints due to the complexity associated to the regularisation of the consumption.

At the end of 2012, the legislation changed again and it was established that from April 2013, all low voltage energy supplies with contracted capacities under 15 kW would be billed every two months and based on real readings, thus eliminating consumption estimates.

In addition, in 2011, the Government froze regulated electricity prices, a decision that the Supreme Court overturned in 2012 and ordered that the last quarter of 2011 and the first of 2012 be re-billed. This ruling meant that the electricity companies had to re-do the bills with the new prices approved for all the consumption between October 2011 and March 2012. EDP (Spain) split the collection of those bills until 31 December 2012 and sent out a letter to its customers explaining the reasons for that decision.

EMPLOYEES



INTRODUCTION

EDP EMPLOYEES COMPRISE THE HUMAN CAPITAL OF THE ORGANISATION AND ARE A CORNERSTONE FOR IMPLEMENTING THE BUSINESS STRATEGY AND THE SUSTAINABLE DEVELOPMENT OF THE BUSINESS BOTH THROUGH THEIR PERFORMANCE AT WORK AND THEIR PERSONAL LIFE.

1.645

At the end of 2012, the EDP in Spain workforce stood at 1,645 employees. The average age was 45 years old and 23% of employees were women. In addition, the company has outsourced personnel providing services to the different companies of the Group and which numbered over 1,800 people at year end.

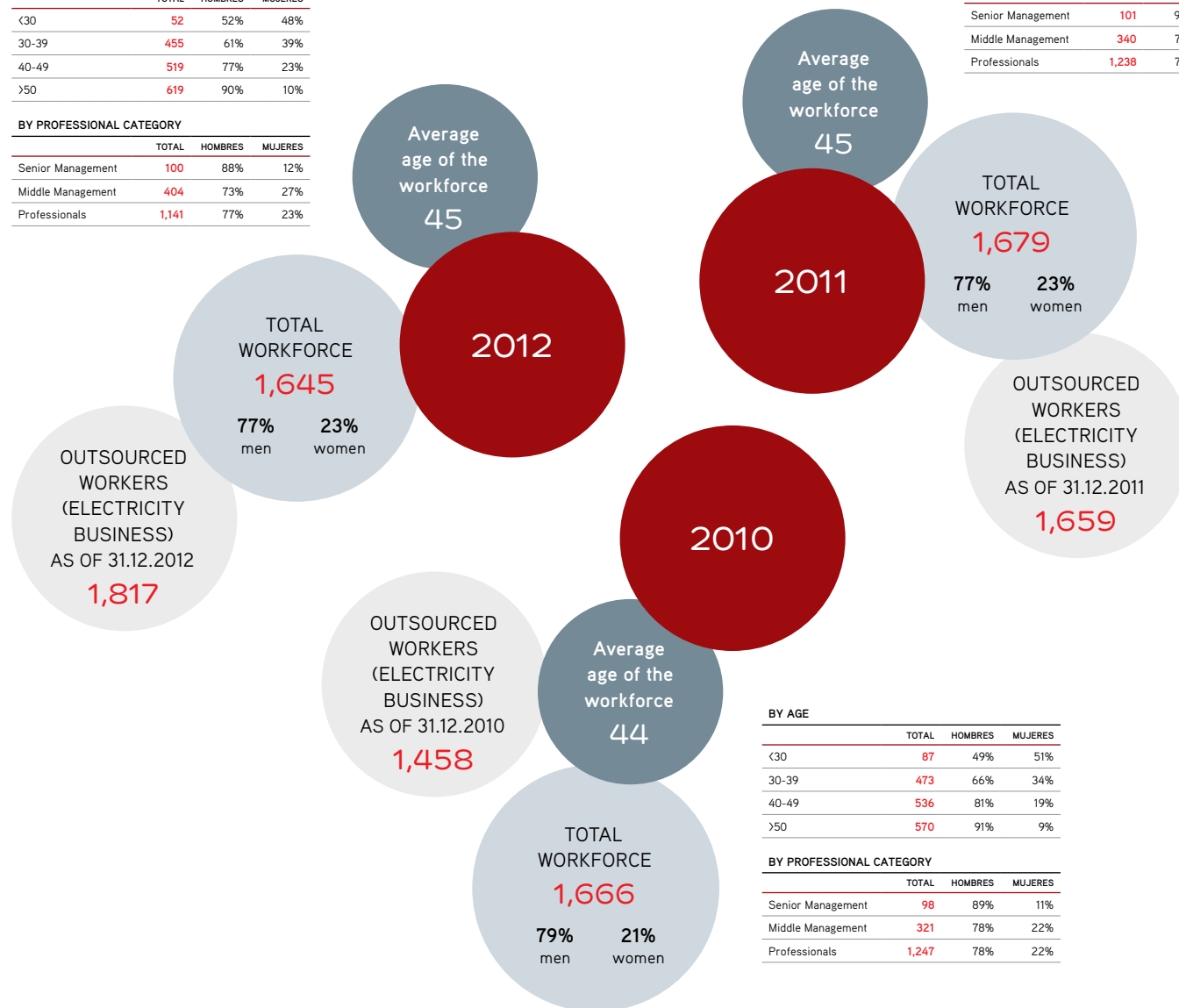
EMPLOYEE PROFILE

BY AGE	TOTAL	HOMBRES	MUJERES
<30	52	52%	48%
30-39	455	61%	39%
40-49	519	77%	23%
>50	619	90%	10%

BY PROFESSIONAL CATEGORY	TOTAL	HOMBRES	MUJERES
Senior Management	100	88%	12%
Middle Management	404	73%	27%
Professionals	1,141	77%	23%

BY AGE	TOTAL	HOMBRES	MUJERES
<30	72	53%	47%
30-39	473	62%	38%
40-49	538	78%	22%
>50	596	91%	9%

BY PROFESSIONAL CATEGORY	TOTAL	HOMBRES	MUJERES
Senior Management	101	90%	10%
Middle Management	340	78%	22%
Professionals	1,238	76%	24%



BY AGE	TOTAL	HOMBRES	MUJERES
<30	87	49%	51%
30-39	473	66%	34%
40-49	536	81%	19%
>50	570	91%	9%

BY PROFESSIONAL CATEGORY	TOTAL	HOMBRES	MUJERES
Senior Management	98	89%	11%
Middle Management	321	78%	22%
Professionals	1,247	78%	22%

EMPLOYMENT FRAMEWORK

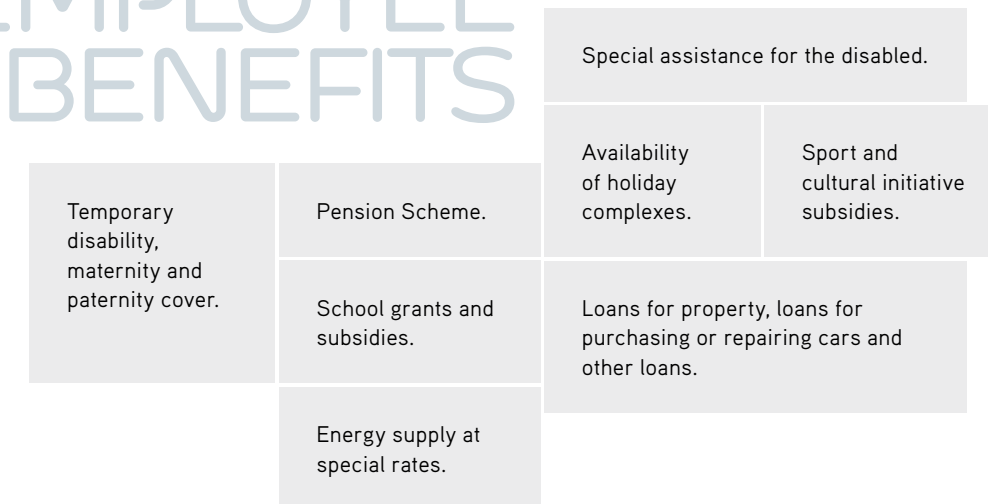
EDP IN SPAIN HAS TWO GROUP COLLECTIVE BARGAINING AGREEMENTS, ONE FOR THE ELECTRICITY BUSINESS AND THE OTHER FOR THE GAS BUSINESS.

With regard to the electricity business, the Agreement was signed in December 2007 for the period 2007-2012. It sought to achieve a uniform and stable framework to regulate the terms of employment, which would eliminate the differences set up in the Group as the result of the deregulation of the electricity sector. 76% of the members of this workforce are covered by the Agreement.

As regards the gas sector, the Agreement was signed in 2009 and will be in force until the end of 2013.

The Agreements provide for numerous employee benefits divided into different categories:

EMPLOYEE BENEFITS



The Agreement also projects the employees' rights to trade union representation, participation and action. The main trade unions of the electricity sector have a section on the company intranet, as well as in the employee section of the corporate website, where they can publish their information and make it available to all users, and where the content of the Agreement can likewise be consulted.

On the other hand, both Collective Agreements have a chapter setting out the commitments

adopted by the company regarding the Prevention of Occupation Risks. The Legal Representatives of the Workers and Management deem it to be essential to protect the occupational health and safety of the workers, by means of establishing efficient occupational health and safety policies and which are the outcome of the necessary consensus between the parties.

A new draft group agreement for the electricity sector is currently being negotiated that would be applicable from 2013 onwards.

HEALTH AND SAFETY

Occupational Health and Safety is a basic part of company management and is a duty and responsibility for everyone. This principle underpins the Integrated Prevention Systems of the EDP in Spain companies and must be a benchmark for all the people working there. The Group's management, aware of the obligation to manage Occupational Health and Safety throughout the organisation, has embraced the ongoing, visible and personal commitment by means of adopting as many measures as necessary to prevent and eliminate all occupational risks that may affect the integrity and health of the workers. Therefore, several years ago, the company embarked on the introduction of an **Integrated Management System of Occupational Health and Safety, based on continuous improvement and whose goal is 'ZERO ACCIDENTS'**. This enables the risks of the activities to be identified and their control mechanism to be designed in a systematised and certifiable way. With respect to the electricity business, in 2009 the Castejón Combined Cycle Power Station became the first facility to obtain certification of its Prevention Management System, pursuant to the OHSAS 18001:2007 standard.

This milestone was the first step towards implement the process in the other business units that, due to the nature of the inherent risks, deserve special attention. Thus, in 2010 the two Soto de Ribera combined cycle plants were certified, and this last year - 2012-, the Soto de Ribera and Aboño Coal-fired Power Stations, the 4 Hydraulic Plant Poolings, along with the Distribution Maintenance and Operation Division in Asturias obtained certification. The scope of the Distribution certificate is planned to be extended to the Supply Centres, Lines and Substations Division. The implementation of this occupational health and safety policy has led to a drop in the accident rate. In the electricity business, the number of accidents has dropped for the third year running, with only one accident resulting in time off work being recorded in 2012. Furthermore, the gas business has unified the prevention of workplace risks in the different areas of the company by using each of their best practices. In order to achieve this unification, a single Prevention Service working under the same criteria established by Management has been set up. Thus, all the centres and facilities where the gas operations take place are certified pursuant to the OHSAS 18001 standard. All these endeavours resulted in the accident rate figures in 2012 being better than in the previous year.

		2012	2011	2010
ELECTRICITY SECTOR	Nº accidents resulting in time off work	1	3	5
	Nº accidents not resulting in time off work	5	6	5
	Lost working days	15	141	183
	Number of emergency drills carried out (covering environmental aspects)	29 (18)	27 (13)	
GAS SECTOR	Nº accidents resulting in time off work	2	2	4
	Nº accidents not resulting in time off work	5	11	

Parallel to the certification process, training templates have been prepared, where **each of the jobs of the different business units are identified with the specific training needs and their priority, along with recycling needs**. This is all included in the relevant Training Plan. This analysis is regularly updated according to the new needs, such as new legal requirements, accident research where applicable or in line with the assessment performed by the people in charge of the efficiency of the training actions. In 2012, the most important milestone was completion of the training templates that were jointly prepared by the Prevention Department and the Electricity Grid and Generation Departments. On the other hand, **the Prevention Policy also establishes the objective of ensuring that our suppliers apply the occupational health and safety practices required by EDP (Spain)**. This is achieved by integrating prevention management in all the activities of the company and also extending it to outsourced workers, by carrying it out in an integrated way and teaching information-training sessions on preventive measures and risks.

During 2012, in line with the integration of prevention in the business units and as the basis for its management and the decision-taking of Management, the EDP (Spain) Prevention Service has therefore implemented the Prevention Scorecard that assess the own accident rate of the contractor companies along with the factors associated to compliance of preventive management. This is all aimed at the convergence of the accident rates both of its own workers and of the partner companies.

Preparing a new edition of the Occupational Health and Safety Manual for the electricity business, aimed at the managers and workers, as well as at the Partner Companies present on our facilities. Its aim is to address, in a practical, achievable and direct manner, a broad number of themes relating to the risks that the work involves and in order to prevent accidents.

KEY MILESTONES 2012

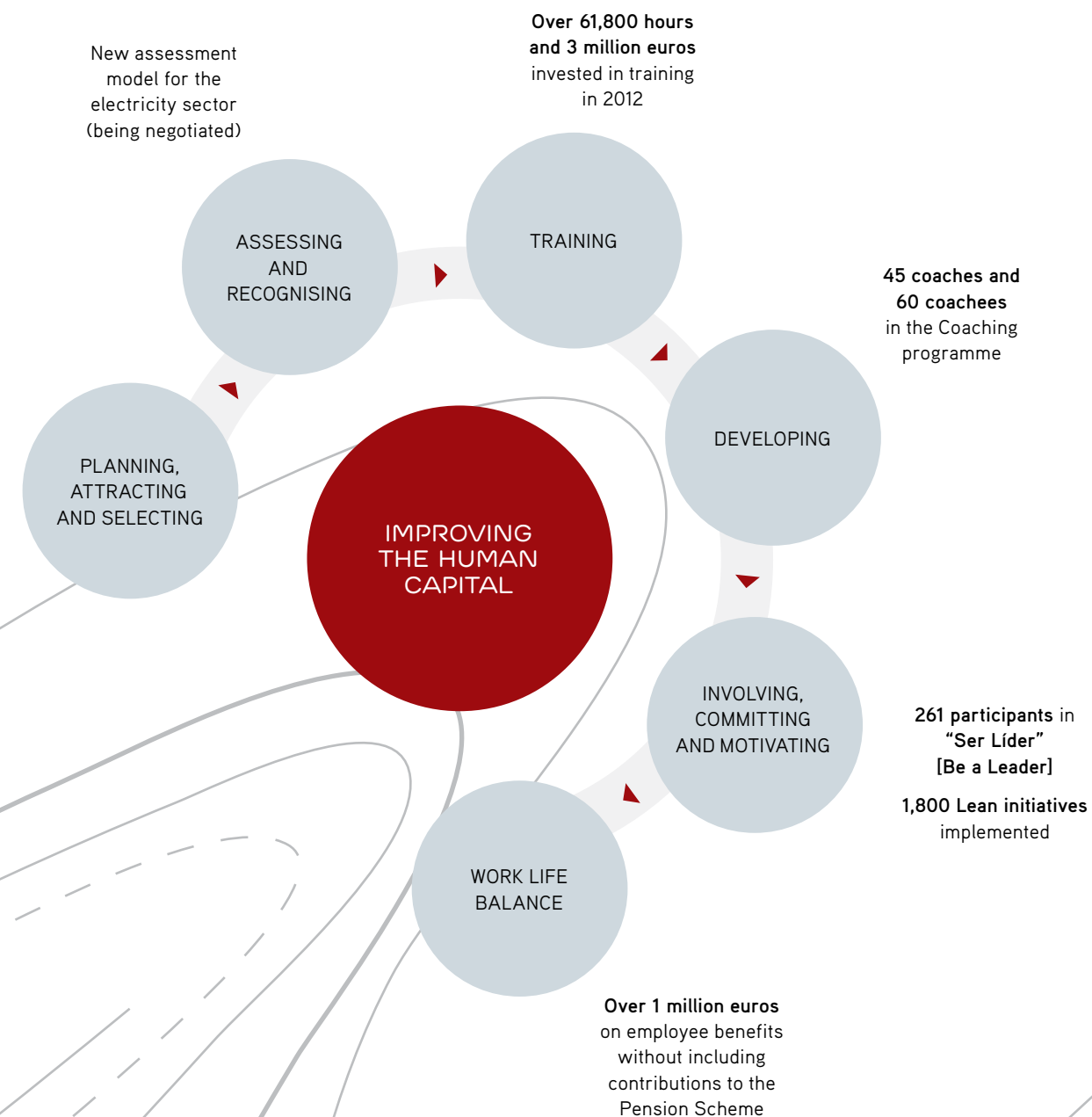
EDP in Spain has become a signatory organisation of the European Road Safety Charter, a European platform made up of enterprises, associations, research institutions and public authorities that have undertaken to carry out specific actions and to share their best practices to solve the road safety problems that they encounter in their day-to-day environments. The aim of this Charter is to help to reduce the number of mortal victims and has over 2,000 signatories. This commitment arises from the accident rate results (traffic accidents) recorded in 2011 and 2012 by own employees when travelling for business purposes. At the end of 2012, the first training campaign was run with the target that all employees will have taken this road safety programme by 2015.

Running the annual campaign of flu and tetanus shots yet again this year, in accordance with the instructions of the WHO.

HUMAN RESOURCES MANAGEMENT

Aware of the importance of human resources being correctly managed, a model has been designed and implemented in recent years to improve the human capital and focused on ensuring that EDP Spain is the best place to work. This model already comes into force during employee selection and continues with the investment in their development and training and the management of their performance, without losing sight of work life balance.

In turn, there is a suggestion channel on the Group's intranet, where the employees can send all those matters that they deem appropriate to improve the workplace environment.



EMPLOYEE SELECTION

Employee selection is part of an integrated management model that seeks to provide EDP with the necessary skills and resources, **for the successful outcome of its strategy and the sustainable development of the business, by attracting** the most appropriate candidates, **fostering** talent and **driving** efficiency, not only to attract the best but also so that people can develop their careers in the Group. The selection processes are based on ethical principles and global modus operandi that ensure criteria equity and foster internal mobility of the people so that they can develop within the organisation. In 2012, EDP overhauled its internal mobility policy driving the international development of its employees. Likewise, special emphasis is placed on contracting local personnel to contribute to the economic development and growth of the territories where we are located and operate. Thus, in the case of the electricity business of EDP in Spain, with deep roots in the Principality of Asturias, over 80% of the jobs in the region are held by people of that Autonomous Region. Special mention should also be made of our contribution to help the society where we are present to progress thanks to grant programmes to train qualified professionals for the future.

RECOGNITION

Managing performance assessment is fundamental to steer the collective and individual endeavours to the results desired by EDP, by integrating management of the strategic competences (potential) and performance management (targets). By means of a participative and fair process, the assessment process seeks to stimulate behaviours that maximise productivity, responsibility, participation and achieving global targets, giving value to their individual contribution and coordinating their performance with the strategy of the organisation. The Group conducts the **performance and potential assessment processes (APD)** along with the **agreement assessment**, with the design of a new Agreement Assessment Model standing out as a key milestone in 2012. This Model emerged from the analysis of the 2011 workplace environment survey results, which involved the active participation of the employees (criteria surveys, pilot, suggestion box, etc.) and which is a design proposal that is being considered in the negotiation process of the first collective agreement of the electricity business. The result of the performance assessment allows the training and development needs of the employees to be defined.

80

TRAINING

Training is an essential instrument for the whole EDP Spain workforce to develop and update their individual skills and know-how, thus fostering their professional fulfilment.

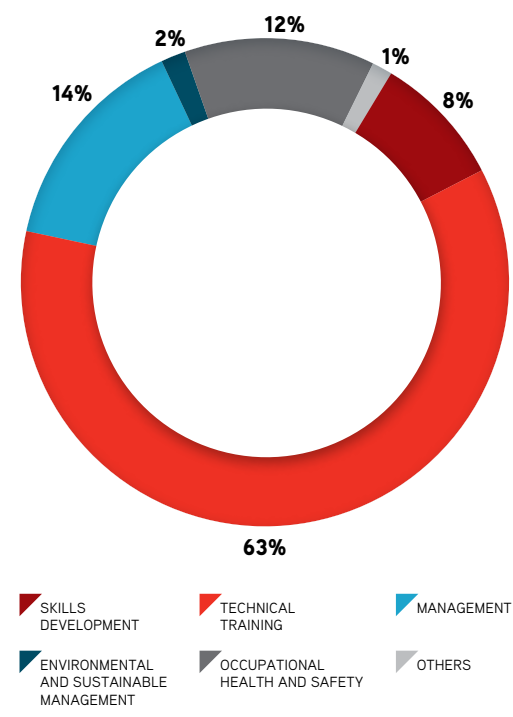
The Training Scheme is prepared annually that includes the training needs detected and approved by the organisation, and where both the individual requests of the employees and those from management and the performance assessment, are considered.

Cross-cutting training requests (quality, environmental and prevention) are also included, along with those from the trade union sections, in accordance with the Group Agreement.

During 2012, EDP Spain invested over 3 million euros in the Training and Development of its employees, both in the gas and electricity sector, which resulted in over 61,800 training hours, with an average of 38 hours per employee.

61,800

TRAINING HOURS BY CONTENT



Apart from the Annual Training Scheme, other programmes such as the EDP University and the PhD Grant Scheme are developed.

The EDP University, up and running since 2009, has participants from all the territorial areas. It has two cross-cutting schools, the EDP School, to develop know-how and skills, and the School for Management Development, focused on leadership and management competences and behaviour competences, along with five functional schools for the specific development of each business: Production, Distribution, Gas, Renewables and Commercial.

The PhD Grant Scheme, which was run for the fourth time in 2012, seeks to support EDP Spain graduate employees in the electricity business who wish to obtain a PhD. The research work for the doctorate thesis will have to be part of a R&D&i project of the group in line with its innovation priorities. The company provides a number of paid days' leave, financial help with enrolment costs and financial help of up to 3,000 euros for additional training.

PROFESSIONAL DEVELOPMENT

As a complement to the training, other programmes have been set up aimed at the development of the potential and work capacities of the employees, which are fundamental to ensure a socially responsible, prosperous and smart business organisation.

The Coaching Programme has been run since 2006, which fosters a leadership style that optimises potential and performance, by helping to develop the work capacities of an employee (coachee) with the support of a manager acting as a coach; in 2011, it began to be run jointly for both the electricity business and gas sector. In 2012, 45 coaches and 60 coachees took part.

COMMITMENT AND MOTIVATION

EDP in Spain, aware of the importance for the company to know the expectations and degree of satisfaction of its employees, has set up different dialogue and participation channels that have helped to direct the strategy of the company and define different lines of action.

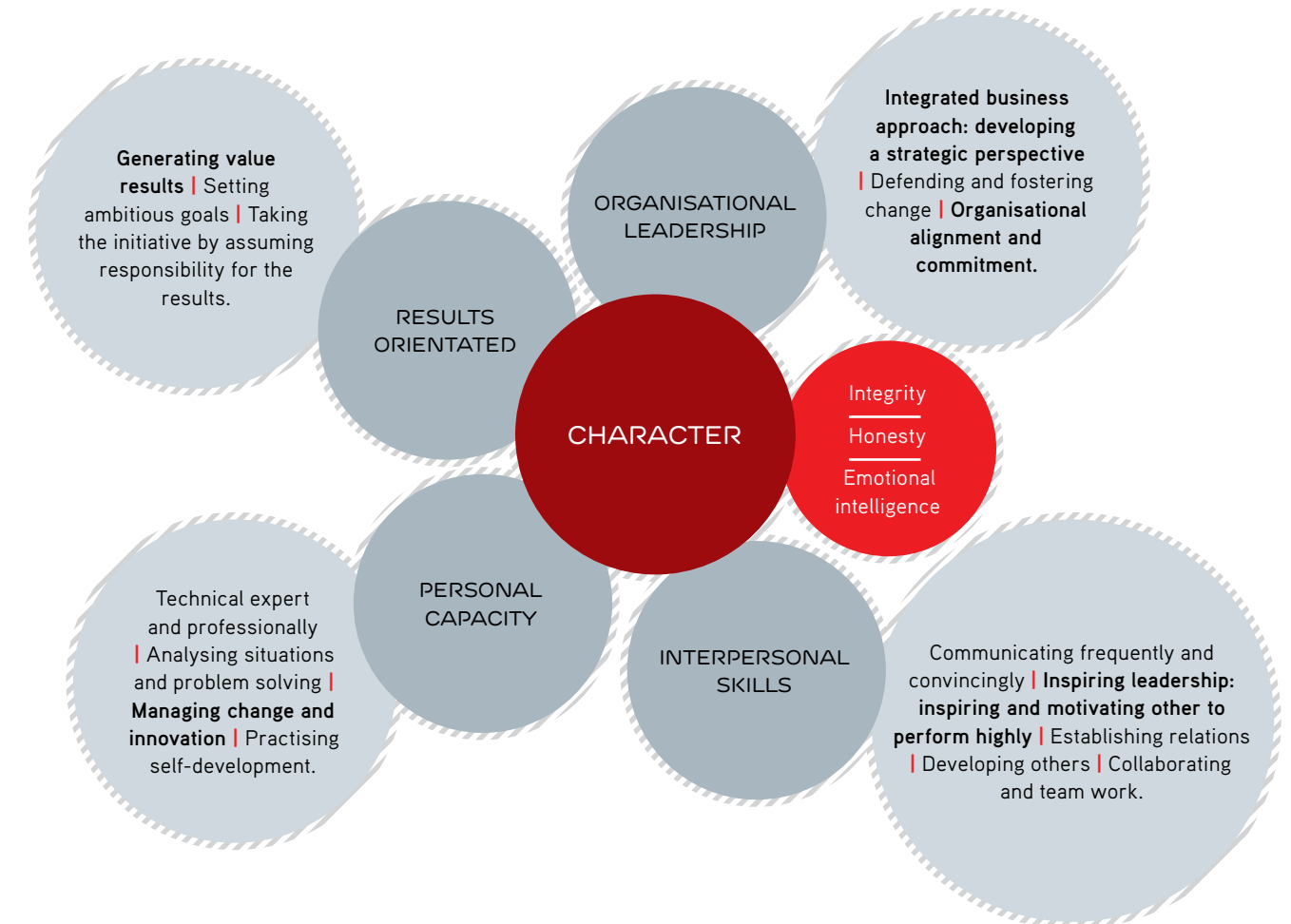
In addition to the corporate programmes such as the Lean Programme, special mention should be made of the regular workplace environment conducted.

WORKPLACE ENVIRONMENT

In 2012, 27 sessions were held to present the results of the latest workplace environment survey for the electricity business, carried out a year earlier, which were attended by 902 employees from all territories.

These sessions seek to share the results obtained, both globally and in each area, with all the employees, along with the joint analysis of the causes for the lower satisfaction factor and to establish specific improvement actions for the future, leading to greater employee motivation and satisfaction.

The results of the Workplace Environment Survey included the conclusion that the higher the satisfaction with the leadership style of the direct superiors is, the greater the motivation of the employee. EDP in Spain therefore implemented its first leadership initiative, with the deployment of the Ser Líder [Be a Leader] programme based on 5 pillars and 6 fundamental competences that make up the profile of the Leader.



The EDP Ser Líder awareness-raising and training sessions were attended by 261 executive-level and team-management employees. This initiative helps to consolidate the leadership competences and conduct of the employees with that profile and, at the same time, it has showcased the Leadership Model and the Leader's Guide in greater depth.

LEAN

LEAN PROGRAMME

One of the main values of EDP is the search for continuous improvements in all its activities, a task which the whole organisation must embrace to contribute value added and the development of solutions that enable the processes to be managed with greater efficiency and effectiveness. This is all based on results-orientation, protecting the environment, along with health, safety and wellbeing of the individuals.

Our initiatives in this area are governed by the EDPWay Lean Programme, an initiative implemented in EDP (Spain) in 2006. Lean Thinking represents a work philosophy, a tool to address a global market that requires an increasingly higher level of quality, at lower prices and with a shorter lead time. Our goal is the customer, from the perspective that what they are looking for are not only products or services, but also solutions.

A fundamental part in the development of the EDPWay Programme is the part that respects people as the most important value of our company. Intelligence, know-how, expertise and, above all, employee creativity have to be taken

into account to be more innovative and stand out. Each and every one of the activities carried out in 2012 have to take this framework for action into account.

The Lean Programme is implemented throughout the EDP Group, in all the Business Units (Generation, Distribution, Marketing, Administration and Finances) and has work teams shared between different geographical areas, such as the now consolidated Commercial Lean Organisation between Asturias and the Basque Country (B2C, Distribution Commercial Support and B2B)

Furthermore, the Lean initiatives are the objectives and targets for the continuous improvement requirements of the Quality Management Systems (ISO 9.001), the Environment (ISO 14.001) and Prevention (OSHAS 18.001) implemented in the company.

THE MOST OUTSTANDING ASPECTS ARE:

Communication

The dissemination of the programme and improvements fosters the involvement of people and helps to develop the culture for improvement. The key actions in 2012 were:

- 12 sessions when the participants explained the improvement initiatives to their colleagues and Management. Some of them are carried out jointly with different centres to facilitate exchanging projects.
- Articles and news items in the corporate media.
- Lean Portal: where any employee can access an electronic repository with initiatives, presentations, reports, manuals, dates of forthcoming presentations, etc., both of their unit and of other EDP Group companies.

Management Support

It is constant and active, participating, among other things, in presentations and rewarding outstanding actions.

High Participation

People are the basis of Lean. There is a team dynamics that makes it easier to bring new people on board, with the direct participation reaching over 670 people along with the collaboration of many others working to improve the company.

Solidarity

Aware of the importance of supporting society, the people behind the prize-winning initiatives in 2012 for their value contribution have donated the financial award to non-governmental organisations.

Initiative identification and completion systematics

Since the start, the programme has resulted in over 2,400 initiatives, some of which have been implemented in different work centres (synergies). The improvements have multiple impacts:

- On the Organisation, by facilitating the control of information, internal management and operation.
- On the customers, by fostering more efficient and streamlined services.
- On the employees, by optimising safety in the workplace and motivation.
- On the environment, by enhancing the efficiency of the facilities and savings in the use of resources.
- On the Suppliers, by fostering integrated and coordinated work.

FAMILY-FRIENDLY COMPANY

The family and personal life of each worker must be stimulated and recognised. This philosophy is a cornerstone of the EDP Group, which fosters the work-life balance taking into account the family and individual interests as a fundamental aspect for the success of the company.

In 2011, EDP in Spain was awarded the Family-Friendly Company Certificate, which was successfully renewed in 2012.

The FFC certificate, awarded by the Másfamilia Foundation and with the backing of the Spanish Ministry for Health and Social Policy, recognises those organisations that are involved in the generating of a work culture that includes the commitment of the company to work-life reconciliation, equal opportunities and managing diversity.

The MásFamilia Foundation awarded this certificate to the Group after the Spanish Standardisation and Certification Association (AENOR) had checked that the management system complies the established requirements in the 1000-3 FFC Model referring to the design, implementation, assessment and continuous improvement of the practices and policies referring to work life balance.

GENDER EQUALITY

The most highly valued aspects include the work on managing gender diversity, that EDP in Spain has incorporated along with work-life reconciliation, and which has led to the signing of the Equality Plans required by current legislation and for each of the companies of the group. Not only the company and the social representatives, by means of the Equality Joint Commissions, but also the employees themselves through different meetings and surveys have taken part in preparing these plans. The involvement of the company in different Business Forums, such as Directory of Companies Committed to Equality and the Catalogue of Best Practices in Human Resources Management, has likewise been taken into account.

WORK-LIFE BALANCE

To encourage work-life balance, EDP in Spain has implemented different programmes and projects related to health and wellbeing, education, personal life and community.

Health and Wellbeing

Employee offers for spas and physiotherapy centres; in 2012 a programme was launched to help those employees who wanted to stop smoking.

Family and Education

Nursery school offers.

Work-Life Balance

Offers for sports centres, holiday and leisure products (hotels, car rentals), consumer products.

Community

Offers on banking products.

All these initiatives are showcased on and accessible both through the company intranet and extranet, allowing for remote access and online management of most formalities. Another of the reconciliation channels is through the **EDP Voluntary Programme**, where the companies allow their employees to have paid time off to volunteer with social causes. Employees are thus supporting the Group's commitment to Society, where in 2012, special mention must be made of the "**Parte de nosotros**" [It's Down to Us] environmental initiative where employees, along with friends and relatives, took part in the environmental recovery of El Valledor, a forest in Asturias devastated by a fire in 2011 (see Society chapter).

SUPPLIERS



INTRODUCTION

The current EDP in Spain management model is committed to outsourcing non-strategic activities, the benefits of which include optimising internal resources and coordinating activities throughout the EDP Group.

A value chain network of the partner companies has thus been set up, with those companies being one of the stakeholders identified by EDP in Spain as:

They are present in the strategy defined by the company, where the undertakings assumed with suppliers are set out.

They condition the organisational structure of the Purchasing Department, which have been broken down by business types (generating, distributing and marketing electricity).

There are different participation, dialogue and communication channels in place for the mutual exchange of expectations (re-pro, website and regular communication sessions).

As regards two-way communication with the Suppliers, as Stakeholders, in 2012, special mention should be made of the setting up of a Contact Center service to deal with queries regarding invoicing, payments pending or accounting. This service is part of the integration with the work system of the EDP Group and it streamlines the query process for the partner companies and for the employees of the group that reroute supplier queries to that telephone service.

SUPPLIER PROFILE

As part of the multinational EDP group, the company follows a joint supplier selection policy where local contracting is not explicitly envisaged. However, the nature of many of the services needing to be outsourced means that local companies are better able to cover them more efficiently.

Expansion to other national territories and new service outsourcing requirements have led to a significant increase in the number of suppliers and the outsourced workforce.

Thus, in terms of the electricity business, partner companies based in Asturias account for **43%** of the total outlay of over **219 million euros** on outsourced services and supplies (without taking purchases of raw materials and fuels into consideration).

This significant outsourcing volume is also reflected by a large external workforce alongside the Group's employees and which numbered **1,817** people involved in the electricity operations as of December 2012.

43%
219
1,817

COMMUNICATION

As part of the communication lines defined between EDP (Spain) and its Suppliers, regular forums and sessions are held to exchange experiences, where the work carried out and the applicable legal requirements are assessed to identify opportunities for improvement and to optimise resources. Along the same lines, it is also noteworthy to mention the Continuous Improvement in the Occupational Health and Safety and the Environment sessions, which are organised every six months and which the Suppliers attend. During the sessions, the latest main aspects in two areas as relevant as preventive management and the environmental aspects of the outsourced work are analysed.

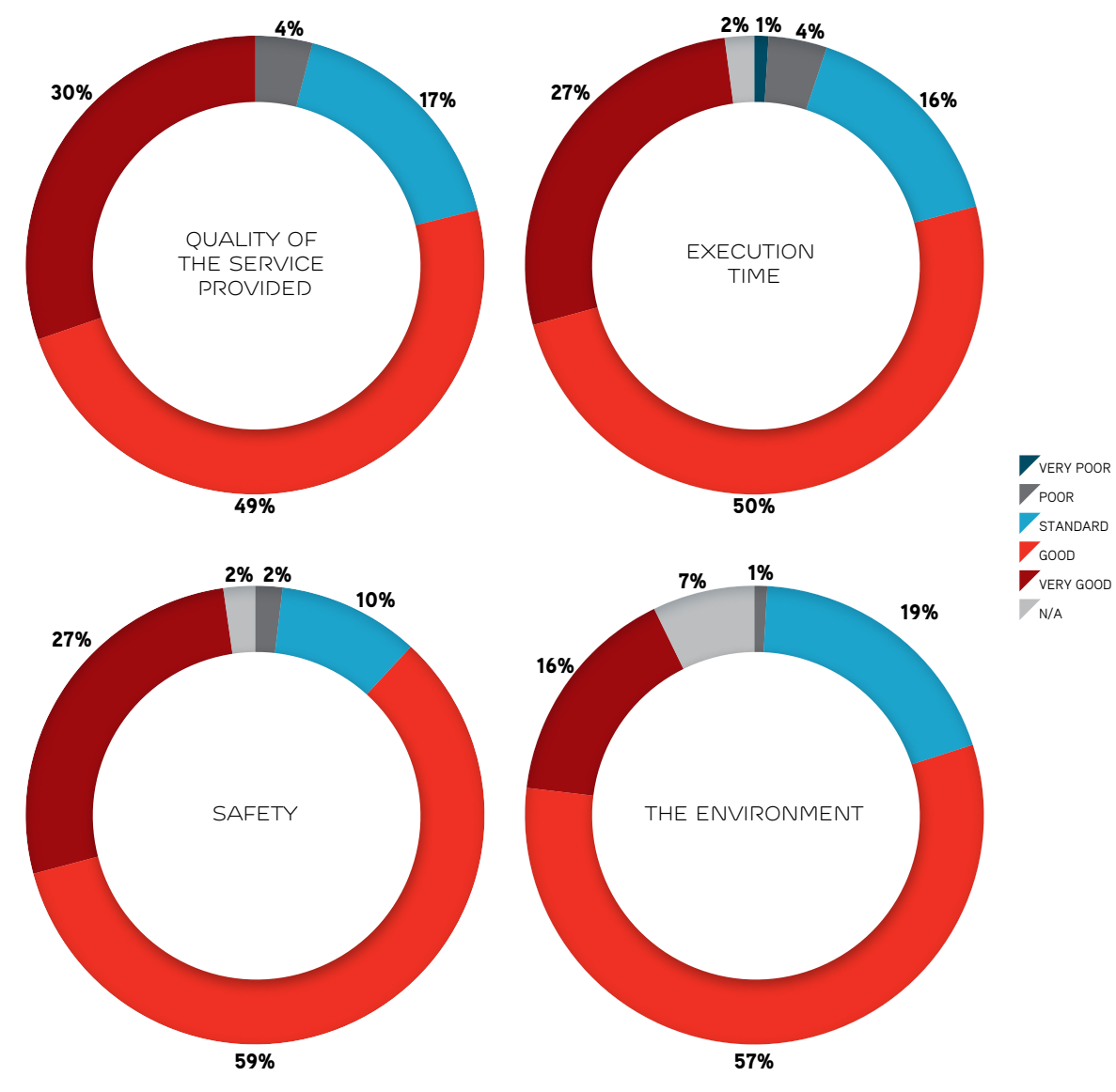
INTERNAL ASSESSMENT

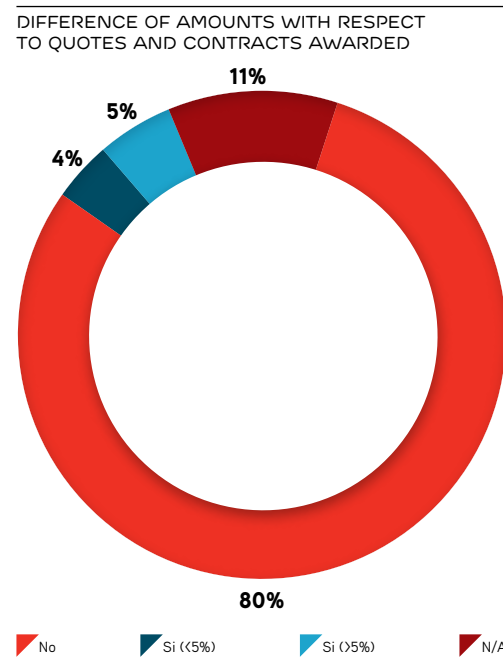
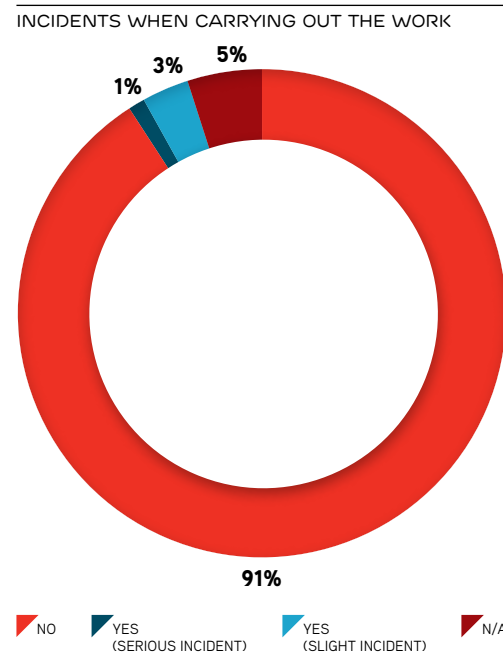
An internal assessment of the Suppliers working for the EDP in Spain electricity business is carried out as part of the Quality Management System. The assessment is conducted by means of surveys completed by the project supervisors of the outsourced work and by the Purchasing Department.

As regards the assessment surveys conducted in 2012, the quantitative data reflect the positive performance of our suppliers in every aspect:

Nº of suppliers assessed internally
58

Total surveys conducted by internal employees
89





MANAGEMENT OF THE VALUE CHAIN OR SUPPLIERS CHAIN

During 2012, EDP in Spain took part in the working group to "identify and analyse risk in the chain of suppliers, from the point of view of sustainability", headed by the Environment and Sustainability Division (DSA) of the EDP Group, with the following objectives:

1. To establish the risk profile associated to the supplier chain, risks regarding the Group's undertakings relating to sustainable development, mainly, employment and human rights, environmental management, and integrity and ethics.
2. To assess the risks identified by their criticality, taking into account the potential impact or damage to the reputation in case of occurrence, and their repetitiveness or frequency.
3. To identify the risk monitoring and control initiatives currently in the value chain and evaluate their effectiveness.
4. To identify and study new EDP influence opportunities in its supplier chain.

This project analysed the risks relating to employment and human rights, including health & safety and working conditions; environmental aspects; and ethical and integrity risks in the workplace. In the specific diagnosis of the operations in Spain, the risks relating to employment and human rights, even though they are risks that are potentially to be found in all the suppliers linked to the employment and contracting practices, are not considered to be significant as they are largely controlled by national and European legislation, given that all the actions are centred in that geographical area. There are likewise sufficient measures in place to control and monitor, and, therefore, to mitigate those risks.

Thus, in general, the risks are controlled according to the Supplier Selection and the Contracting Practices criteria, defined in the Quality Management System, and by means of REPRO, with that control being carried out by the Purchasing Department.

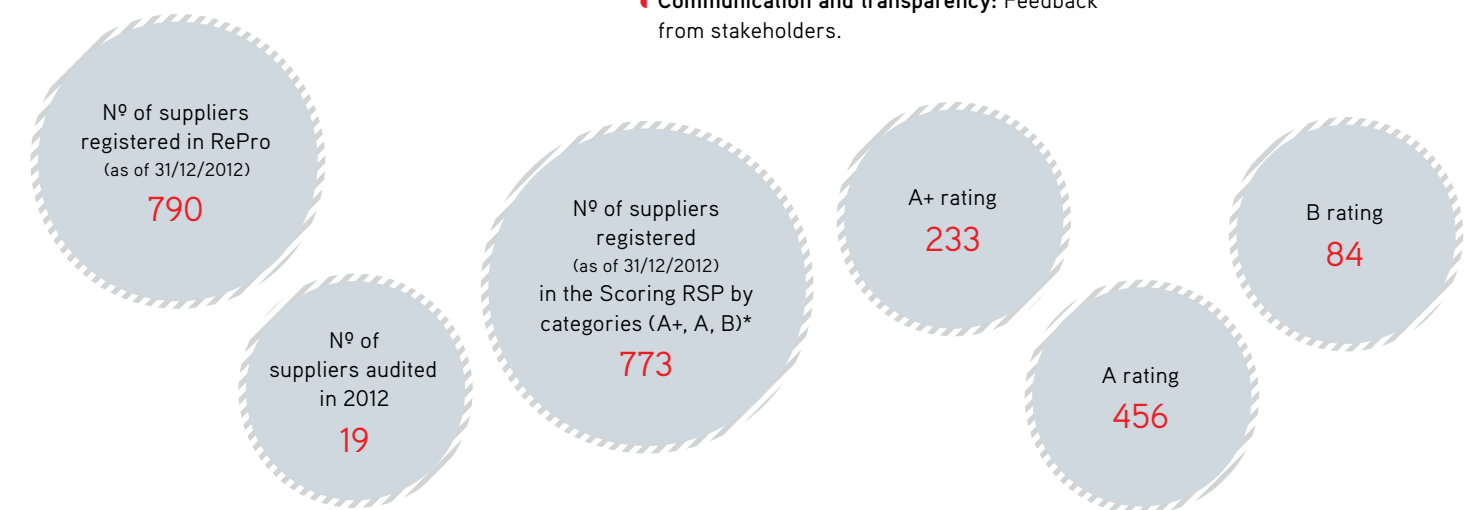
REPRO provides updated and detailed information on the following fields:

- Technical Resources.
- Human Resources.
- Occupational Health and Safety.
- Quality Management.
- Environmental Management.
- Financial-Economic Situation.

Those suppliers deemed to be critical given their impact on the quality of the final product undergo external audits during which the validity of the documentation submitted is checked. In addition, a REPRO assessment is also conducted of the Scoring RSC (measuring the performance of the suppliers in terms of sustainability), which allows to differentiate between suppliers when tendering or contracting with them.

The following aspects are analysed and audited:

- **Leadership:** The commitment made by the company with regards to Corporate Social Responsibility and corporate governance.
- **Dialogue:** Willingness to negotiate with stakeholders.
- **Management system:** Systematisation of CSR management.
- **Communication and transparency:** Feedback from stakeholders.



* This assessment methodology seeks to quantify the relative position of the suppliers with respect to the market in terms of sustainability. The A+ rating is therefore awarded to suppliers that have obtained a score over the average; A, suppliers with an average score; B, suppliers under the average.

All these aspects are also controlled from the Code of Ethics and its Implementing Regulation, given that it is applicable to the Organisation and to the whole supplier chain, and specifically refers to all those risks.

The monitoring and controlling of the risks includes an independent Ethics Channel (accessible from www.edpenergia.es) that enables the transfer of complaints and allegations to the EDP Group Ethics Ombudsman.

Furthermore, EDP in Spain, as a signatory to the Global Compact, reports on its supplier chain management practices in its Communication on Progress, which was rated "Advanced" for the second year running.

Finally, specific inspections are implemented in the field of the occupational health and safety, linked to the deployment of the OHSAS Prevention Management System, along with environmental controls linked to the Environmental Management System, pursuant to ISO 14.001 or the EMAS Regulation, as applicable.

HEALTH AND SAFETY

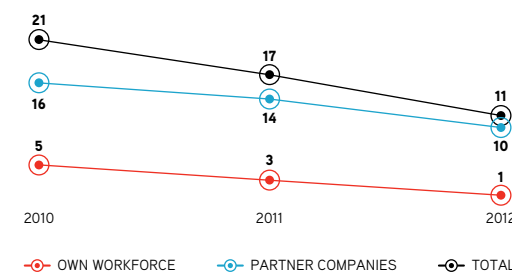
The objectives of the EDP in Spain Prevention Policy includes complying with all the health and safety legal requirements that are applicable to our activity, along with ensuring that our suppliers apply the occupational health and safety practices required by the group.

Different mechanisms are thus established to ensure that the partner companies embrace and take on board the EDP in Spain preventative culture.

The Prevention Department thus runs information sessions on risks and preventive measures for the contractor's employees, such as information sessions on specific risks, emergency plans or Thermal Power Plant End of Campaign Reviews. The latter are works that due to the complexity and high number of people coinciding at the same time in the premises are particularly relevant from the point of view of safety and occupational health and safety.

As a result of this work, EDP in Spain has managed to reduce in recent years the accident rates of its partner companies, down from 27 accidents requiring time off work in activities of the electricity business in 2009 to 10 accidents with time off work in 2012. These numbers are proof of that ongoing drop in the number of accidents, but there is need for further improvement until the "zero accident" target is met. During the year in question, there were 12 accidents requiring time off work in the activities of the gas business.

ACCIDENT RATE TRENDS (electricity business)



ACCIDENT RATES OF SUPPLIERS IN THE ELECTRICITY BUSINESS	2012	2011	2010
Incident rate	5.89	9.35	10.97
Frecuency rate	3.46	4.73	6.45
Severity rate	0.12	0.26	0.22

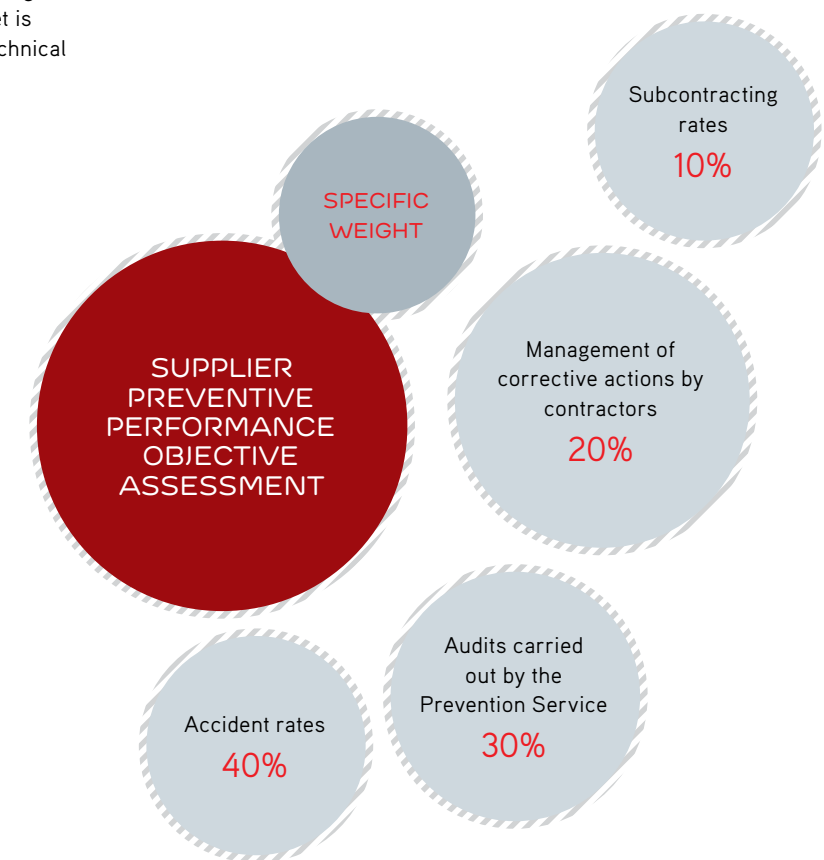
ACCIDENT RATES OF SUPPLIERS IN THE GAS BUSINESS	2012	2011	2010
Incident rate	18.62	1.29	17.28
Frecuency rate	13.35	0.92	12.71
Severity rate	0.68	0.01	1.03

In addition, the Prevention Service holds regular coordination meetings, aimed at the employees of the suppliers who perform work for EDP in Spain, in order to introduce improvement actions. Furthermore, and to ensure the integrated management of prevention in the different business units, the Contractor Management Model has been reviewed.

On the one hand, in the procurement management process for awarding works and services for an amount over 200,000 euros, partner companies must complete a Prevention Datasheet based on 5 aspects: accident rates, training in the occupational health and safety, implementation of a certified Preventive Management System, preventive method and degree of outsourcing. The information contained in the datasheet is taken into account in the economic and technical assessment of the bids.

On the other hand, for those companies that regularly work for EDP in Spain and are considered to be Priority 1 (accident rate in previous years, volume of work and hazard of the work carried out), the EDP in Spain Prevention Service performs an objective assessment of their preventive performance based on 4 aspects: accident rates, results of the audits performed by the EDP (Spain) Prevention Service, managing corrective actions by the partner companies, and degree of subcontracting.

Each one of those aspects is weighted and each supplier is awarded a score that is available in the Prosafety software.



According to those assessments, EDP in Spain may request from the partner company a plan of action which should it not be carried out, may result in the permanent or temporary suspension of that company to work for our organisation.



INTRODUCTION

EDP's commitment to society has always been the hallmark of the company. The Group does not work with customers, but rather with people. Proof of this are the initiatives introduced and implemented by EDP España, which are channelled through the EDP HC Energía Foundation for the electricity sector. Our aim is to improve the quality of life of people and their environment. The following sections outline the main initiatives in 2012, with further information available at www.sostenibilidadedp.es

EDUCATION

GRANT SCHEME

The future of our society lies in the hands of young people and we want to help give them a good start. The EDP HC Energía Foundation has therefore entered into an agreement with the University of Oviedo, which involves over one hundred and fifty paid work placements being awarded annually at the different EDP work centres.

Thanks to this scheme, final year students or those who are working on their end-of-degree dissertation are offered the magnificent opportunity to immerse themselves in the company and obtain a perspective of the corporate project.

Trainees are selected on the basis of their academic records and, after six months, many can extend their contract for a further six-month period. Prior to joining the company, students attend an induction course on basic aspects of the electricity business, along with company policies regarding Quality, the Environment and Occupational Health and Safety, and aspects related to the company's communication tools, mainly the Intranet.

Once they have successfully completed the first semester on the work placement, trainees are given a diploma during a ceremony with representations from the company and the University of Oviedo.

SCHOOL VISITS TO EDP PREMISES

The youngest members of society also have their rights and EDP has a place for them. The Foundation organises a comprehensive programme of visits to its different work centres, including thermal and hydraulic power plants. In 2012, nearly 2,000 primary and secondary students visited the facilities to learn about the electricity generation process.

EDUCATING FOR SUSTAINABILITY: ¡VIVA NUESTRA ENERGÍA! SCHOOL PROGRAMME

EDP is committed to sustainability-orientated education and which has been achieved thanks to the ¡Viva nuestra Energía! [Long Live our Energy!]. This initiative is focused on developing learning workshops where the school children can learn about the source of energy and get some energy efficiency tips and recommendations to use energy more safely.

The scheme was run in Asturias and the Basque Country in 2011 and it was expanded to Madrid and Murcia in 2012, where over 50,000 school children took part. ¡Viva Nuestra Energía! will be extended to Cantabria in 2013, which will mean that the total number of children that have taken part in the Programme will have exceeded 110,000.

Other key event on our 2012 calendar was "El Viaje Energético" [The Energy Trip], a large party organised by EDP at the LABoral University, Art Centre and Industrial Design. An extension of the Viva Nuestra Energía! programme, the party includes educational and fun activities for the youngest members of the family. Attendance was notable with over 3,500 people taking part.

The young artists also had the opportunity to show-off their creative skills by helping to make a large mural reflecting the world of energy. Over 300 children from all over Asturias took part in the drawing contest.

The www.educacionedp.es website showcases all the EDP in Spain educational initiatives.

UNIVERSIDAD ITINERANTE DEL MAR (UIM)

Our commitment stretches beyond frontiers. The EDP HC Energía Foundation has been working with the Universidad Itinerante del Mar [Travelling University of the Sea] for many years now. This platform for cooperation, created by Oviedo and Porto universities, focuses on training university students and projects in areas related to the sea.

During the 2012 campaign, entitled "The Iberian Ocean. The Azores, a Rung in the American Connection", 41 Portuguese and Spanish students went on a study trip along the route Avilés- Porto - Ilhavo - Vila do Porto - Ponta Delgada - Faial - Lisbon.



SOLIDARITY

The company does not overlook the most disadvantaged. The EDP HC Energía Foundation works with different associations that help those collectives.

Affordable Food

This institution run by the Sisters of Charity serves thousands of meals to the homeless.

New Future

This Association is dedicated to providing and maintaining foster homes for homeless children, in other words, children who for different reasons (being orphans, abandoned, lack of resources, etc.) do not enjoy the benefits of living in a family environment.

Red Cross

The mission of this institution is to be increasingly nearer to vulnerable people internationally and nationally, by means of preventive, care, rehabilitation and development initiatives. These activities are mainly carried out by volunteers.

Energy without Borders

This independent organisation seeks to spread and enable access to energy and drinking water services in places where they are still not available or where the service quality or supply conditions are very poor.

Hope Hotline

In 2012, the foundation embarked on a new initiative with this volunteer-run entity, a ground-breaker in the promotion of emotional health and, particularly working with people suffering from psycho-social, family or individual crises.

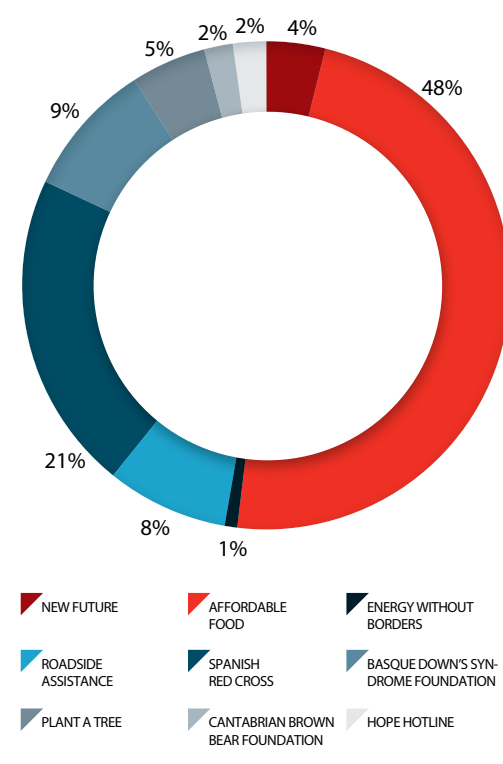
POINTS

EDP also wants to get our customers involved in our social commitment. "Points" is a totally free programme rewarding EDP in Spain customers with a series of points that can be accumulated in the following ways: 1 point for each kWh of gas or electricity consumed, for registering new contracts with us, for every year that the customers belong to the point programme, for taking part in EDP initiatives, etc.

The programme provides customers with an opportunity to embrace the social commitment as the points can be exchanged for gifts or donated to charity projects run by different NGOs (responsible points).

The response from our customers has been more than satisfactory. In 2012, over 2,800 customers contributed 12,680,000 points that were divided between the following NGOs:

RESPONSIBLE POINTS DONATION



VOLUNTEERING PROGRAMME

Alongside our support of charities, the company has sought to introduce its own volunteering programme. In 2011, the Corporate Volunteering Project was set up within the EDP Group and its aim is to get company employees to sign up to volunteer. This programme is in line with the strategic goals of the Group, where sustainability and thus corporate social responsibility is one of its main principles.

In 2012, the Energy Development Team

embarked on a project with ESF – Energías Sin Fronteras, which involves installing over 200 photovoltaic panels in the village of Nyumbani (Africa), which is home to 1,000 children who have lost both parents and 100 adults (grandparents) who look after them. This project aims to replace the current electricity generators by photovoltaic panels that will lead to a significant savings on fuel.

The amount collected (€ 2,215) during the Aceite Solidario [Solidarity Oil] campaign was used to help to fund this project. The initiative was run by the EDP in Spain Cogeneration Division and consisted of donating oil from the olive groves surrounding the Bioener plant in Jaén.

Our Food Team works with the Food Bank

by taking part in different activities to manage and collect surplus food to be distributed to different charities, Kilo operations and in communication and awareness-raising campaigns in schools.

During the 2012 Christmas campaign, we managed to collect over 475 kg of perishable food, donated voluntarily and selflessly by EDP in Spain employees.



The Childhood Team is another initiative

that our volunteers support. The dedicated employees work with children from different child care centres, run by the Principality of Asturias, where they help the children by tutoring and mentoring.

Good deeds are magical. And children can also see dreams come true through magic, such as the ones that our volunteers pull out of the bag at the San José Shelter in Gijón. For the second year running, the team brought smiles and joy to the children at Christmas. In the Basque Country, the 'Solidarity at Christmas' initiative organised fund-raising events (such as selling Hot Chocolate, games, balloon sculpting, bouncy castles) in Bilbao and Vitoria-Gasteiz, with the money raised going to AEMAR, the Álava Multiple Sclerosis Association and for children at risk of social exclusion in Bilbao La Vieja and Otxarkoaga.

Workers' involvement (involving their

taking part in numerous activities as volunteers) with different non-profit associations and entities whose activities are aimed at a social purpose. Particularly: Aspanovas (Childhood Cancer Association) | Novia Salcedo Foundation | Cáritas | Down's Syndrome Association | Spanish Red Cross | DYA | Aranzadi Society | Gaztelueta Foundation | Álava Multiple Sclerosis Association.



Generosity is something that characterises our employees, who are committed to social responsibility. Thus, the volunteering programme offered the employees of the gas business the opportunity to donate funds to buy basic foodstuffs, which were subsequently donated to food banks of the regions where the Group operates. Thanks to this, 17,000 euros were collected which meant that 14,000 kg of food could be bought. Our employees who received prizes from the company in 2012, decided to voluntarily donate the 15,500 euros that they had won to different entities and associations of their choice. Down's Syndrome Association of the Principality of Asturias, Fundación PROCLADE, Lorca Local Council Solidarity Account, Creo Desarrollo - Hay Un Niño En Tu Camino (HUNETC), ANA - Asturias Association of Friends of Nature, and Coordinadora ornitológica d'Asturias.

GREEN ACTIVITIES

"PARTE DE NOSOTROS 2012" [IT'S UP TO US] VOLUNTEERING PROJECT

Energy unites us. The different EDP territories around the world took part in a global action, within the initiatives of the EDP Volunteering Programme known as "Parte de Nosotros 2012", which sought to unify environmental endeavours in an event held on 29 September.

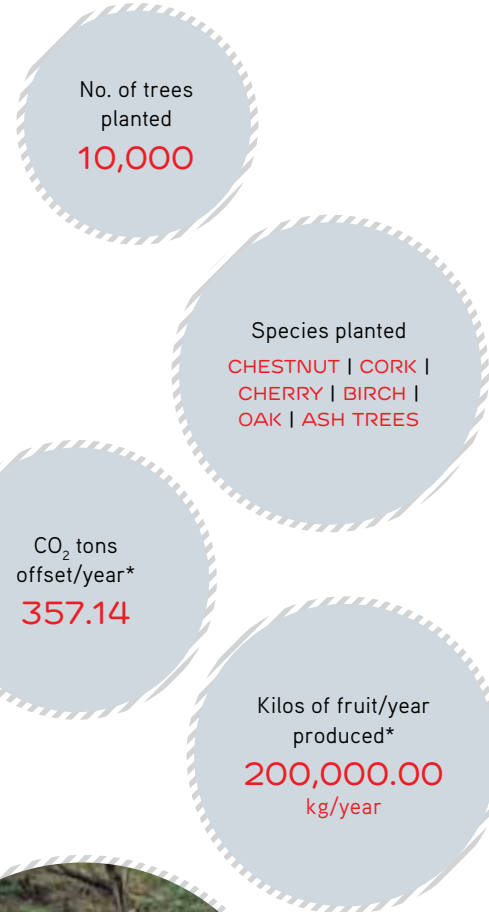
In Asturias, a project was implemented to recover the EL Valledor forests and woodland, in the municipality of Allande, that had been devastated by a huge fire in the area in 2011. Given the scope of the catastrophe, the project has allocated three years to recover the environment and its first phase involved this volunteering action, where EDP in Spain employees, along with their friends and families, planted 10,000 trees.

The FAPAS (Trust for the Protection of Wildlife) ecologist organisation is working with EDP HC Energía Foundation to achieve an optimal development of the programme. The biodiversity of the environment will benefit from the environmental recovery project, as the plan is to plant 30,000 trees.



parte de nosotros

*The figures refer to mature trees, when they have achieved their maximum productivity. Data provided by FAPAS (<http://www.mesosoemenosco2.com>)



RE STOCKING RIVERS

For several years now, EDP HC Energía Foundation has been involved in this initiative to restock the rivers of the Principality of Asturias with fish and which aims to achieve sustainable development in all areas where the company operates.

Thus and in cooperation with the Asociación de Pescadores y Amigos del Nalón [Friends of the River Nalón Fishermen's Association] and with the participation of students from local schools, the project is aimed at helping recover the ichthyofauna, as well as raising environmental awareness among children, whilst teaching them to respect, improve and protect biodiversity. Thanks to the proposal and implementation of this type of initiatives, over 500,000 young trout have already been released at different points of the River Nalón.

In 2012, EDP, together with the Asociación de Pescadores y Amigos del Nalón, ran a new campaign in Pola de Laviana, when 10,000 young trout were released by students from the "El Bosquín" state school in El Entrego (San Martín del Rey Aurelio). This specific action is aimed at awareness-raising among the school-children of Asturias about looking after the environment and the need to protect the biodiversity, and to protect the rivers and the fauna.

This unique and exceptional initiative is part of a broader programme to look after the environment and recover woodland where the EDP HC Energía Foundation has been working for many years with its "Un cliente, un árbol" ["A Customer, A Tree"] Program. It has been up and running for several years, during which over 60,000 trees have been planted at different places of Asturias. Yet again, the company has involved its customers in its environmental and social commitment initiatives. Thanks to this initiative, EDP undertakes to plant one tree for every customer that signs up for e-billing and also encourages customers to donate their customer loyalty points to this purpose. In the point catalogue, customers can now choose to plant a tree in El Valledor and thus help, along with the Foundation, in the recovery of an iconic nature area in Asturias.

CO-OPERATION WITH FUNDACIÓN OSO ASTURIAS

The EDP HC Energía Foundation takes into account all aspects of the environment. As it is in keeping with our principles, as well as helping with the native flora, the Foundation also seeks to work with entities such as the Fundación Oso de Asturias-FOA (Asturian Bear Foundation), with which it shares its concerns regarding the disappearance of the fauna of Asturias. FOA is a non-profit private cultural entity, set up to organise and develop activities aimed at protecting the Cantabrian brown bear and their habitat.

The main fields in which it works are social awareness-raising about the current status of the Cantabrian brown bear, enhancing environmental education, promoting socio-cultural values related to the bear and the areas it inhabits and conducting scientific research into the Cantabrian brown bear and its habitat.

CULTURAL ACTIVITIES

CAMERATA REVILLAGIGEDO CONCERTS

EDP is aware of the important role that culture plays in social development. Driven by this awareness, the EDP HC Energía Foundation sponsored a series of Christmas concerts by the Camerata Revillagigedo, travelled to different venues including San Cristóbal Parish Church in Colunga, San Martín Parish Church in Sotroño, the Collegiate Church of San Juan Bautista in Gijón or the José Bautista Auditorium in Pravia. The choir was founded in 1991 by José Fernández Avello, who still continues to be its conductor.

OVIEDO OPERA FESTIVAL

The Campoamor, the historical theatre that is home to Oviedo Opera, hosts a select annual opera season, featuring the most exquisite voices from the international musical scene. The institution also organises a varied programme of concerts and activities, such as round tables and even talks involving some of the leading members of the cast, aimed at delving further into the works that make up the programme.

PRINCE OF ASTURIAS FOUNDATION

Every year, since 1981, this renowned institution has awarded the Prince of Asturias Awards, a series of awards that recognises the human, social, cultural, technical and scientific work of individuals, entities or organisations from around the world in the following eight fields: Communication and Humanities, Social Sciences, Arts, Literature, Technical and Scientific Research, International Cooperation, Peace, and Sport. The foundation is presided by the H.R.H. the Prince of Asturias, Don Felipe de Borbón y Grecia.

The Foundation provided the Prince of Asturias Foundation with two electric vehicles in 2012 in order to meet the green goal of the prize ceremony of that year being certified as a Zero Emissions event.

ANTÓN SCHOLARSHIPS

A priority for the EDP HC Energía Foundation is to seek to embrace all artistic expressions. For yet another year running, the Foundation has therefore sponsored the Antón scholarship for sculptors. First awarded in 1990, the scholarship seeks to support, encourage and foster creative activities in the field of sculpture.

Ivan Fernández, an artist from Asturias, was chosen to be awarded the scholarship from among the 16 candidates. His winning project was "Presencias", where he used recycled materials from beach clean-ups to create sculpture structures.

BILBAO-TRETO GAS PIPELINE

In the case of the Bilbao-Treto project, EDP Spain has contributed to research on an important event of the last Carlist War, the Las muñecas battle, which marked the end of the siege of Bilbao. Work on the gas pipeline has unearthed evidence of the advances of the liberal army and how they overran the Carlist troops. In fact, thanks to the findings of the remains of ammunition used, researchers have been able to study the chronicles of the time and verify that the advance was along the east of the Talledo.

In short, the documentation work prior to laying out the gas pipeline, the archaeological survey before starting on the work and the subsequent archaeological monitoring of the work have helped to clarify part of our recent history, the details of which are unknown and which was key to the outcome of the Spanish Carlist wars. Furthermore, it has also been ruled out that there were remains of the Roman road that linked Pisoraca with Flaviobriga (today's Herrera de Pisuergra with Castro Urdiales) which, in this section, ran from Sopuera over Las Muñecas to Otañes. We have also been able to identify an aqueduct from the end of the 18th century which was used for the mining operations at that time that has not only been preserved (by changing the route of the gas pipeline), but has also been enhanced by documenting and disseminating it. This has been all showcased in a report whose results will help the Autonomous Government of Cantabria to update both the state of the cultural heritage of the zone and the official inventories of archaeological sites and hydraulic artefacts.

SPORTS ACTIVITIES

FUN RUNS

A healthy society gives importance to sport and EDP is aware of its key role. Following on with the tradition, in 2012, the EDP HC Energía Foundation sponsored different races, such as the Ruta de la Reconquista Half Marathon in Cangas de Onís. These runs are very popular.

BAT BASQUE TEAM

EDP Spain is, along with the Basque Government and EITB, a sponsor the BAT Basque Team, whose goal is support Paralympic and Olympic sportspeople in their sporting and professional and personal preparation. This integral training programme provides the selected sportspeople with high performance facilities, highly qualified coaches, monitoring and control medical teams, and agreements with the University of the Basque Country for the academic training of the athletes on the programme.

Thanks to the hard work put in, athletes on the programme won three bronze medals and a silver medal at the London 2012 Games, along with a further bronze medal at the Paralympics.

NATURGAS NUPTSE EXPEDITION

In September 2012, Alberto Iñurrategi, Juan Vallejo and Mikel Zabalza completed their fifth expedition together, whose goal was to establish a new ascent in alpine style up the Nuptse, in the Himalayas.

BASKONIA FOUNDATION

We work with the International Youth Basketball Campus, in conjunction with the Baskonia 5+11 Foundation, which is held in Vitoria-Gasteiz in July and which was attended by 350 young people from 17 different nationalities in 2012. Working with the different international coaches at the Campus, the young players not only perfect their basketball skills, but the camp is also a model for coexistence as for 2 weeks, they share exercises, language classes, meals and accommodation.

THE ASTURIAN SAILING WEEK

The EDP HP Energía Foundation is committed to the environment where it operates. Proof of this is the event that it sponsors annually held off the coast of Asturias and which is very popular with the participants. During the XIV Asturian Sailing Week organised by Luanco Yacht Club and sponsored by EDP HC Energía Foundation and Cajastur, 130 sailors race along the coast from Avilés, Gijón, Carreño and Gozón.



CYCLING

In 2012, EDP Spain continued to work with the Basque Cyclist Foundation to back the up-and-coming cyclists in this sport. As part of an integral training programme, it sponsors the Under-23 Amateur Cycling Team, whose members are taught values such as sacrifice, team work, discipline and team building while they continue with their academic studies. We also work with the learning centre that the Basque Cycling Foundation has in Derio, which around 3,000 children aged between 6 and 12 attend every year and they learn the basic notions of bike maintenance and road safety. Finally, it supports the BBT (mountain bike) school run by the Euskadi Foundation and regularly takes part in the Bike Day, in which over 3,000 cyclists took part in 2012, many of them children wearing the red kit of the EDP Spain team.

SESTAO CHESS CLUB

In 2012, the Naturgas Energía Sestao Chess Club won the Spanish championship, which has helped to relaunch its activities and attract new members. It currently has 300 young members.

ADMINISTRATION AND
REGULATORY BODIES



INTRODUCTION

THE 1997 ELECTRICITY SECTOR ACT AND THE 1998 HYDROCARBON ACT INTRODUCED FAR-REACHING CHANGES TO THE DEVELOPMENT OF THE GAS AND ELECTRICITY ACTIVITIES.

In order to guarantee the energy supply, its quality and its performance at minimum cost, a new regulation was defined where the business for those supplies (generation | transmission | distribution and electricity marketing; supply | regasification | storage | transport | distribution and gas marketing) were no longer integrated vertically in order to become the corporate purpose of companies that are independent for both legal and accounting purposes.

Furthermore, the generation and marketing of electricity were deregulated, in the first case, by means of the right to free installation, with economic compensation based on the wholesale market (known as "pool") and in the second case, by means of the consumers being free to contract and choose their supplier.

In the case of the gas sector, the supply and marketing activities have been deregulated. With respect to electricity transmission and distribution, and the regasification, basic storage, transport and distribution of gas are activities subject to significant economies of scale and can be considered as natural monopolies; the deregulation of those businesses is reflected in the generalised third-party access to the grids and facilities, whose ownership no longer guarantees its exclusive use. However, its compensation continues to be overseen by the Administration, which defines it in such a way to avoid any possible abuse due to dominant positions arising from the existence of a single network. This compensation is funded by means of the amounts collected for the regulated prices for the uses of the facilities (tolls and fees).

These reforms led to an objective and transparent energy system (gas and electricity), that operates under the principle of free competition, but that given its technical complexity, and in order to guarantee a deregulated framework, it is regulated by the National Energy Commission. This body (which in general we will refer to as Administration and Regulatory Bodies) has thus become a key stakeholder for the EDP Spain Group, which bases its activity on the production, distribution and marketing of energy (gas and electricity).

Communication with this stakeholder is channelled through the Regulation Department, in the case of the electricity business, and the Operations Department, for the gas activity. These departments are involved in the legislation development of the energy sector, by representing the company and acting on its behalf with the agents of the Regulatory System.

During 2012, the main regulatory developments were related to the electricity tariff deficit and the containment of the regulated costs of the gas sector, even though special mention should be made of the Fiscal Measures for Energy Sustainability Act, which has deeply affected the electricity sector and with an additional direct impact for natural gas consumers.

GAS SECTOR DEFICIT

The Gas Sector deficit occurs when the revenue collected as tolls and fees for third-party access to the facilities of the system are not sufficient to cover all the cost of those assets (transport networks, regasification plants, underground storage and distribution networks). The accumulated deficit balance at year end 2012 stood at 298 million euros, i.e. 9% of the total regulated costs of the Spanish gas sector.

The measures taken by the Government during the year to offset this slide have been aimed at both cost containment of the regulated activities and to increase revenue. In this context, the most important legislative initiatives were as follows:

Royal Decree Act 13/2012

Published in March, this legislation not only adopted measures to tackle the deficit in the electricity sector, but also specific initiatives for the gas sector, including:

- Suspension of the processing of transport gas pipelines and measurement and regulation stations (ERM), which are not considered to be international commitments or economically profitable for the system due to the increase in the associated demand.
- Change in the compensation system of the gas pipelines dedicated to supply their catchment area by means of cutting the compensation if the consumption is not reached to justify their construction.
- Review of the compensation model of the underground storage.
- The coming into service of certain facilities delayed.
- Reduction of the interruptible supply.
- Elimination of the specific compensation to new population centres.

In addition, this legislation transposes into our legal system the Third Internal Energy Market Package, as far as the separation of activities is concerned, which led to the agreement to sell Naturgas Europea Transporte, a company of the Group and owner of the transport assets of the Basic Network, to Enagas.

Order IET/849/2012

This order published in April updated the tolls and fees associated with third-party access to gas facilities. It thus established a 5% rise in the linear tolls that came into force on 28 April, on top of the one that had already been introduced in January 2012.

Order IET/2812/2012

Published on 27 December, it updated by an average of 1% the tolls and fees associated to third-party access to the gas facilities and the compensation of the regulated activities to be applied from 1 January 2013.

Also with impact for 2013, this Order amended the calculation of the transport and distributor compensation by means of cutting the efficiency factor from 0.85 to 0. This factor is an implicit element in the compensation formula of those agents.

ELECTRICITY TARIFF DEFICIT

The tariff deficit is defined as the mismatch between the real cost of the electricity supply and the price paid by the consumers, which is temporarily being financed by the electricity companies Endesa, Iberdrola, Gas Natural-Fenosa, EDP (Spain) and E-On. At year end 2012, the accumulated amount stood at 25,500 million euros for the sector total. Even though Royal Decree Act 6/2010 established that no further deficit would be generated from 1 January 2013, as the access tolls would be sufficient to cover all the costs of the regulated activities, RDL 29/2012 eliminated this provision, which implies that an ex-ante deficit can exist.

The following 2012 legislative initiatives should be highlighted as measures to solve this problem of the tariff deficit:

Royal Decree Act 1/2012

This legislation suspended the special regime compensation pre-assigned procedure (prior registration as a special regime facility required to be entitled to the compensation) and suppressed the economic incentives for the new facilities based on electricity from cogeneration, renewable sources and waste. The grounds for this measure are:

The country has already met the photovoltaic, thermo-electric and wind power installed capacity envisaged in the Renewables Plan 2005-2012.

The existence of overruns in the system caused by payment of premiums to the solar facilities.

The insufficiency of the measures adopted in other legislation to eliminate the tariff deficit from 2013 onwards (as envisaged in RDL 6/2010).

The installed electricity is sufficient to cover electricity demand.

Royal Decree Act 13/2012

Published in March, this Royal Decree Act adopted a series of urgent measures to rationalise different cost items and thus achieve the sufficiency of the access tolls to cover the costs of the electricity system. The items affected by this cut were:

Reduction of the compensation of the electricity distribution and transmission activities.

Reduction of the compensation to non-mainland and island generation companies (compensation to offset the surcharge involved in producing electricity in those territories).

Reduction of the incentive for long-term investment in capacity (an incentive to make a certain installed capacity available to the System Operator, which is accredited by means of the commissioning certificate of the generation facility) and of the incentive to the environmental investment established in 2008 (and which was aimed to power stations that use coal as the main fuel and which had implemented a desulphurization plant).

Reduction of the subsidy for thermal power stations for the use of national coal (it is an incentive to keep the option open to consume fuels sourced locally, apart from the fact that the electricity generation using coal-fired power stations provides a degree of reliability that guarantees the correct operation of the system).

Reduction of the interruptibility discounts which benefit certain customers (discounts that are applied to customers that accept cuts in their supply under certain circumstances as a demand management tool).

In addition, the system revenue is increased from funds not used in other budgetary items (own funds of the National Energy Commission, funds not used by the Institute for Energy Diversification and Savings, IDAE).

Order IET/843/2012

This Order established the access tolls to the electricity grids applicable from 1 April 2012, and at the same time it redefined the tolls of the last quarter of 2011 and of the first quarter of 2012, in response to the relevant Rulings of the Supreme Court.

Those Rulings were the result of the electricity companies challenging the orders that established the tolls of the previous quarters, alleging that they were not sufficient to avoid the tariff deficit and thus contravening what was established in RDL 6/2010.

Royal Decree Act 20/2012

Even though this legislation sought to guarantee budgetary stability and foster the competitiveness of the Spanish economy, it also covered some issues related to the electricity sector.

It cut the compensation for the electricity transmission business.

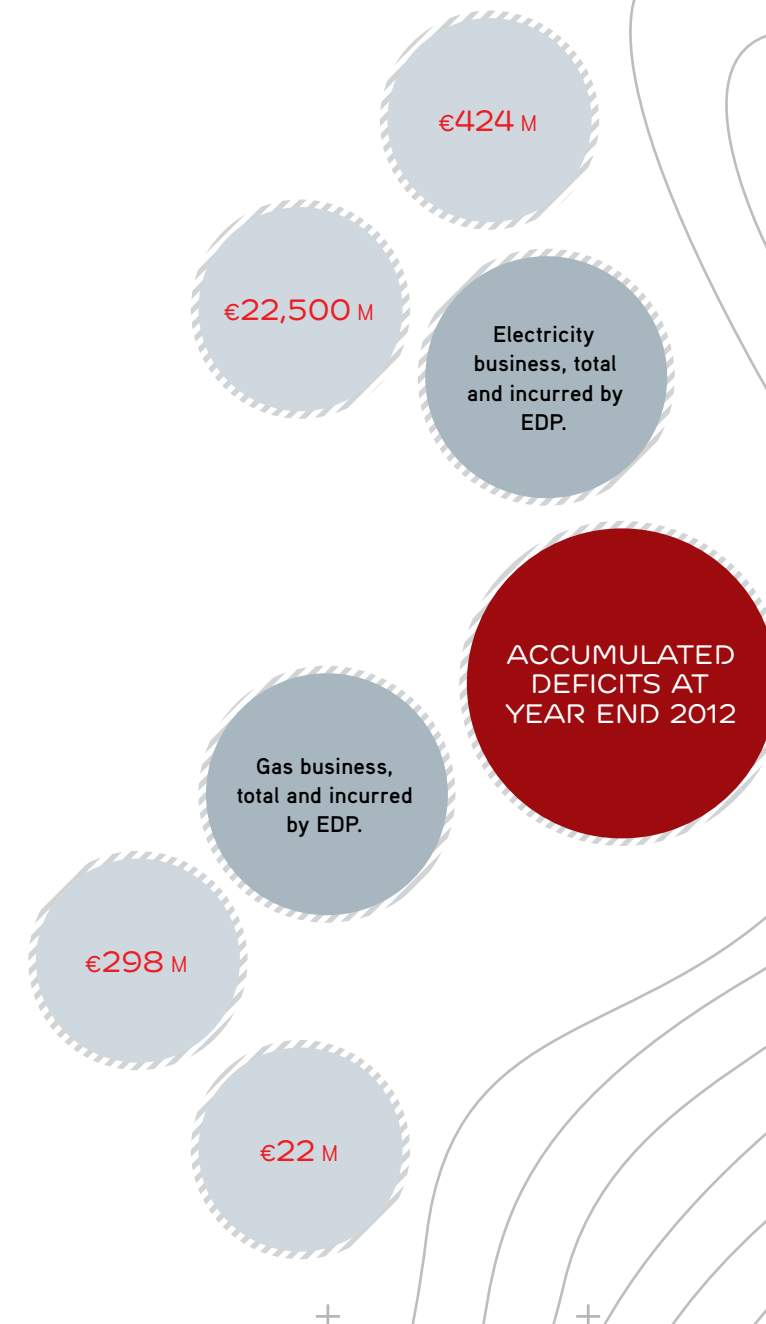
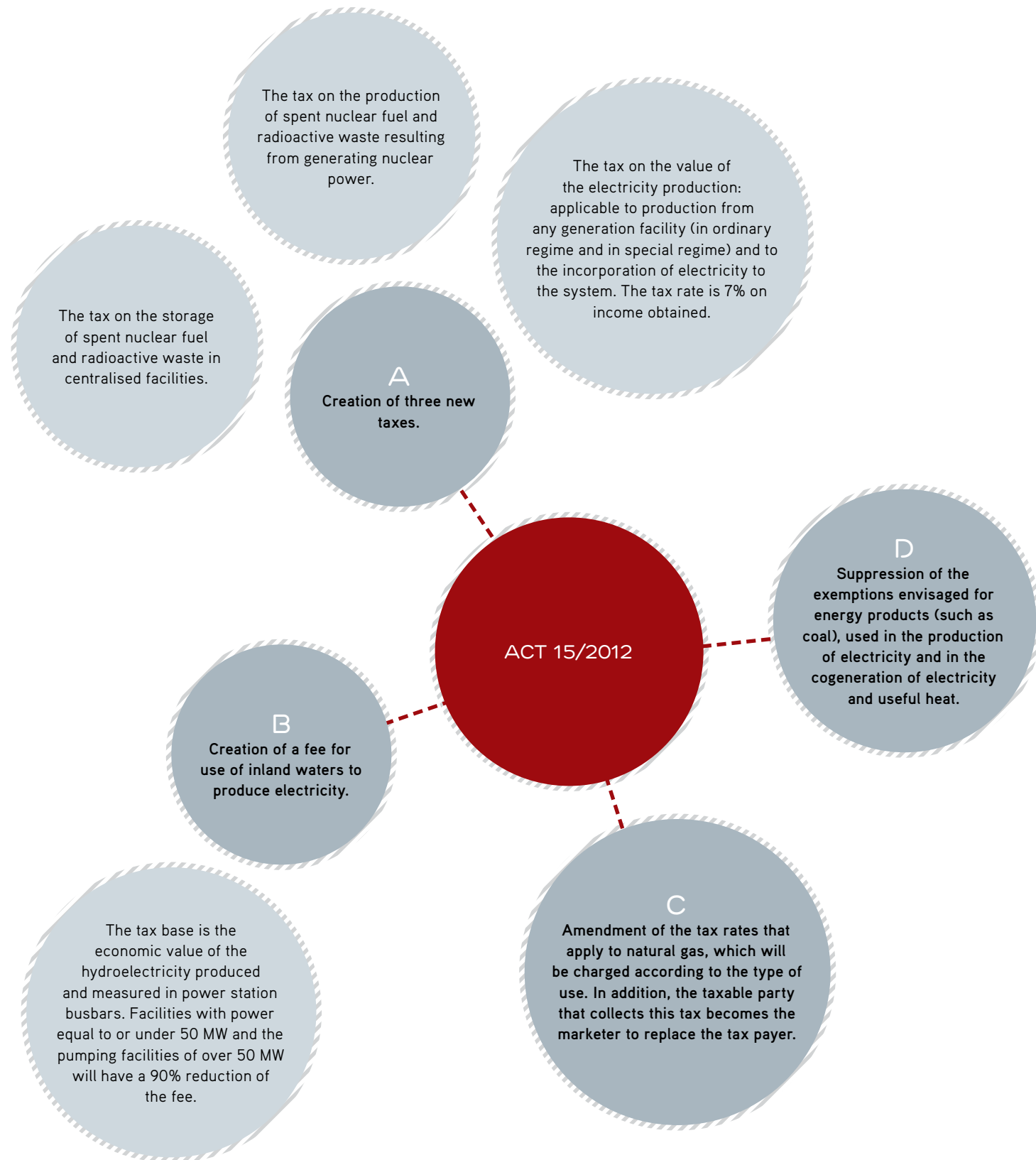
Given the proliferation of regional taxes on the electricity supply activities or facilities, and to avoid them affecting all consumers nationally, the mandatory application of a territorial supplement in the tolls and in the Last Resort Tariff (TUR) was established in those communities that set specific taxes, so that they would only be paid by the consumers located in that territorial sphere.

The quarterly review of the tolls was eliminated.

It opens the way to defining progressive access tolls, which will take into account the average consumption of the supply points, which seeks to provide an energy price alert to the consumers, thus fostering energy savings and efficiency.

TAX MEASURES FOR ENERGY SUSTAINABILITY

Act 15/2012, published in December, seeks to internalise the environmental costs arising from electricity production, by stimulating the improvement of energy efficiency and the management of natural resources. The main measurements are as follows:





EDP SPAIN HAS AN ENVIRONMENTAL MANAGEMENT SYSTEM IMPLEMENTED IN ACCORDANCE WITH ISO 14.001

100% POWER DISTRIBUTION AND GAS MARKETING

INSTALLED CAPACITY **97%**

ENVIRONMENTAL EXPENDITURES AND INVESTMENTS **€25M**

EDP has produced an Iberian Environmental Best Practices Manual to share and disseminate measures at our facilities internally and externally that highlight the total commitment to sustainability. A software application hosted at www.mapaedp.com has been developed as a support tool and is accessible both for employees of the Group and for external workers.

ENVIRONMENTAL OVERVIEW

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THE ENVIRONMENT

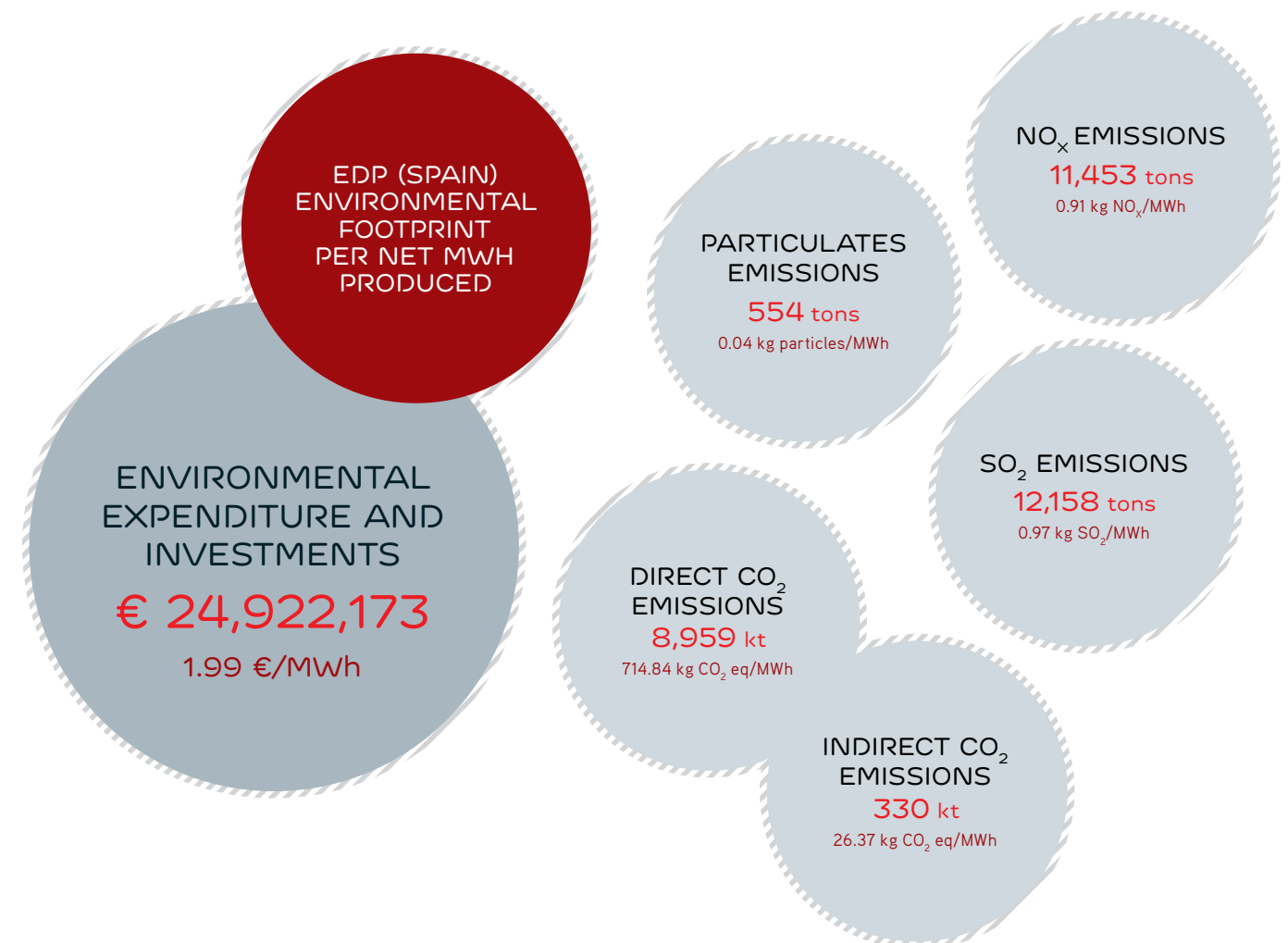
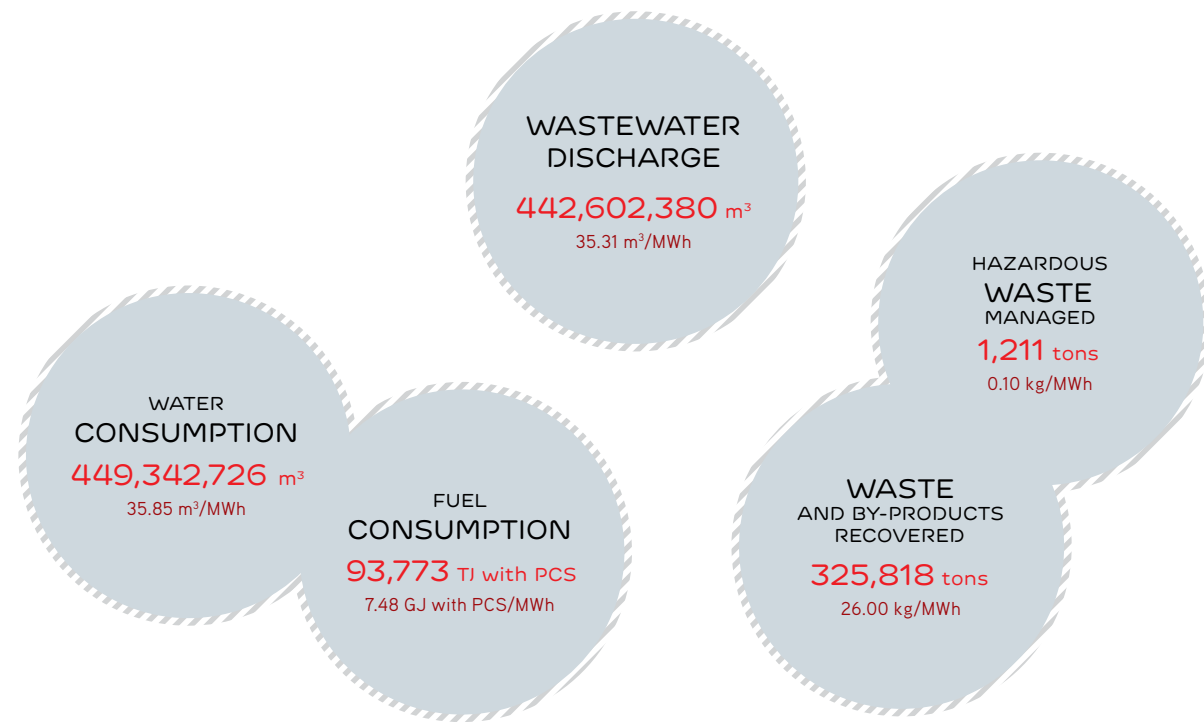
INTRODUCTION

The EDP Group believes that proactive environmental management generates value and that it is also the obligation of any socially responsible company. It therefore fosters an organisational culture to ensure that the business development and initiatives are environmentally responsible and encourages innovation and continuous improvement.

In this line, EDP in Spain has an environmental policy approved by the Board of Directors in which it promulgates:

<p>Respecting the environment to be integrated throughout the value chain.</p> <p>In 2012, implementation of the MaPA application - Manual of Environmental Best Practices for facilities, employees and suppliers www.mapaedp.com</p>	<p>Compliance with applicable legislation and regulations.</p> <p>Environmental Management System certified pursuant to UNE-EN ISO 14.001 that covers 100% of the distribution business, 97% of electricity generation and 100% of gas marketing.</p>	<p>Driving the continuous improvement of our environmental performance.</p> <p>Continuous improvement LEAN programme up and running in EDP in Spain since 2006, with over 1,800 initiatives implemented since the start of the programme and the involvement of over 670 people. In 2012, EDP in Spain spent nearly 16 million euros on protecting the air, climate and soil, managing waste and protecting biodiversity, and 9 million euros on environmental management and prevention areas.</p>	<p>Awareness-raising and training employees to minimise the environmental impacts of its activities.</p> <p>In 2012, nearly 6,000 hours were spent training on subjects related to sustainability and, specifically, over 850 hours on environmental issues.</p>	<p>Promoting energy efficiency.</p> <p>In 2010, EDP Spain set up an energy efficiency service company (HC Naturgas Empresa de Servicios Energéticos, S.L.), which offers energy services to companies, domestic customers, buildings and public administrations.</p>	<p>Considering the expectations of the stakeholders in the environmental processes.</p> <p>Every two years, EDP in Spain conducts a Sustainability survey to foster the participation of the stakeholders in the design of its sustainability strategy.</p>
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EDP in Spain has an Environment, Sustainability, Innovation and Quality Department (DASIC) to guarantee and facilitate the application of those principles. In addition, an "Environmental Coordinator" is appointed in the business units where the activity has an environmental impact and those coordinators will work with DASIC in the day-to-day operations and, formally, by means of regular working groups. The structure of the environmental management of the Group is completed with Environment Committees (they meet every six months), where apart from the DASIC and the Coordinators, the business directors take part for the environmental monitoring of the different activities and facilities.

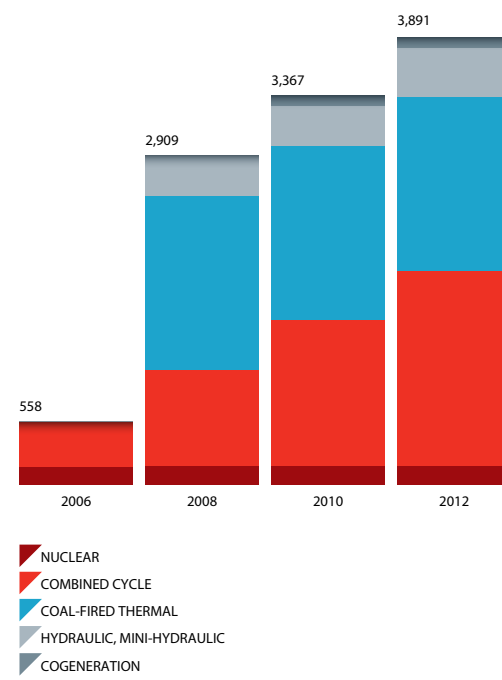


ENVIRONMENTAL MANAGEMENT SYSTEM AND TOOLS

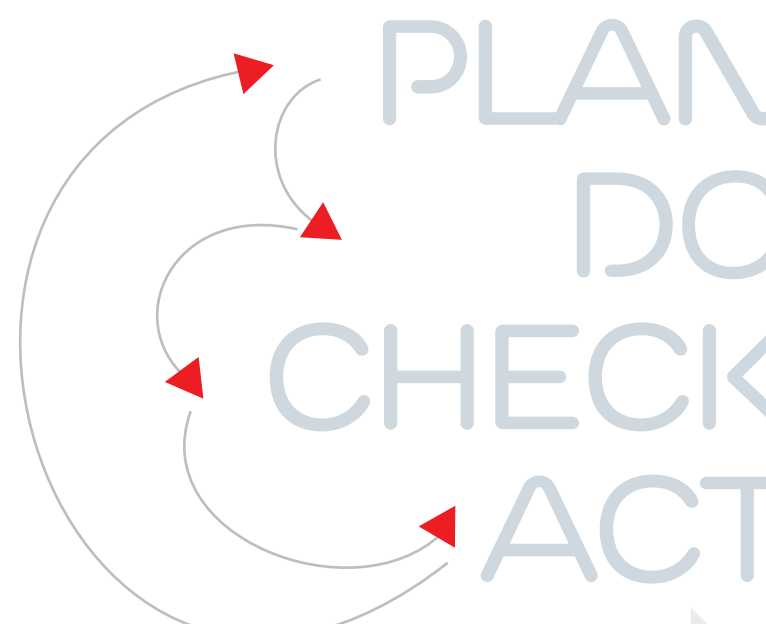
100%
97%
100%

100% of the distribution business, 97% of the electricity generation and 100% of the gas marketing, have a certified management system that is audited annually by external and, therefore, independent auditors.

EVOLUTION OF THE ISO 14.001 CERTIFIED INSTALLED CAPACITY



In addition, the Sidergás Cogeneration and Soto de Ribera Combined Cycle is also EMAS certified (Eco-Management and Audit Scheme). These ISO 14.001 and EMAS certificates are voluntary and recognise those companies that have implemented an Environmental Management System and have acquired an externally verified commitment to continuous improvement. Furthermore, the EMAS certified companies periodically reports on the operating of the system by means of an Environmental Declaration, whose data are also audited to guarantee the reliability of the information. A systematic control based on a simplified environmental management system and internal audits has been established for the non-certified plants, which account for the remaining 3% power generated by small waste and co-generation facilities.



Environmental Management Programme with the targets and goals to implement environmental improvement measures.

Internal monitoring and control of emissions, waste and consumptions: **INFORMA**.
Tool for logging and documentary control of waste management: **REMA**.

Review of the appropriate environmental performance by means of **Committees and Working Groups** and analysis and implementation of new requirements.
NORMA, tool to control the applicable environmental legal requirements.

SICRAM, used to describe the environmental baseline and an analysis of the possible environmental risks is included.
MaPA, application with the implemented Environmental Best Practices, as a source of information for other facilities.

ENVIRONMENTAL BEST PRACTICES MANUAL, MaPA

www.mapaedp.com

As a result of the EDP Group Iberian Symposium on the Environment held in Porto in January 2012, the initiative emerged to design an Environmental Best Practices Manual, in order to share and disseminate within and outside the EDP Group measures taken in our facilities that highlight the total commitment to sustainability.

A software application has been developed as a support tool and is accessible both for employees of the Group and for external workers at www.mapaedp.com.

MaPA



Using a simple search engine, users can find the different measures at our **facilities**, classified by different criteria, including the lifecycle phase (preliminary, operating, construction, etc.), the technology (thermal, hydraulic, combined cycle, cogenerations, etc.), or the environmental aspect processed (water, air, waste, noise, etc.).

The **employees** can also find some tips to be taken into account not only in the workplace, but also in our everyday lives to protect the environment. The advice ranges from tips to reduce consumption (water, electricity, raw materials, climate control, etc.) or to manage waste correctly, to recommendations for the sustainable use of means of transport.

The Manual also includes Best Practices aimed at our **suppliers** as the basis for their work habits in our centres, such as waste management or the monitoring and control of small works. A concept datasheet with a more educational goal and a second datasheet with the detailed description of the environmental best practices have been prepared for each of these best practices.

THE OBJECTIVE

MaPA aims to be a dynamic tool that is progressively expanded with the best practices implemented in the day-to-day running of the facilities. Therefore, a **contact** section has been set up where users can submit comments and suggestions, along with proposed new best practices to be included in the application.

Anyone who so wishes can sign up for the latest news, a feature which allows them to regularly receive a summary of the latest Best Environmental Practices that have been registered in the tool.

The application can also be accessed through the sustainability website, www.sostenibilidadedep.es

THE ELECTRICITY BUSINESS AND THE ENVIRONMENT

THE OPERATIONS TO GENERATE ELECTRICITY AND DISTRIBUTE IT TO THE CONSUMPTION POINTS ARE LINKED TO A SIGNIFICANT ENVIRONMENTAL BURDEN. EDP (SPAIN) HAS ANALYSED ALL THE ENVIRONMENTAL ASPECTS AND IMPLEMENTED MEASURES FOR ITS PREVENTION AND MINIMISATION.

EMISSIONS

SOIL

WASTEWATER DISCHARGE

NOISE

BIODIVERSITY

WASTE

CONSUMPTION

GENERATION

Thermal power stations burn fuel in a boiler and heat water to generate steam, which expands in a turbine and generates electricity in an alternator. As a result of the combustion, gases are obtained that are treated and finally eliminated through the stack.

The coal-fired thermal power stations, furthermore, generate waste during the combustion process (ash and slag) and gypsum, a by-product of the gas desulphurization process.

Another form of obtaining electricity is by means of the hydraulic harnessing of the rivers, where the dammed water is sent through a turbine, with the potential energy of the water being transformed into mechanical energy, which in turn transmits energy to an alternator to produce electricity.

Rivers, many of which are located in protected areas or where there are habitats and eco-systems of special interest, are the main source of the water used in our power stations.

As in any other industrial activity, the necessary measures are taken into account at all the facilities for the appropriate management of the land and to control the acoustic impact outside.

DISTRIBUTION

The electricity generated at the production centres is distributed along the electricity lines to homes and other consumers.

To reduce the grid losses, the voltage of the electricity is raised at the generation points and is then transformed back to medium or low voltage at points near to where it is to be consumed. Transformers are therefore used, along with other protection and measurement equipment, located in sub-stations, distribution centres and/or transformation centres.

This equipment mainly uses oil as a coolant and appropriate maintenance is therefore required to minimise waste production and to avoid any leak or accidental discharge.

The switchgear used to switch and protect the main elements of the grid uses a dielectric agent, mainly oil or sulphur hexfluoride (SF6), which is what really makes the switching or extinction of the electric arc effective. The correct maintenance of that equipment is fundamental, particularly in the case of SF6, as it is a greenhouse gas.

To guarantee the electricity supply at any point of our geography, the lines are also laid out taking into account the minimum environmental impact, even though in some cases they inevitable have to cross natural spaces.

The low-lying vegetation growing along the route of those lines is cleared to reduce any risk of fire, for example, caused by a branch coming into contact with a line.

MARKETING

Energy marketing consists of selling energy and value added services to our customers: maintenance of the facility and household appliances, electronic billing and other services to improve the energy efficiency of the facilities.

ATMOSPHERIC EMISSIONS

THE OPERATIONS OF EDP (SPAIN) SPAN ENERGY PRODUCTION, DISTRIBUTION AND MARKETING. ELECTRICITY GENERATION, AND MORE SPECIFICALLY THERMAL GENERATION, IS THE ONLY ONE THAT HAS A SIGNIFICANT IMPACT ON ATMOSPHERIC EMISSIONS.

THE USE OF FOSSIL FUELS TO PRODUCE STEAM (COAL IS USED IN TRADITIONAL THERMAL POWER STATIONS AND NATURAL GAS IN THE COMBINED CYCLE AND COGENERATION) IS THE SOURCE OF SULPHUR DIOXIDE, NITROGEN OXIDE, PARTICULATES AND CARBON DIOXIDE.

COAL	Convention thermal power station	SO ₂ , NO _x , Particulates, CO ₂
NATURAL GAS	Combined cycle	NO _x , CO ₂
	Cogeneration	

SULPHUR DIOXIDE

Sulphur dioxide, SO₂, is formed from the sulphur contained in the fuel that is burnt and the coal-fired power stations therefore emit those gases (coal has a variable percentage of sulphur in its composition, on average between 0.5% and 1%, depending on its origin). However, the combined cycles, that burn natural gas, are not considered emitters (natural gas has less than 10 ppm - parts per million - of sulphur).

The electricity sector has been traditionally the maximum contributor to those emissions, accounting for over 60% of the national total in 2000 (the rest basically comes from the industrial combustion plants and maritime transport). Therefore, the reduction measures carried out in the last decade, mainly the desulphurization of the coal-fired power stations and the progressive implementation of combined cycles, **had led to emissions attributed to Spanish thermal power stations to be cut by 92% and has meant the national total has dropped by 68%.**

In this line, EDP (Spain) has two desulphurization plants in the Soto 3 and Aboño 2 coal-fired generators and, in the last 10 years, it has invested in constructing 1,712 MW in combined cycle power stations, where the combustion of natural gas prevents the emissions of sulphur dioxide.

NITROGEN OXIDE

NO_x mainly refers to a set of NO nitrogen monoxide and NO₂ nitrogen dioxide emissions; the combustion of any fossil fuel produces NO_x due to the high temperatures and to the existence of nitrogen both in the air used for the combustion and in the fuel. The NO_x emissions generated in the combustion process are 90/95% NO, and the rest NO₂; when the smoke leaves the stack, a large part of the NO is oxidised in the atmosphere and becomes NO₂.

The NO_x emissions from the electricity sector accounted for 22% of the national total in 2011, with transport and the industrial combustion plants (whose contribution comes to 72%) being the most polluting sectors. Since the year 2000, **the reduction measures carried out in the thermal generation process have managed to lower emissions by 64%.** In the case of the EDP (Spain) power plants, the installation of low NO_x burners in the coal-fired generators (Aboño 1, Aboño 2 and Soto 3), and the continuous improvement of the combustion processes of the combined cycles (such as installing additional chromatographs that regulate the entry of air into the gas turbine and thus reduce the combustion temperature, and therefore the NO_x emissions), has enabled the specific emissions to be reduced in recent years.

PARTICULATES

The main cause of particulate emission in coal combustion is its incomplete burning due to the presence of inorganic matter, thus producing ashes; on the other hand, natural gas does not have impurities or waste, which rules out the emission of this pollutant.

In 2011, the electricity sector was responsible for 7% of the total national emission of particles and special mention should be made of the contribution of the transport sector, the residential and industrial combustion plants, and agricultural, which in total account for 88%.

Since the year 2000, **particulate emissions in the electricity sector have fallen by 90%**, thanks to the investments in electro-filters, to the particulate retention impact of the desulphurization plants, and to the progressive penetration of the combined cycle power stations.

INMISSION: AIR QUALITY

Nitrogen and sulphur oxide are the main causes of acid rain, the term used for the dry and humid sedimentation of the atmosphere with a much higher content than normal of sulphuric and nitric acids.

Where the climate is humid, damp sedimentation (rain, snow, fog or mist) occurs, which causes a flow of water on the ground that can affect plants and animals to different degrees, depending on the degree of acidity of the water, the chemical composition and the damping capacity of the land in question. If, on the other hand, the climate is dry, acid chemical substances can be added to the dust or to smoke and thus fall on the ground, adhering to it, to buildings, to trees, etc.

Those contaminants together with the particulates and other parameters (carbon monoxide and ozone) are measured in the Air Pollution Forecasting and Monitoring Networks managed by EDP (Spain) in the catchment areas of our thermal power stations (the company is responsible for 12 stations in the Principality of Asturias and for 4 stations in Navarra and La Rioja). These networks are in addition to those managed by the relevant authority in each Autonomous Region and seek to measure, assess and quantify the concentration of pollutants in the air.

The stations of the EDP (Spain) grids are fitted with automatic analysers located on site, which provide in situ data transmitted in real time. They are basically acoustically and thermally insulated booths and fitted out to accommodate the analysers. They have a data acquisition system, which gather and store the values continuously facilitated by the analysers.

In addition, there is an Air Quality Prediction Model in the Soto de Ribera area, where there are two coal-fired generators and two combined cycle generators of EDP (Spain). It is a predictive model that operates continuously, producing weather forecasts that include factors such as temperature, wind and atmospheric stability conditions. On the other hand, it predicts the emissions of each pollutant (nitrogen and sulphur oxides and particles) from our facilities, according to the operating expectations, and also takes into account other emissions from different sources that may affect the air quality of the study zone (emissions of the main sources of the environment, of the urban agglomerations and the main traffic routes).

GENERATION FACILITIES



CLIMATE CHANGE

Carbon dioxide, CO₂, is generated in any combustion of a fossil fuel (coal, oil, natural gas...). CO₂ is not a pollutant in the sense of affecting the health or the environment, but it is a greenhouse gas, deemed to be the main cause (due to its abundance) of climate change.

To reduce global emissions in the electricity generation process, EDP (Spain) has in recent years opted to expand its generator stock by means of combined cycles, which enables the specific CO₂ emissions to be reduced by nearly a third (approximately, 0.36 kg CO₂/kWh in the cycles compared to 0.92 kg/kWh on the coal-fired plants).

Given that climate change is not a local phenomenon, EDP (Spain) takes part in other initiatives in order to cut global emissions. In this spirit, EDP (Spain) works with the iron and steel sector by means of an agreement between the Aboño thermal power station and the ArcelorMittal iron and steel works. Waste gases generated during the steel production process cannot be directly released into the atmosphere due to their high levels of carbon monoxide (CO), which is toxic. They therefore need to be burnt before they can be released, thus converting them from carbon monoxide to CO₂. This combustion can be directly carried out in a burning flare or the waste energy content of the gases can be used. The Aboño boilers are multi-fuel and are designed to burn those gases simultaneously with coal (a minimum coal/gas ratio is necessary for the combustion to be stable). In 2012, it meant that 15% of the energy generated by those systems came from the combustion of iron and steel process gases and thus avoided 1 million tons of CO₂ being released into the atmosphere without recovering any of their energy content. The Sidergás cogeneration plant likewise also used the ArcelorMittal waste gases at its Trasona factory to produce electricity and steam. In addition, the Group takes part in Clean Development Mechanism (CDM) projects, in other words, projects being run in developing countries for greenhouse gas emission reduction which can then be traded for industrialised countries to meet the CO₂ emission targets under the Kyoto Protocol.

This involvement in the CDMs is carried out through two carbon funds (instruments created to finance the purchase of project emissions that help to reduce greenhouse gas emissions in developing countries and in transition economies):

Spanish Carbon Fund: EDP (Spain) is taking part in the first tranche of this Fund whose value is over 4 million euros. This fund was created in 2005 and is multi-donor with private/public participation and is managed by the World Bank. The resources of the Spanish Carbon Fund are used to purchase Greenhouse Gas Emission Reductions generated by projects that are preferably in renewable, energy efficiency, handling waste and gas sequestration, with the ultimate aim of contributing to the sustainable development of developing countries and transition economies. The portfolio of this fund includes, in different stages of processing, a total of 20 projects that represent an equivalent emission reduction of 19.02 million tons of CO₂. These projects are being run in different regions, including Latin America, North Africa, East and South-East Asia, Eastern Europe and the Russian Federation.

Community Development Carbon Fund (CDCF): the EDP (Spain) stake in this Fund stands at 5 million dollars. This Fund was established in 2003 with the priority intention of extending the financial benefits associated to the carbon markets to the poorest communities of the least development countries in the world, and which would otherwise not have access to those mechanisms due to their financial risks. The participants in this Fund contribute to the development of those communities and in exchange receive certified emission reductions (CERs). The fund is involved in 32 projects at different stages of development and expects to achieve certified emission reductions of around 6.5 million tons. Over half those projects are developed in the least developed countries (LDC), such as Kenya, Bangladesh, Pakistan or the Philippines.

THE KYOTO PROTOCOL (2008-2012) EXTENDED UNTIL 2020

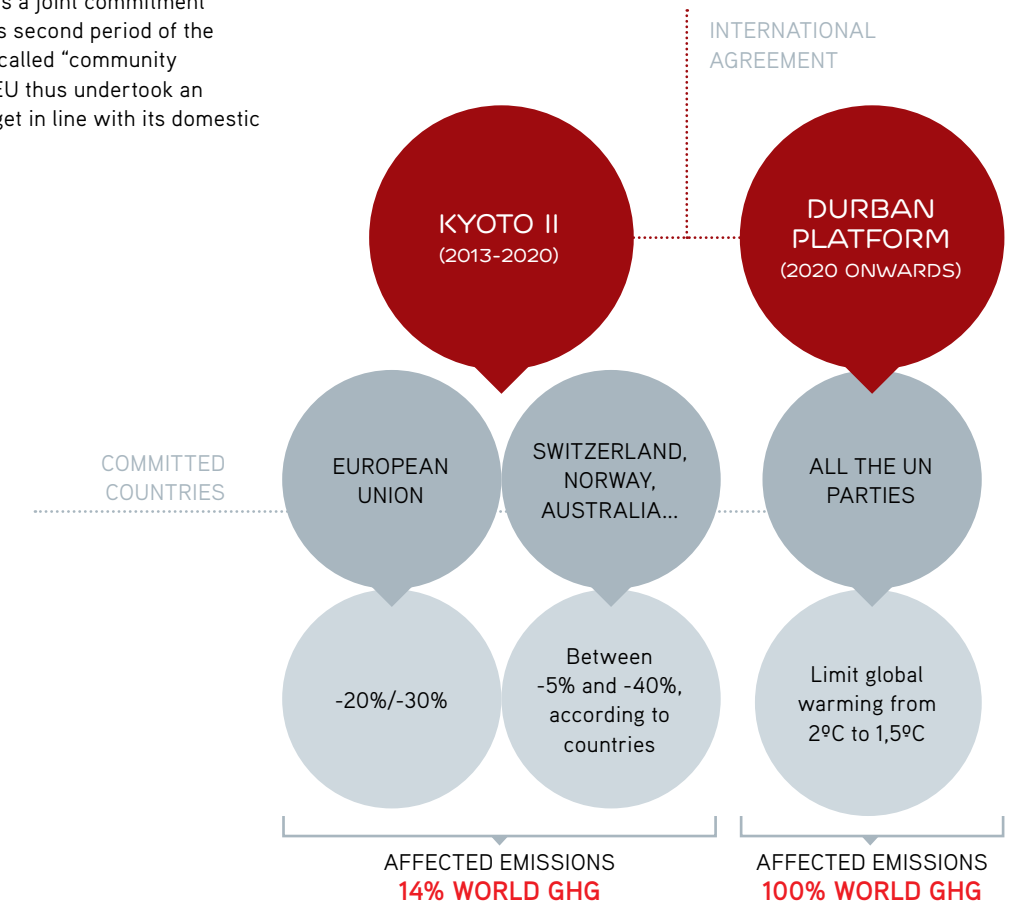
2012 was the last year of the first phase of the Kyoto protocol (2008-2012). Throughout the last year, the uncertainty remained regarding the future of the protocol beyond 2013. We had to wait until the Doha Summit (Climate Change Summit under the United Nations Framework Convention on Climate Change) held from the 26 November to 7 December 2012 for the position of all the parties to be clarified.

At Doha, the necessary amendments were adopted for the Kyoto agreement to be extended from 1 January 2013 until 31 December 2020. It is therefore currently the only legally binding international instrument to fight against climate change. The countries that signed up to the agreement and established reduction targets for this second period include the European Union, Switzerland, Norway and Australia. The ones from the first period who have opted out are Japan, Russia and New Zealand (that will continue to be parts of the Kyoto Protocol but without reduction targets), Canada (who left the Protocol) and the USA, that never ratified the Kyoto Protocol.

The European Union has a joint commitment in the framework of this second period of the Kyoto Protocol (the so-called "community bubble"). At Doha, the EU thus undertook an emission reduction target in line with its domestic

legislation of the Climate Change and Energy Package, which involves a 20% reduction of its emissions between 2013 and 2020 with respect to the 1990 levels. This target could be increased to 30% if the conditions are appropriate, in other words, if the other developed countries and the major emerging economies embrace reduction commitments.

However, the countries that have signed up to the Kyoto protocol in this new stage with reduction undertakings only account for 14% of world greenhouse gas emissions. Given that the Climate Change has a global effect on the whole planet, an international agreement involving more countries is essential. This future agreement was profiled in Durban in 2011 and is known as the Durban Platform. There are now some years of negotiating ahead to reach a new legally-binding international commitment, that would be adopted in 2015, and which would come into force from 2020 onwards. All the countries would therefore have to tackle climate change from then onwards according to their capacities and responsibilities.



WATER ABSTRACTION AND DISCHARGE

Water is the raw material used to produce electricity in hydraulic power stations, as it is directly used to move the turbines. We can distinguish between two types of hydraulic power stations.

RUN OF RIVER
These power stations barely have any water reserves; the flow supplied depends on the river contribution.

DAMMED WATER
The water used in the power station comes from a lake or reservoir, built using dams. According to demand, the dammed water is taken through pipes to the turbines.

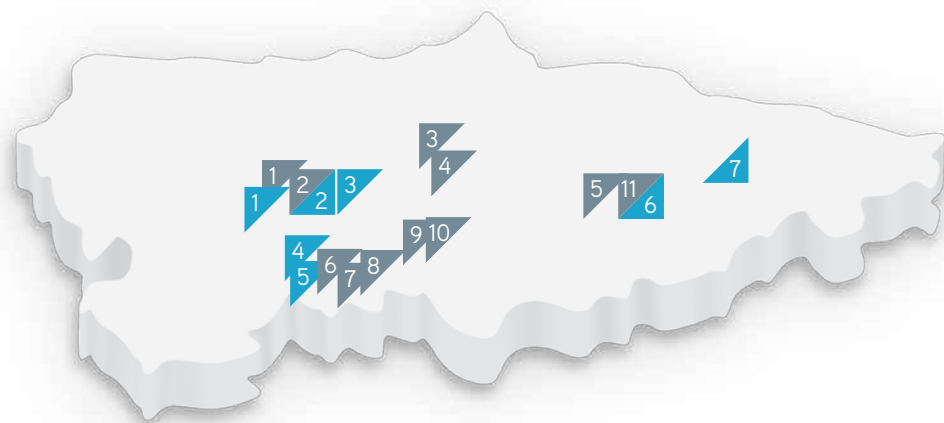
The main EDP in Spain power stations are dammed-water plants, with the Tanes plant being particularly noteworthy as it uses a pumping system, in other words, it has another reservoir downstream from the power station from which the water can be returned to the upstream reservoir to be used again to produce electricity. In any event, the amount of water that can be used during the uptake is regulated in the hydraulic use concessions and in the case of the EDP (Spain) hydraulic power stations, this water abstraction does not significantly affect any body of water. Furthermore, the concessions or agreements entered into with the Cantábrico River Basin Authority establishes the so-called ecological flow, which is the water needed to preserve the ecological values of the river basin. With respect to the dammed water, in 2012, EDP (Spain) carried out the environmental monitoring of the ecological potential and the trophic status of eleven reservoirs, along with the ecological status and evolution of their tributary and recipient rivers (eutrophication is defined as the enrichment of the water with nutrients at a rate that cannot be offset by total mineralisation or elimination, and one of its main manifestations is the proliferation of algae and macrophytes). This voluntary work is based on the criteria and requirements established in the Water Framework Directive (2000/60/EC) and in the River Basin and National Hydrological Planning. The objective is to establish the degree of alteration to the dammed bodies of water compared to their natural conditions and, according to those results, to define the operating conditions of the reservoirs according to environmental criteria.

In addition, the bathymetrical study of the reservoirs has been performed in order to obtain an updated estimate of their volume, along with the spatial distribution and amount of accumulated sediment since they came into service.

BODY OF WATER STATUS OF THE RESERVOIRS

Reservoir	Ecological potential	Trophic Status*
PILOTUERTO	Optimum	Oligotrophic
LA BARCA	Moderate	Eutrophic/Mesotrophic
PRIAÑES	Optimum	Mesotrophic
FURACÓN	Optimum	Mesotrophic
RIOSECO	Optimum	Mesotrophic
VALLE II	Optimum	Mesotrophic/Oligotrophic
VALLE I	Optimum	Oligotrophic
SALIENCIA	Optimum	Oligotrophic
SOMIEDO	Optimum	Mesotrophic/Oligotrophic
VALDEMURIO	Optimum	Mesotrophic/Oligotrophic
TANES	Optimum	Mesotrófico

* The bodies of water can be basically classified into three main types:
: Oligotrophic. Aquatic system with low nutrient content and minimum plant production.
: Mesotrophic. Aquatic systems with intermediary characteristics between oligotrophic and eutrophic.
: Eutrophic. Aquatic system with high nutrient content and excessive plant production.



Finally, the dammed water, once it has driven the turbines is returned to the environment, but first undergoes the necessary controls to guarantee that it complies with the quality of the receptor river, which are, in many cases, Sites of Community Importance (SCI).

HYDRAULIC POWER STATIONS IN SCI

Station	Location
LA FLORIDA	River Narcea SCI
LA BARCA	River Narcea SCI
MIRANDA	River Pigüeha SCI
LA RIERA	Somiedo SCI
LA MALVA	Somiedo SCI
TANES	Redes SCI
CAÑO	River Sella SCI

In the case of the thermal power stations, water consumption has two main purposes:

Transformed into steam, it drives the turbines and the alternator that finally generates electricity that enters the grid. Even though this operation takes place in a closed circuit (the steam is produced in the boiler and, after driving the turbines, it is condensed again and returned to the boiler to repeat the cycle), it requires a continuous small contribution. The reason for this contribution is that the abstracted water, before being used to generate steam has to undergo a series of treatments with chemical additives to improve their quality and avoid corrosion problems in the boiler; these additives do not evaporate and the water of the circuit tends to concentrate in salts, which means that a small bleeding and the ensuing abstraction to compensate it are required.

It contributes to the cooling system: it is the most significant consumption of water in a thermal power station with steam turbine. The steam that has expanded in the turbine needs to be condensed to continue the circuit. There are two cooling systems to perform this condensation:

Cooling by direct abstraction, which is possible when there is a large amount of water available to use in the power station. Cold water is taken directly from a public flow (river, lake, sea, etc.) and is returned with a thermal jump (an increase in temperature). That is the case of our Aboño Thermal Power Station, which is supplied by sea water for the cooling process.

Closed circuit cooling (cooling towers). Cooling towers use water evaporation to reject the heat of a process, in this case, electricity generation. It is thus possible to absorb the heat of the steam driven through the turbines and condense it so that it again returns to the boiler and the circuit is repeated. In reality, it is a semi-open process as, apart from the loss through evaporation, a part of the water is bled and replaced by fresh water to avoid salt concentration. The Soto de Ribera coal-fired thermal power station uses this cooling system in its No. 3 generator; it abstracts water from the River Nalón (considered to be a SCI – Site of Community Interest) to use it in a natural draught cooling tower. The Soto de Ribera combined cycles, along with the Castejón 1 plant, use induced draught cooling towers, with fans in the upper part that create a small vacuum inside the tower. At Soto de Ribera, as in the case of the coal-fired one, the contribution is from the River Nalón; at Castejón, from the River Ebro. The Castejón No. 3 Generator have a hybrid cooling tower; a hybrid cooling tower can operate under humid conditions (as all the above, with water evaporation) or in hybrid mode (dry cooling in the upper part and humid cooling in the lower part). This tower has a mist elimination system for the output air flow, which allows to reduce the visibility of the steam plume.

The water used for the cooling process is always discharged to the original environment (the sea in Aboño, the River Nalón in Soto de Ribera and the Ribera Ebro in Castejón), with a minor modification to the physical-chemical properties. The only impact is a temperature increase that is constantly controlled to avoid thermal jumps that may affect the receptor environment.

2012	
Discharged to sea (m ³ /year)	437.070.182
Discharged to river (m ³ /year)	5.531.597
Discharged to local wastewater networks (m ³ /year)	601

Industrial water from the different processes at the power plants is discharged to the environment after being appropriately treated, which ensures that it complies with all the parameters whose control and limits are specified in the relevant discharge permits.

WATER ABSTRACTION AT THERMAL POWER STATIONS

	COOLING	ELECTRICITY GENERATION
2012		
Sea	436.090.462	0
River	10.764.077	536.024
Municipal Network	75.853	1.830.279
TOTAL	446.930.392	2.366.303
Recovered cooling water	440.760.586	
% recovered water of abstracted water	99%	

FUEL OIL LEAK AT THE ABOÑO THERMAL POWER STATION

ON 26 JUNE 2012, THERE WAS A FUEL OIL LEAK INTO THE SEA AT THE ABOÑO THERMAL POWER STATION AS THE RESULT OF TWO ACCIDENTAL AND UNFORESEEABLE EVENTS TAKING PLACE AT THE SAME TIME: A BREAKAGE IN A FUEL OIL PIPE AND THE ACCIDENTAL FILTRATION FROM A MANHOLE OF THE RAINWATER COLLECTION AND TREATMENT SYSTEM TO THE SEAWATER CHANNEL THAT IS USED TO COOL THE GENERATORS.

The incident occurred despite the systematic reviews performed and which enable strict compliance of all the applicable environmental and industrial legislation.

The fuel oil, due to its high temperature, had a low density that helped to disperse it in the sea and most volatile fractions to evaporate. Both the tides and the prevailing winds quickly pushed the leak towards the coast where it was deposited on the seashore. The potential physical and chemical impact on the coastal waters that are usually associated to this type of accidents were greatly reduced.

A 13-km stretch of coastline was affected between San Pedro beach (Antromero) and Cabo Torres. There are beaches, tidal platforms, cliffs and rocky coastlines, along with breakwaters and man-made structures.

On the 26th itself, absorbent booms were installed in the water and work began on cleaning up the beaches, tidal platforms and rocky coasts.

The fuel oil on the beaches was cleaned up manually, but using machinery for some specific

jobs. The clean-up of the accessible outcrops near to the beaches, along with the breakwaters and man-made structures, was carried out using pressurised water jets in some cases and manually in others. The other rocky cliffs exposed to the waves were not cleaned up.

In the case of rocky cliffs exposed to the waves, it has been shown that natural cleaning is the best option to recover this type of areas, as the natural weathering and fuel degradation processes allow the environment to be recovered quickly; and it has a much lower environmental impact than any type of artificial cleaning, as the abrasion of many cleaning methods kill off the biological communities that cling to the rock face. They are usually areas that are practically inaccessible and therefore other less aggressive applicable techniques (such as aspiration or the use of absorbents) are not very viable.

In accordance with the competent authorities, exhaustive studies were carried out on the impact on the coastal waters and its ecological quality by analysing the nutrient and physiochemical parameters, the chlorophyll and phytoplankton indicators, the chemical status of the water, the chemical status of the sediments, the status of the benthic macroinvertebrate communities and of the coastal macro-algae, the status of the tidal and underwater communities and the environmental quality of the interstitial waters. The combination of quantitative and qualitative indicators used in the assessment indicates that the receptor body of water of the leak did not suffer any negative impact on its ecological status or on its chemical status.

With the water free of any impact and the quick intervention in the clean-up work (in the first three weeks, over 80% of the waste finally removed had already been collected), the field work carried out did not detect abnormal levels of mortality in the different colonies of species present along the coastal strip.

Right from the start, EDP (Spain) assumed its responsibility in the clean-up and recovery of the affected areas and met all the requirements laid down by the competent authority and the different parties affected by the accident. During the days following the fuel leak, over 100 of the company's employees were involved in all the tasks related to the accidental leak.

Once the clean-up work was completed, there was no surface affected by remains of fuel on the beaches or on the adjoining rocky areas.

WASTE MANAGEMENT

EDP (SPAIN)'S WASTE MANAGEMENT POLICY IS BASED ON THE "WASTE PREVENTION" AND "PREPARING TO REUSE" LEGISLATIVE CONCEPTS DESCRIBED IN THE EUROPEAN FRAMEWORK DIRECTIVE AND IN THE "3RS" STRATEGY:

REDUCE
REUSE
RECYCLE

Avoid generating waste and reduce the demand for raw materials, water and energy, as an indirect way to minimise waste production.

Extend the useful life of products and encourage subsequent uses without any need for complex processes or treatments.

Use waste to make new products and/or uses different to the ones initially defined; recycle used materials for new processes.

Thus, the different EDP (Spain) production centres have a "Non-hazardous and Hazardous Waste Minimisation Plan" that proposes implementing reduction measures at the source of the waste, reusing, recycling and its recovery, with priority being given to those tools over other management techniques.

THE CONTENT OF THOSE PLANS IS AS FOLLOWS:

Analysis of the causes of the waste production to impact PREVENTION.

If the waste is inevitably produced, priority will be given to REDUCTION AT SOURCE initiatives, which will directly lead to a drop in management costs.

The REUSE, RECYCLING AND ENERGY RECOVERY options, as priority alternatives. Thus, the waste is used to replace natural resources, with the ensuing savings in energy consumption and atmospheric emissions in the processes where the waste is used.

Finally, and as a final management method, the waste for which there is no use defined is sent to BE ELIMINATED pursuant to the criteria established in current legislation.



EUROPEAN WEEK FOR WASTE REDUCTION 2012

Juntos, Reducir es Actuar [Together, Reducing is Acting].

For the second year running, EDP (Spain) took part in the European Week for Waste Reduction, held last November.

The EDP (Spain) Environmental, Sustainability, Innovation and Quality Division sought to highlight the initiatives carried out by the different business units and facilities of the Group over recent years and which are clearly focused on improving processes and waste reduction.

The project submitted consisted of different internal awareness-raising initiatives for all EDP (Spain) employees by means of the corporate intranet, as the main internal communication tool of the Company with its employees and associates, as well as through the sustainability website, www.sostenibilidadedp.es, the open platform aimed at raising awareness among the general public of different environmental issues.

The main waste and by-products generated in the EDP (Spain) operations are:

BY-PRODUCTS

GYPSUM

By-product produced on the Desulphurisation Units of the coal-fired power stations, which is entirely commercialised to be reused by building material manufacturers making plasterboards and other similar products.

NON-HAZARDOUS WASTE

ASH AND SLAG

In terms of volume, they are the main waste in the coal-fired thermal power stations. These products are non-hazardous waste and are mainly recovered in the construction and ancillary sectors, both to make cement and mortar, and as fillers in the construction of linear infrastructures.

CDWS

Construction and demolition wastes (CDW), generated in civil engineering projects for EDP (Spain), mainly in network expansion and facility maintenance work, are managed by the treatment plants that proceed to recover the different fractions of that waste.

SCRAP

The scrap produced in works and facility maintenance is recovered by authorised managers.

SEPARATE COLLECTION WASTE SIMILAR TO HOUSEHOLD WASTE

The waste collected through the separate waste collection system at our facilities, in the blue, yellow and green containers, is sent to be recycled. This "preparation for recycling" is therefore extremely important for the subsequent reuse of waste, which is why we insist on the need to correctly separate the waste and to always make sure that other type of waste, mainly hazardous, is not put in those containers.

HAZARDOUS WASTE

PCB

Hazardous waste earmarked to be recovered, so that the authorised manager that removes the waste proceeds to clean the transformers, by eliminating the traces of this pollutant and finally collect the materials, mainly copper. The PCB-contaminated oil is incinerated at a specialist plant.

WEEES (WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT)

Lamps, electronic equipment and meters collected by Ambilamp, as part of the Integrated Management System (IMS) of that waste and whose main objective is to close the life cycle of those products, by recovering of its different components.

OTHER HAZARDOUS WASTE

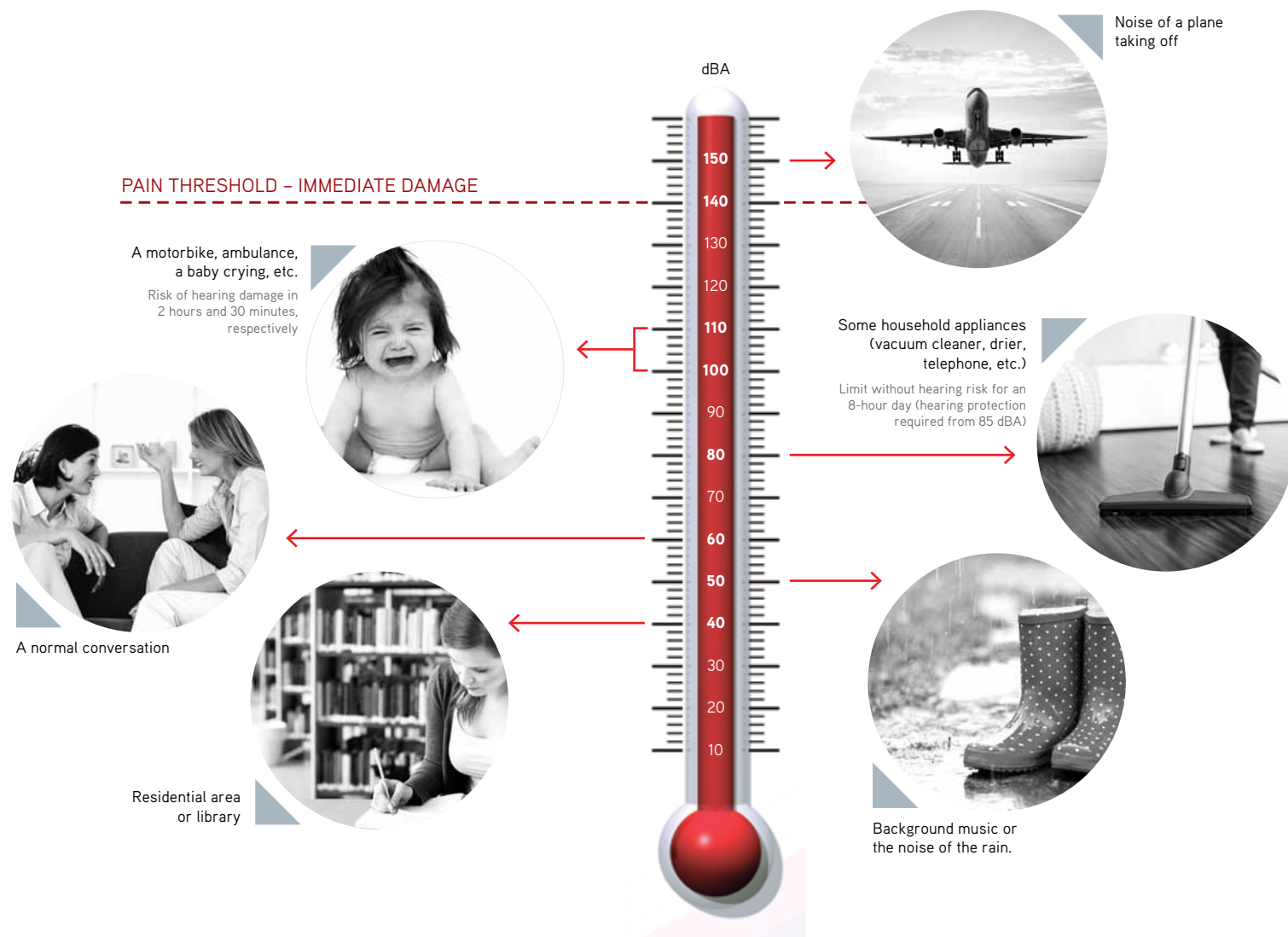
Hazardous waste include used oils, grease and lubricants, impregnated cloths and cotton, contaminated containers (plastic and metal), aerosols, paint waste, solvents, etc., which are mainly generated in the maintenance of the facilities. All the EDP (Spain) facilities have clearly-marked Green Collection Points and containers for the safe segregation of the different types of waste. It is then subsequently collected by authorised managers, which then carry out different recovery or destruction processes, such as, the energy recovery of oils at thermal power plants.

ENVIRONMENTAL NOISE

dB NOISE IS MEASURED IN DECIBELS (DBA), WHICH IS THE LOGARITHMICAL RATIO BETWEEN THE INTENSITY OR POWER OF ANY NOISE AND A BENCHMARK LEVEL. THE HUMAN HEARING THRESHOLD IS ESTABLISHED AT 0 DBA AND THE PAIN THRESHOLD AT 140 DBA.

Weighting A is a correction of the decibel (dB) to compare the real noise level with the real perception of the human hearing. The "noise thermometer" is a very visual graphic depiction to give us an idea of the environmental noise levels existing in our environment.

Some decibel values that we can use as a guide are:



In order to ensure compliance of noise legislation, in the different EDP (Spain) facilities, priority is given to reducing the sound levels according to the relevant acoustic quality targets to the area of implementation, by controlling all the noise sources of the activity, both permanent and temporal alike. Thus, regular control campaigns are conducted to measure the environmental noise, where the data obtained must be assessed to discount the background noise, uncertainty of the measurement and other potential interferences. Special mention must be made here of the voluntary campaign that is being carried out to control the noise at sub-stations, between 2011 and 2013, by obtaining satisfactory results in all the cases analysed so far.

More complex facilities from the environmental impact point of view are the thermal power stations, where apart from the annual control campaigns, there are environmental noise modelling (isophonic map) and minimisation plans. There are numerous initiatives in place to soundproof the emission point:

Direct soundproofing of the sources of noise identified within the limits of the industrial facility.

Indirect soundproofing, by means of installing acoustic screens in specific zones outside the industrial facility, to reduce the sound inmission levels.

To give an example, the main noise emission points in thermal power stations are inside closed warehouses and fitted with sufficient acoustic insulation. Silencers, anti-vibration systems and other general devices to control noise at source and acoustic screens have been installed in process areas ("enclosure" of the boiler, fans in cooling towers, water pumps, etc.) and perimeter screens.

BIODIVERSITY

SINCE 2007, THE EDP GROUP HAS HAD A BIODIVERSITY POLICY IN PLACE AIMED AT CONTRIBUTING THE WORLD TARGET TO REDUCE THE LOSS OF BIODIVERSITY DUE TO HUMAN ACTIVITY.

The deployment of this policy has meant the integration of the biodiversity variable in all production and distribution business areas, and in all the phases of the life cycle of our facilities: project, construction, operating and dismantling.

IMPACT CONTROL

PROJECT PHASE

In the design process of a new project, whether generation or gas and electricity distribution, and linked to the relevant Environmental Impact Study, all the required environmental analyses are performed, including modelling and specific studies on the impact on a habitat or species, where applicable. Based on these studies, the project sets out and integrates the necessary corrective and preventive measures to avoid or minimise the environmental impact associated to the facility.

In 2012, particularly noteworthy was the drafting of two projects in the electricity distribution business: Improvement of the Genestoso-Leitariegos MVL, in the Las Fuente del Narcea, Degaña e Ibias Natural Park, and the Beleño-Camporriondi MVL, in the Ponga Natural Park, distribution lines. Both projects stand out from the environmental point of view as they are in protected spaces and affect zones which are potentially home to the brown bear, the iconic species of the Cantabrian mountain range and classified as being in danger of extinction. The two projects have obtained a positive impact declaration, including a large list of environmental requirements (corrective and preventive measures), integrated in the implementation phase. In the Generation area, in 2012 the Preliminary Environmental Impact Study (PEIS) for the "Project to Repair the Pilotuerto Dam Sluices (SCI ES1200050 Upper River Narcea Basin)", the reservoir supplying La Florida Hydraulic Power Station. The aforementioned project was submitted for approval to be executed in 2013, and for whose implementation a series of sufficient corrective and preventive measures have been defined to ensure compatibility of the works with the environment, and to which the ones established by the Competent Authorities will be added.

CONSTRUCTION PHASE

The environmental monitoring of the works is based on the Surveillance Plans, where the application of all the necessary corrective and preventive measures is controlled. During 2012, the Electricity Distribution Division has executed the works of the Gijón Port (Asturias) and Rojas (Alicante) substations, along with the extension of the Quart de Poblet sub-station (Valencia), projects where no direct impacts on the biodiversity were identified. In the gas business, special mention should be made of the Bilbao-Treto and Moratalla-Mula gas pipelines, projects where, as it was an underground work, the impact on the biodiversity ended with the completion of the gas pipeline, even though the affected land had to be restored with similar or equal species to those existing beforehand.

Bilbao-Treto. Special mention should be made of the following environmental preventive measures taken for the Bilbao-Treto gas pipeline:

- **Using a reduced route.** Identifying the sections coinciding with flora of interest (such as native forests and priority habitats) with the ensuing reduction in the width to minimise their impact.
- **Conserving woodland of interest.** Carrying out controlled pruning and changing the work and access routes to safeguard old and established trees.
- **Control of the ichthyofauna.** Prior to the machinery being brought on site, electric fishing was carried out in the Sabiote, Rocalzada and Callejamala streams with fish fauna. The data gathered during the catch were sent to the General Directorate for Woodlands and Nature Conservation of the Government of Cantabria. Thus, apart from minimising the impact on the ichthyofauna, we are helping to gather data for the Administration.
- **Closed season schedule.** With respect to the breeding period in streams with established presence of salmonids and cyprinoids, with operations stopping during that period (November, December and January).
- **Controlling the topsoil reserve.** Surveillance of the correct separation of the topsoil to use it in the subsequent restoration of the land. Affected streams were also monitored so that there are no leaps in the riverbed that could hinder the movement of the fish fauna and the size of the river walls was controlled to make sure that the gaps were well stocked with earth to facilitate the subsequent replanting.
- **In line with the restoration project, the planned measures mainly consisted of planting and hydroseeds.** The main aim was to facilitate the recovery of the altered areas and enable a quick reestablishing of the original vegetation. Mainly replanting riverbank systems (around 1,230 m²), habitats mainly with holm oaks and areas with mainly oaks, are noteworthy seeding and hydroseeding actions in this project, along with actions with large species.

OPERATING PHASE

In the operating phase, the types of facilities with the greatest environmental impact on the biodiversity are those located in areas with a certain degree of environmental protection: gas and electricity distribution facilities, hydraulic power stations, along with thermal power stations along the River Nalón.

Distribution

As regards electricity grids, the main impacts on the biodiversity are down to the work maintaining the streets where the lines run and of the potential risk of oil leaks in equipment out-of-doors.

The statutory maintenance of the streets involves cutting the trees under the line, controlling the adjacent trees with the risk of falling on or contacting the line, and ancillary tasks that guarantee the passability of the street and accessibility to the different positions for their control, all of which has a dual objective, to guarantee the service and minimise the fire risks caused by the contact. To minimise the impact on the vegetation of that work, a Pruning and Felling Manual has been prepared in conjunction with the Agroforestry Unit at Oviedo University, which includes the best practices, taking into account the proximity to important enclaves for birds and other fauna. With respect to minimising the risk of polluting the land and groundwater due to accidental spillages in equipment out-of-doors, during 2012, 9 transformers with biodegradable oil were installed at critical locations as a pilot project, with priority being given to removing PCB-contaminated equipment in protected spaces and less than 50 m from a riverbed.

Hydraulic power stations

As a means to minimise the possible impact due to oil leaks in hydraulic power stations directly affecting bodies of water, since 2008 the mineral oil has been gradually substituted by food grade oil (used in the pharmaceutical and food industry) in all the equipment where there is a risk of discharge to the river.

In addition, a project pilot has been run in La Barca and Tanes hydraulic power stations, which has involved describing the environment and baseline of the environmental resources and services where both power stations are located, within the deployment of work pursuant to the Environmental Responsibility Act.

Thermal power stations

As regards thermal generation, the Soto de Ribera site (with two coal-fired and two combined cycle generators) is in the River Nalón SCI (Site of Community Interest). At those power stations, and within the framework of the Environmental Responsibility Act, work is being carried out on analysing the environmental risks of the facility and identifying and carrying out an inventory of the habitats and biodiversity in their catchment area, in order to determine the baseline state of those areas and establish the management practices and risk minimisation needed to avoid their causing potential environmental damage. During 2012, two ecological characterisation campaigns of the River Nalón were carried out downstream from the power stations to determine their current status. This work is planned to continue throughout 2013, in order to ensure traceability between the results; it will also be extended to the River Ebro, around the Castejón thermal power station, to complete the monitoring work of the quality parameters of that riverbed already established in its Integrated Environmental Permit, and better definition of the baseline around the power station.

PUBLICATIONS

The EDP Group has published its Biodiversity Report, which is available from www.edp.pt, under the sustainability section. The EDP in Spain Biodiversity Report has likewise been produced and is available from www.sostenibilidadedp.es. Both publications are produced pursuant to the transparency policy of the Group and they describe the main actions regarding biodiversity. On the other hand, the publication of the book "Aves de la España atlántica" [Birds of Atlantic Spain] was noteworthy in 2012. It is a field guide of the species that can be seen in the Atlantic territories of Spain, with concise texts and a broad graphic component. The book can be downloaded in the publications sector of EDP HC Energía Foundation, on the corporate website www.edpenergia.es.





INTRODUCTION

EDP in Spain has established seven R&D&i strategic lines that will enable it to focus its activities on the technologies to meet the environmental challenges facing its operations.

Three activities are basically carried out to implement the R&D&i Strategy.

Generating R&D&i projects

This activity consists of defining projects aimed at validating hypothesis, developing or demonstrating technologies. The project design is based on the principles of open innovation with a strong collaborative component with the stakeholders of the science and innovation system in the territories where the company operates.

Technology surveillance

This activity seeks to acquire information on the latest innovations occurring mainly in the technology lines underpinning the R&D&i Strategy. In order to systematise this process, EDP (Spain) takes part in certain forums, such as the Spanish Technology Platforms for Future Grids (Futured), for Energy Efficiency, for CO₂, for Spanish Steel (Platea) or the European Gas Research Group (GERG).

Technology visibility

In the same way that the aim of technology surveillance is to discover what others are doing, technology visibility seeks to showcase the R&D&i activities of EDP in Spain. The cooperation networks are thus reinforced with the agents of the science and innovation system. This activity is carried out by means of holding congresses and dissemination workshops.



ELECTRICITY SECTOR

The projects and measures implemented in each of the strategic lines of the electricity business in 2012 were:

FLEXIBLE AND WIDELY AVAILABLE GENERATION

PROJECT TO "ENHANCE AVAILABILITY OF COGENERATION PLANT ALTERNATORS"

The objective of the project is to broaden our knowledge by analysing alternator currents, as an effective tool to diagnosis problems that go undetected by the vibration analysis. To this end, the necessary research components were incorporated to ensure the ongoing monitoring and diagnosis of the alternators at the three EDP (Spain) cogeneration plants in Asturias (Sidergas, Tudela and Sevares). Electronic equipment has been developed that collects and transmits the key electric variables of the cogeneration alternators, along with the vibration signals, in real time in the network. This project was successfully completed in 2012.

"MULTIYESO2015" PROJECT

This project aims to generate the necessary technical and scientific knowledge to find multiple commercial and viable outlets for the gypsum obtained as a by-product during the gas desulphurization processes of the thermal power stations. This is possible thanks to new products and technologies being obtained that make the electricity generation process at thermal power stations more economical and with a minimum and sustainable environmental impact. Alongside EDP (Spain) as coordinator, the companies Kinbauri and Anes Innovación, the Coal Institute and Oviedo University comprise the consortium set up to develop the project. The project, which is funded by the CDTI, started in 2012 and will end in 2015.

SPANISH TECHNOLOGY PLATFORM FOR CO₂

Created in 2006, this platform aims to contribute to the improvement of energy efficiency at large industrial facilities. It also seeks to develop and introduce technologies to capture, transport, store and use CO₂ for Spain to comply with its emission reduction commitments. In 2012, EDP (Spain) was part of the "CO₂ Uses", "Regulation" and "Environmental, Social and Economic Studies" task forces, as well as being on the Governing Board of the Platform.

MICRO-GENERATION AND ENERGY EFFICIENCY

SPANISH TECHNOLOGY PLATFORM FOR ENERGY EFFICIENCY (WWW.PTE-EE.ORG)

The Spanish Technology Platform for Energy Efficiency was set up in 2008 with the aim of innovating the use of product and service technology that contribute to achieving smarter and more sustainable consumption of the different types of energy. The platform is made up of Spanish companies, research centres and associations, including EDP (Spain), which is represented in the Platform's Management Group. In 2012, the Platform was restructured and new task forces set up, where EDP (Spain) heads the Regulation group.

ENRIMA PROJECT: ENERGY EFFICIENCY AND RISK MANAGEMENT IN PUBLIC BUILDINGS

As part of the Seventh Framework Programme of the European Union for Research and Technological Development (FP7), EDP (Spain) is part of the EnRiMa project. The project aims to develop an integrated management system to support the decisions of the managers of public spaces and buildings classified as energy

efficient. This will optimise their running by minimizing costs, managing risk and complying with emission reduction, efficiency and energy requirements.

Along with EDP (Spain), the members of the project are Stockholm University, University College London, the Rey Juan Carlos University, the Sintef Institute in Norway, two Austrian partners (IIASA and CET) and Tecnalia Foundation.

In 2012, the European Commission assessed the status and progress of the project, which was positively rated.

GRIDS AND POWER STORAGE

SPANISH TECHNOLOGY PLATFORM FOR "FUTURED" GRIDS (WWW.FUTURED.ES)

This Technology Platform was set up in 2005 to bring together all the stakeholders involved in defining and driving R&D&i in Spain, with a special focus on Spain distribution and transmission grids. The so-called "smart grids" of the future will have to effectively address the integration of renewable energies, while facing a double challenge of their rapid growth and their decentralised nature.

Futured actively participates and particularly noteworthy is the organisation of seminars in different Spanish cities in order to promote projects within the Platform, where EDP (Spain) is on the Governing Board.

INNFACTO REDOX 2015 PROJECT

This project follows on from the work initiated in the Storage sub-project of the PSE REDES 2025 Special Strategic Project, the first R&D&i initiative driven by the Spanish Technology Platform for Grids (Futured), in order to develop an innovative

high capacity electricity storage system based on redox flow batteries.

In 2012, the "Optimisation analysis of the cell behaviour" and "Battery detailed engineering" deliverables were produced, along with a battery prototype.

ELECTRIC VEHICLE

ELECTRIC VEHICLE FORUM

In 2012, EDP (Spain) continued to be part of the Eurelectric Electric Vehicle task force and in the Spanish Electric Vehicle Forum (FOREVE).

PURCHASING ELECTRIC VEHICLES

In January 2012, EDP (Spain) added two cars from the BYD Chinese manufacturer to its vehicle fleet as part of the strategic agreement existing between the two companies. This purchase will enable EDP (Spain) to gain know-how about the management system of the battery used by this manufacturer.

GAS SECTOR

The projects and measures implemented in each of the strategic lines of the gas business in 2012 were:

NATURAL GAS SUPPLY SAFETY AND MANAGEMENT

EEVALGAS

Development of new techniques for the multi-parametric gas mixes in the industrial-domestic area. It was approved by the Basque Government's ETORGAI programme for 2011, 2012 and 2013. The rationale for 2011 has been successfully processed.

TRI-REFORM

(Clean hydrogen generation – Biogas tri-reforming processes).
University-Society R&D collaboration project with Bilbao School of Engineering for 2011 and 2012.

REMOTE METERING

Field tests to trial a domestic remote metering global system. The field tests began in the third quarter of 2012.

ENERGY EFFICIENCY

PROSAVE2

(Research Project into Advanced Systems for a more Eco-efficient Aircraft).
Research project subsidised by the CENIT programme of the Ministry for Science and Innovation for 2010, 2011, 2012 and 2013. Due to the amount involved, the project had to be approved by the Spanish Cabinet. The rationale for 2011 was successfully processed.

ECODIS

Development of technologies for the efficient generation, distribution and management of the energy flows in industrial and urban environments and their application in the transformation of cities towards a LOW CARBON CITY model. Project approved by the Basque Government's ETORGAI programme for 2012.

CHS (Sustainable Household Cell)

Development of technologies for a sustainable household and their integration into sustainability environments (Smart Cities, Smart Grids, etc.)
Project approved by the Basque Government's ETORGAI programme for 2012.

STIRLING

Innovation project regarding energy efficiency in buildings. Its goal is the application of natural gas new technologies and renewable energies in the market. A 1 kW_e Stirling motor that generates both hot water and electricity has been installed in the company.

SUSTAINABILITY

LIFE BIOGRID

(Biogas injection into natural gas grid and use as vehicle fuel by upgrading it with a novel CO₂ capture and storage technology).
Project implemented and headed by Naturgas Energia in 2009, which seeks to research new biogas purification systems (unicellular algae and cryogenic systems) that convert it into renewable natural gas apt to be injected in the gas infrastructure and for its use in vehicles that result in negative carbon dioxide emissions. Approved by the LIFE programme of DG Environment, an amendment was sent to the European Commission to extend the project during 2013 which was approved on 12 November.

CADIONAT

(Electrochemical sensor to measure the natural gas and biogas quality).
This project aims to use electro-chemical nano and micro technologies by means of a new carbon dioxide sensor to analyse online and in situ the CO₂ concentration after a biogas injection into the existing gas infrastructure. The CDTI funding document was signed and the rationale for 2011 has been successfully processed.

INYEGAS3

(Control and purification modules for the safe injection of biogas into the natural gas network).
Project approved by the Basque Government's ETORGAI programme. The performance in 2011 has been successfully justified and the Basque Government also approved the aid for 2012.

NANOTUBOS

Biogas catalytic decomposition to produce high value added carbon materials. It was approved by the Government of the Principality of Asturias for 2011 and 2012. The rationale for 2011 has been successfully processed.

HIPS

(Admissible hydrogen concentrations in gas systems).
European Gas Research Group (GERG) project for 2012 and 2013.

BIOGRID

Renewable natural gas project. The objective is to inject biomethane or renewable natural gas to the natural gas networks and its use in vehicles. This R&D project has a high degree of energy innovation as a future business model.

TRAINING AND EDUCATION

The training and education activity of the R&D&i Department is very important and particularly noteworthy are the different Master's Courses into research and development in the energy sector:

- Official Master's Degree in Hydrogen and Fuel Batteries organised annually by the Menéndez Pelayo International University and the CSIC [Science Council].
- Class on New Gas Applications at the Spanish Energy Club (Madrid).
- Official Master's Degree in Energy and Competitiveness organised by the Orkestra Foundation of Deusto University.
- Official Master's Degree in Sustainable Energy Engineering of the Bilbao School of Engineering.

Special mention should also be made of the Science-Technology Collaboration Agreement with Bilbao School of Engineering which was signed in 2010 and which led to the setting up of the Naturgas Learning Centre.

The six projects embarked on in 2012 are as follows:

1. **Implementation of micro-cogeneration for "off-the-grid homes".**
Study to implement an installation independent of the grid (off-the-grid home) by using micro-cogeneration.
2. **Biomass and natural gas co-combustion.**
Analysis of the biomass co-combustion possibilities, both solid and gasified with natural gas.

3. Positioning of natural gas in terms of the Post-2020 trends (roadmaps 2030/2050).

Analysis of the trends set by the community energy documents 2030-2050, the different milestones and the associated situations. Search for the evolution of the different possibilities where gas can play a key role whether there is no alternative to natural gas, along with those where there are alternatives.

4. Hybrid cars and plug-in hybrids with natural gas.

Study of the possibilities that natural gas offers as vehicle fuel, hybrid with other fuels or with electric batteries. The current status will be analysed, along with the advantages and drawbacks of the different alternatives studied.

5. Biogas purification to obtain biomethane from algae and cryogenic distillation.

Microalgae analysis to eliminate CO₂ of the biogas by means of photosynthesis and study of different iron oxide materials, both natural and synthesised in the laboratory, that by means of REDOX reactions enable the CO₂ to be eliminated from the gas current.

6. Optimisation of the management of domestic gas consumption (continuance of a project from the previous academic year).

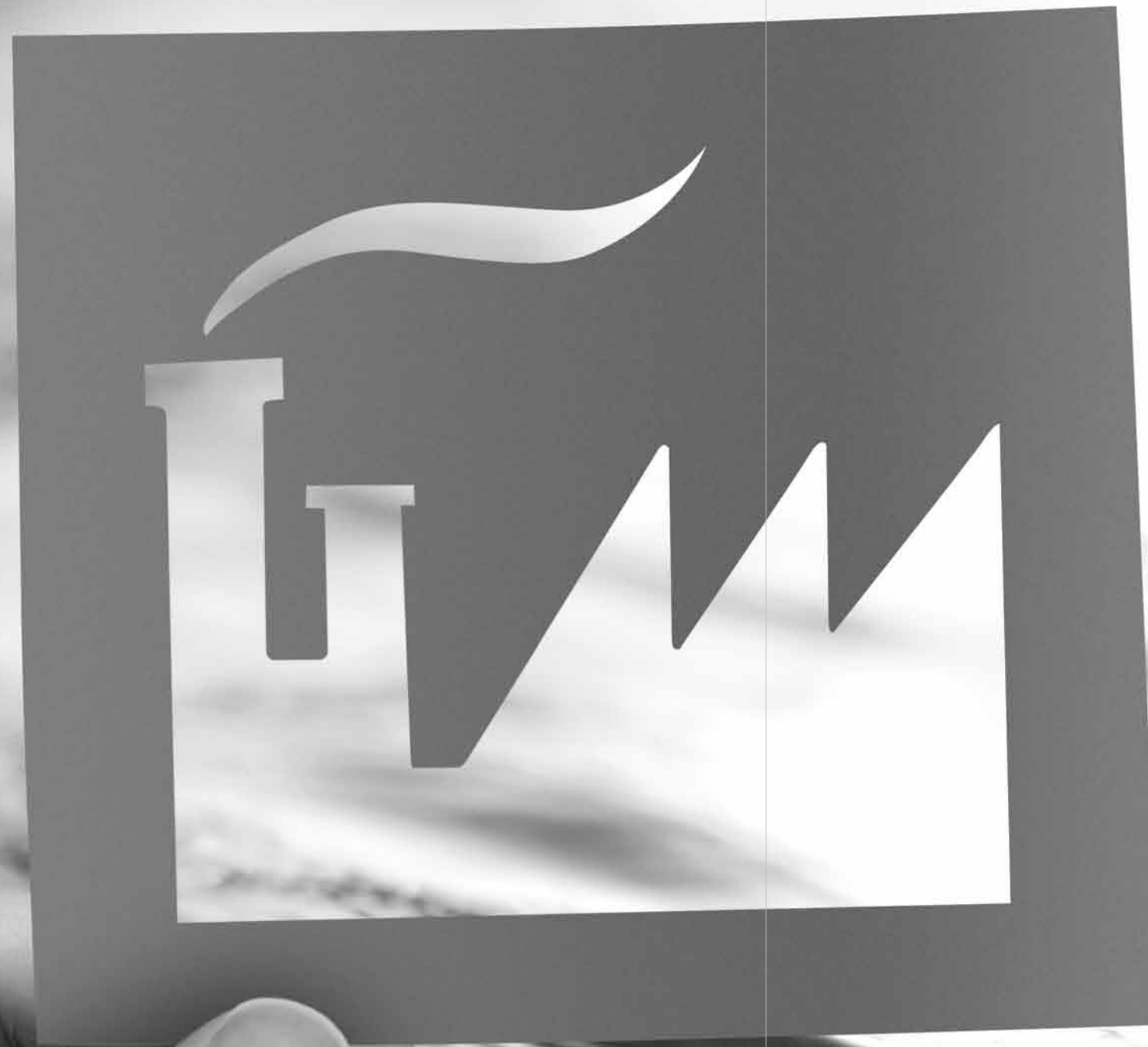
This involves establishing correlations between domestic and commercial customer gas consumption and the seasonality of that consumption and of other significant variables.

The projects were selected for the 4th GERG Academic Network Event. Only 20 of the 32 R&D projects submitted by European research centres and universities met the quality standards to be accepted, which means that a quarter were from EDP Spain.

Four of them were from the NATURGAS Learning Centre at the Bilbao School of Engineering, which seeks to attract university talent into the natural gas sector by means of collaboration projects researching into natural gas and the other was from the CEIT (Gipuzkoa Technical Research and Study Centre).

In-company, special mention must be made of the **Lean Creative Thinking**, consisting of a series of training actions on creativity run for the company employees in order to improve the Lean teams (which are described in the Employees chapter of this report).

LEAN CREATIVE THINKING
Using the potential of people to achieve a more innovative Lean thinking by using the creativity of the EDP (Spain) employees.



EDP SPAIN GENERATED OVER 13,800 GWH OF ELECTRICITY IN 2012, 4% UP ON 2011

23.000 km
OF ELECTRICITY GRIDS

10.000 km
OF GAS NETWORKS

11% GAS AND ELECTRICITY MARKET SHARES IN SPAIN
10%

The EBITDA of the EDP Group in Spain in 2012 was down 12% on the previous year, a downturn deemed to be moderate in a climate noted for a drop in demand (which is down to 2005 levels), the large share of the special regime, the lower production margins and the regulatory amendments, and which is the outcome of the strategic decisions taken by the company.

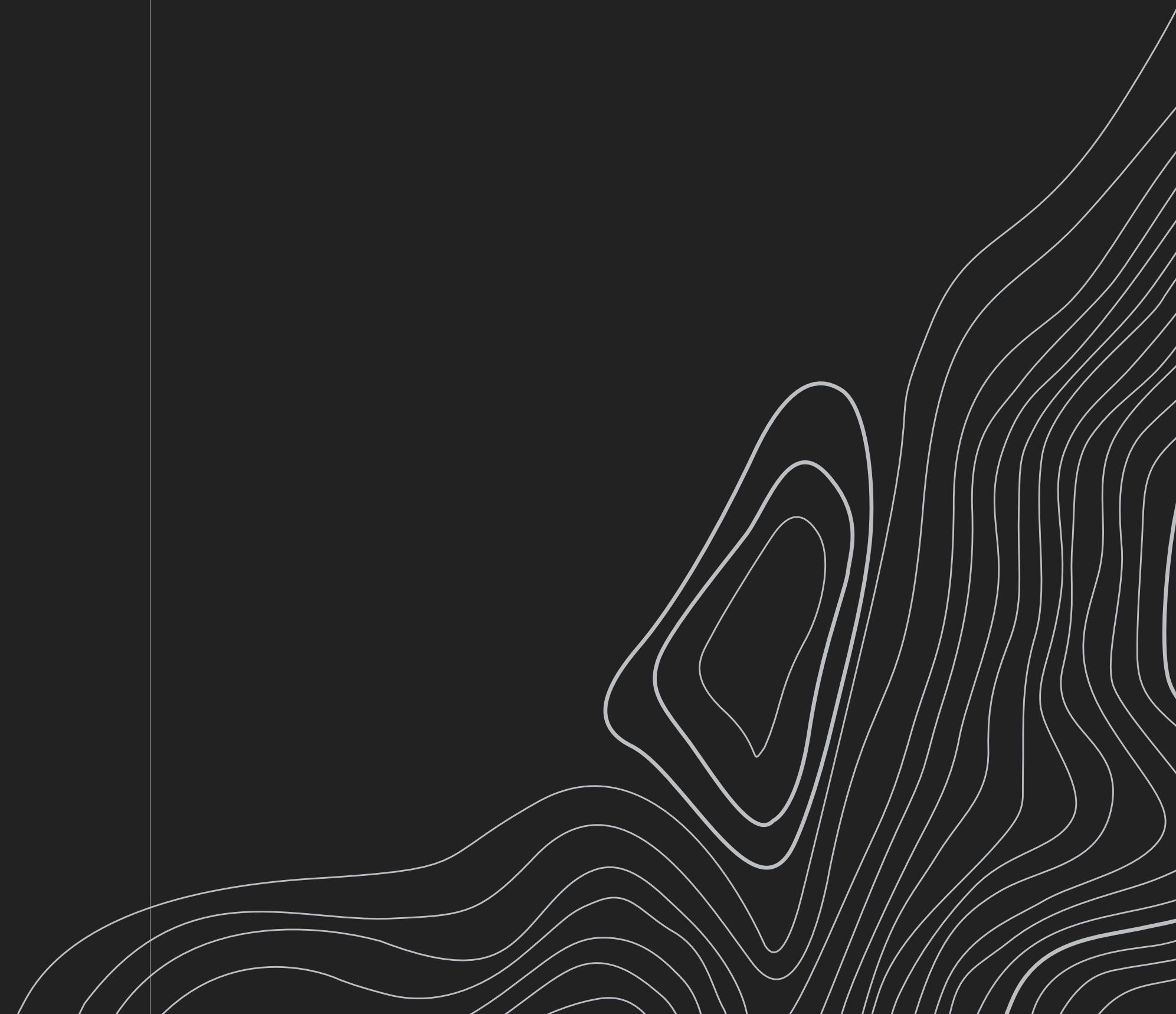
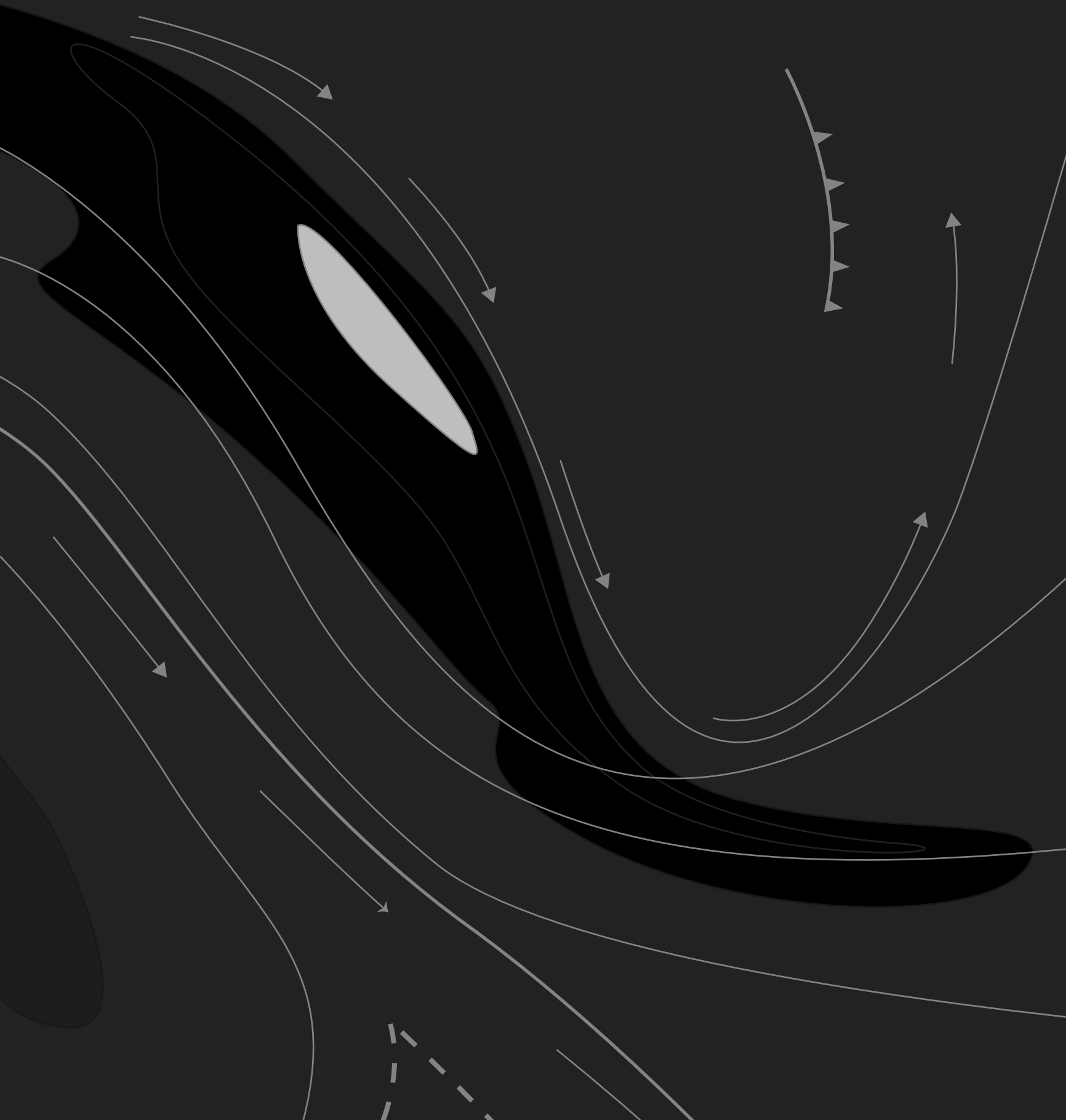
FIGURES

year-on-year data

financial data	140
technical data	141
environmental data	144
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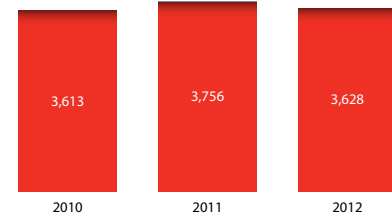
milestones	148
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YEAR-ON-YEAR DATA

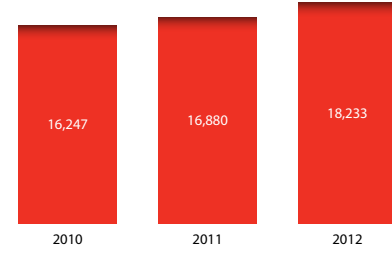


FINANCIAL DATA

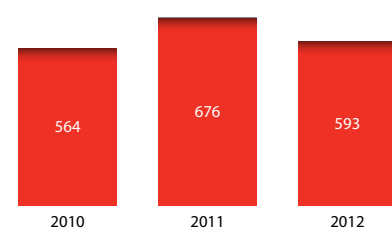
EDP: EBITDA
(€ million)



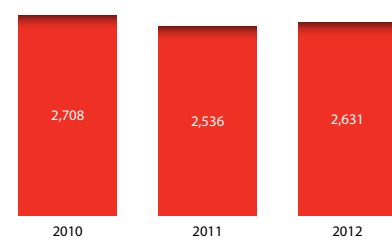
EDP: NET DEBT
(€ million)



EDP (SPAIN): EBITDA
(€ million)



EDP (SPAIN): NET FINANCIAL DEBT
(€ million)



EDP RESULTS	UNIT	2012	2011	2010
Turnover	Millions of euros	16,340	15,121	14,171
EBITDA	Millions of euros	3,628	3,756	3,613
Net result	Millions of euros	1,012	1,125	1,079
Working cash-flow	Millions of euros	1,997	2,947	1,842
Operational investments	Millions of euros	2,011	2,161	2,667
Net debt	Millions of euros	18,233	16,880	16,247

EDP (SPAIN) RESULTS	UNID.	2012	2011	2010
Turnover	Millions of euros	4,358	4,233	3,714
EBITDA	Millions of euros	593	676	564
Net profit (EAT)	Millions of euros	131	217	83
Cash-flow (EAT+depreciation)	Millions of euros	389	483	322
Non-financial investments	Millions of euros	157	185	242
Net financial debt	Millions of euros	2,631	2,536	2,708
Leverage	%	48	47	50

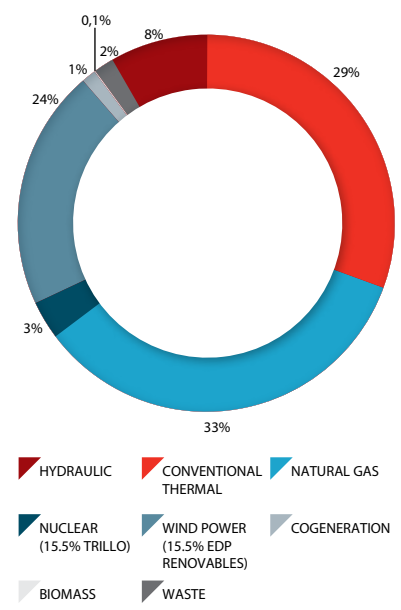
TECHNICAL DATA

FACILITIES

INSTALLED GENERATING CAPACITY as of 31 December	UNIT	2012	2011	2010
TOTAL HYDRAULIC	Gross MW	433	433	433
Conventional thermal	Gross MW	1,535	1,535	1,535
Natural gas	Gross MW	1,721	1,721	1,721
Nuclear (15.5% Trillo)	Gross MW	166	166	166
TOTAL THERMAL	Gross MW	3,422	3,422	3,422
OVERALL TOTAL	Gross MW	3,855	3,855	3,855
Wind power ⁽¹⁾ (15.5% of EDP Renovables' operational capacity)	Gross MW	1,238	1,160	1,035
Operational MW in Spain (15.5%)	Gross MW	358	341	318
Cogeneration	Gross MW	57	57	56
Biomass	Gross MW	3	3	3
Waste	Gross MW	83	83	83
SPECIAL TOTAL	Gross MW	1,380	1,302	1,177
TOTAL	Gross MW	5,235	5,157	5,032

(1) Investments in wind power generation are through Edp Renovables

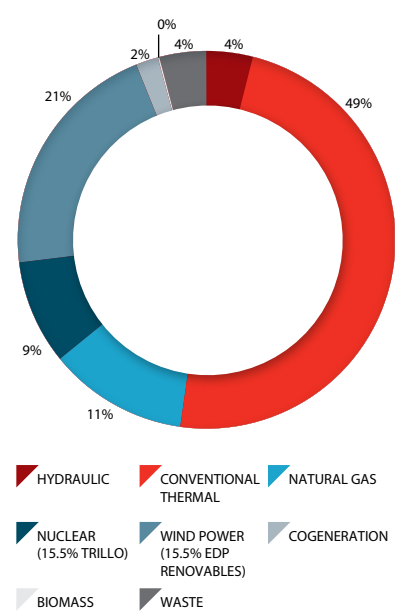
INSTALLED GENERATING CAPACITY
BY TECHNOLOGY



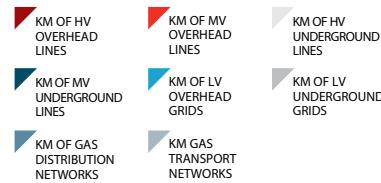
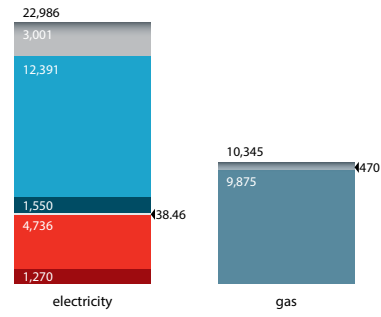
NET ELECTRICITY GENERATION	UNIT	2012	2011	2010
TOTAL HYDRAULIC	MWh	620,781	584,032	1,037,903
Conventional thermal	MWh	6,714,429	5,353,702	4,243,606
Natural gas	MWh	1,598,269	2,754,049	4,469,828
Nuclear	MWh	1,230,170	1,212,044	1,190,117
TOTAL THERMAL	MWh	9,542,868	9,319,795	9,903,551
OVERALL TOTAL	MWh	10,163,649	9,903,827	10,941,454
Wind power ⁽¹⁾ (15.5% of EDP Renovables' operational capacity)	MWh	2,858,975	2,604,000	2,224,560
Operational MW in Spain (15.5%)	MWh	791,430	710,520	675,025
Cogeneration	MWh	292,851	300,024	356,203
Biomass	MWh	0	0	0
Waste	MWh	523,691	540,882	553,335
SPECIAL TOTAL	MWh	3,675,517	3,444,906	3,134,098
TOTAL	MWh	13,839,166	13,348,733	14,075,552

(1) Investments in wind power generation are through Edp Renovables
Net electricity generation-gross electricity generation - plant self-supply

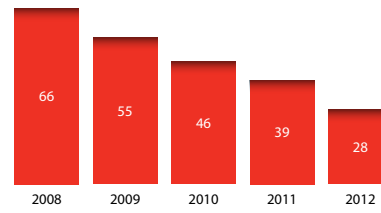
NET ELECTRICITY GENERATION
BY TECHNOLOGY



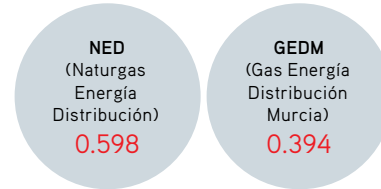
KM OF GAS AND ELECTRICITY NETWORKS



TIEPI EVOLUTION IN EDP ESPAÑA (minutes)



GAS NETWORK RUPTURE INDEX FOR EDP (SPAIN)



ELECTRICITY DISTRIBUTION FACILITIES	UNIT	2012	2011	2010
HV overhead lines (50/132 kV)	km	1,270	1,263	1,396
MV overhead lines (5/10/16/20/22/24 kV)	km	4,736	4,710	4,694
HV underground lines (50/132 kV)	km	38.46	30.91	28
MT underground lines (5/10/16/20/22/24 kV)	km	1,550	1,513	1,466
LV overhead grids	km	12,391	12,240	12,222
LV underground grids	km	3,001	2,796	2,754
Transformation centres	Nº	6,714	6,686	6,519
Transformation centre installed capacity	MVA	2,254	2,222	2,178
Sub-stations	Nº	58	56	56
Transformers in sub-stations	Nº	120	101	98
Installed capacity in sub-stations	MVA	5,165	4,423	4,886

GAS DISTRIBUTION NETWORKS	UNIT	2012	2011	2010
Gas distribution networks	km	9,875	9,690	9,521
Gas transport networks	km	470	445	425

The gas transport companies were sold to Enagas in February 2013.

CUSTOMERS AND ENERGY

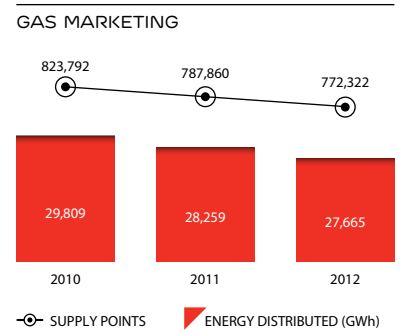
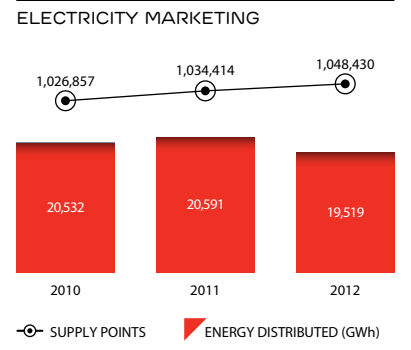
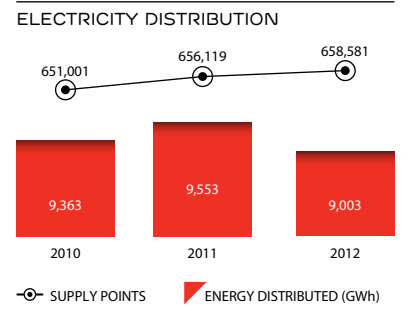
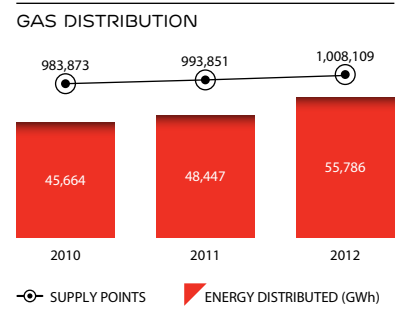
GAS DISTRIBUTION	UNIT	2012	2011	2010
Supply points	Nº	1,008,109	993,851	983,873
Energy distributed	GWh	55,786	48,447	45,664

ELECTRICITY DISTRIBUTION	UNIT	2012	2011	2010
SUPPLY POINTS	Nº	658,581	656,119	651,001
Low Voltage (1 kV)	Nº	657,459	655,004	649,895
Medium Voltage (0.1 kV and < 36 kV)	Nº	1,098	1,091	1,085
High Voltage (0.36 kV)	Nº	24	24	21
ENERGY DISTRIBUTED	GWh	9,003	9,553	9,363
Low Voltage (1 kV)	GWh	2,491	2,461	2,689
Medium Voltage (0.1 kV and < 36 kV)	GWh	1,260	1,279	1,273
High Voltage (0.36 kV)	GWh	5,252	5,812	5,401

ELECTRICITY MARKETING	UNIT	2012	2011	2010
SUPPLY POINTS	Nº	1,048,430	1,034,414	1,026,857
HC ENERGÍA	Nº	444,133	385,385	330,707
B2B (key accounts and corporations)	Nº	16,544	14,944	14,435
B2C (households and small businesses)	Nº	427,589	370,441	316,272
NATURGAS ENERGÍA COMERCIALIZADORA	Nº	105,711	106,472	102,838
B2B (key accounts and corporations)	Nº	3,042	2,937	2,531
B2C (households and small businesses)	Nº	102,669	103,535	100,307
CHC ENERGÍA	Nº	221,059	225,829	234,167
HC NATURGAS COMERCIALIZADORA ÚLTIMO RECURSO	Nº	277,527	316,728	359,145
ENERGY MARKETED	GWh	19,519	20,591	20,532
HC ENERGÍA	GWh	15,219	15,836	16,184
B2B (key accounts and corporations)	GWh	13,899	14,571	15,069
B2C (households and small businesses)	GWh	1,320	1,265	1,115
NATURGAS ENERGÍA COMERCIALIZADORA	GWh	1,730	1,995	2,030
B2B (key accounts and corporations)	GWh	1,425	1,667	1,718
B2C (households and small businesses)	GWh	305	328	312
CHC ENERGÍA	GWh	676	746	792
HC NATURGAS COMERCIALIZADORA ÚLTIMO RECURSO	GWh	709	833	1,099
OTHER MARKETERS	GWh	1,185	1,181	427

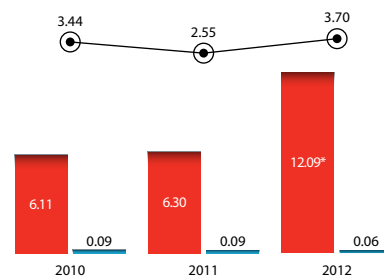
GAS MARKETING	UNIT	2012	2011	2010
SUPPLY POINTS	Nº	772,322	787,860	823,792
NATURGAS ENERGÍA COMERCIALIZADORA	Nº	684,727	616,666	616,666
B2B (key accounts and corporations)	Nº	6,166	6,166	6,166
B2C (households and small businesses)	Nº	678,561	610,500	610,500
HC NATURGAS COMERCIALIZADORA ÚLTIMO RECURSO	Nº	87,595	165,128	200,520
ENERGY MARKETED	GWh	27,665	28,259	29,809
NATURGAS ENERGÍA COMERCIALIZADORA	GWh	27,254	27,254	27,254
B2B (key accounts and corporations)	GWh	23,142	23,142	23,142
B2C (households and small businesses)	GWh	4,112	4,112	4,112
HC NATURGAS COMERCIALIZADORA ÚLTIMO RECURSO	GWh	410	1,003	1,441

MARKET SHARES	UNIT	2012	2011	2010
Electricity generation	%	6.4	6.0	6.1
Electricity distribution	%	3.6	3.8	4.0
Gas distribution	%	20.1	18.4	
Electricity marketing	%	11.2	12.1	12.1
Gas Marketing	%	9.9	10.8	



ENVIRONMENTAL DATA

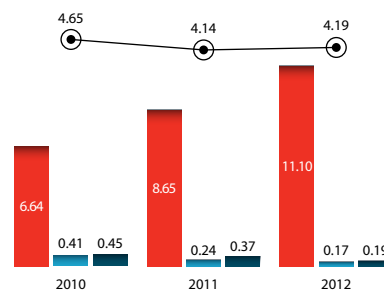
SO₂ TOTAL EMISSIONS (kt)



○ SPECIFIC EMISSIONS (kg/MWh)
 ■ CONVENTIONAL THERMAL
 ■ COGENERATION

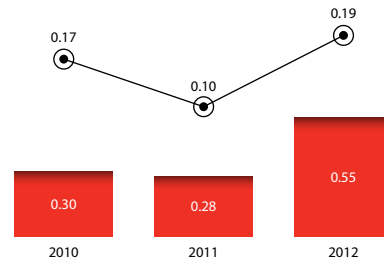
(*) Emissions increased in 2012 due to EDP's commitment to burn national coal.

NO_x TOTAL EMISSIONS (kt)



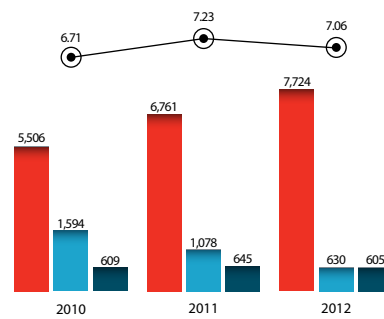
■ CONVENTIONAL THERMAL
 ■ NATURAL GAS
 ■ COGENERATION

PARTICULATES TOTAL EMISSION (kt)



○ SPECIFIC EMISSIONS (kg/MWh)
 ■ CONVENTIONAL THERMAL

CO₂ TOTAL EMISSIONS (kt)



■ CONVENTIONAL THERMAL
 ■ NATURAL GAS
 ■ COGENERATION

○ SPECIFIC EMISSIONS (t/MWh)

EMISSIONS PER POWER PLANT

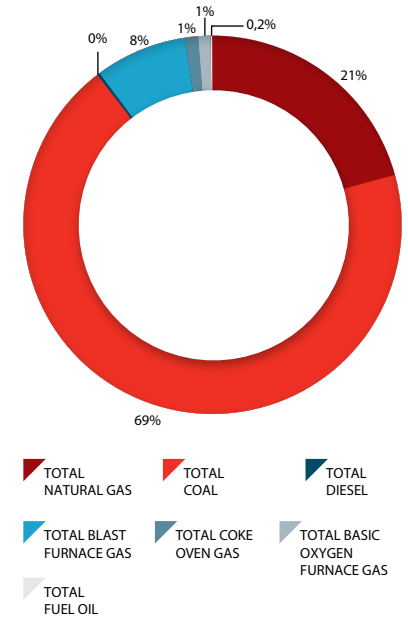
	2012		2011		2010	
	kt	kg/MWh	kt	kg/MWh	kt	kg/MWh
SO₂						
COAL-FUELLED THERMAL POWER PLANT						
Aboño	9.38	1.80	4.77	1.16	4.44	1.31
Soto de Ribera	2.72	1.80	1.53	1.25	1.67	1.97
COGENERATION						
Sidergas	0.06	0.10	0.09	0.14	0.09	0.16
NO_x						
COAL-FUELLED THERMAL POWER PLANT						
Aboño	7.81	1.50	6.47	1.56	4.65	1.37
Soto de Ribera	3.29	2.18	2.18	1.79	1.99	2.35
COGENERATION						
Sidergas	0.19	0.31	0.37	0.59	0.45	0.75
COMBINED CYCLE						
Soto de Ribera CCGT	0.07	0.09	0.10	0.06	0.10	0.07
Castejón CCGT	0.10	0.12	0.14	0.14	0.31	0.11
PARTICULATES						
COAL-FUELLED THERMAL POWER PLANT						
Aboño	0.37	0.07	0.22	0.05	0.21	0.06
Soto de Ribera	0.19	0.12	0.05	0.04	0.09	0.11
CO₂						
COAL-FUELLED THERMAL POWER PLANT						
Aboño	6,208.59	1.19	5,543.40	1.34	4,621.66	1.36
Soto de Ribera	1,515.79	1.00	1,217.78	1.00	884.42	1.04
COMBINED CYCLE						
CTCC Soto de Ribera	307.95	0.40	688.48	0.39	550.68	0.39
CTCC Castejón	322.30	0.39	389.64	0.40	1,043.42	0.38
COGENERATION						
Sidergas	314.13	0.50	360.36	0.57	330.70	0.56
Bioener	35.87	0.59	36.06	0.58	39.42	0.59
Eito	19.83	0.35	19.91	0.32	19.37	0.32
Oviedo Hospital	24.82	0.71	23.95	0.70	30.68	0.48
Intever	60.43	0.56	57.43	0.56	59.39	0.52
Sierra de la Tercia	66.08	0.53	67.73	0.53	67.30	0.53
Sinova	66.06	0.54	61.77	0.54	62.03	0.54
Tudela	17.34	0.30	17.44	0.30	-	-

Specific emissions calculated with all decimal points. The SO₂, NO_x and particulate emissions are measured continuously at thermal power plants and combined-cycle power plant. The measurements are one-off in the case of cogeneration power plants. CO₂ emissions are calculated based on Decision 2007/589.

FUEL CONSUMPTION

	ENERGY	UNIT	WEIGHT OR VOLUME	UNIT
Total fuel oil	152	TJ	3,578	Tons
Total natural gas	19,587	TJ	459,896	Ndam ³
Total coal	64,507	TJ	2,599,716	Tons
Total diesel	142	TJ	3,121	Tons
Total blast furnace gas	7,375	TJ	2,175,917	Ndam ³
Total coke oven gas	682	TJ	33,134	Ndam ³
Total basic oxygen furnace gas	1,329	TJ	150,140	Ndam ³

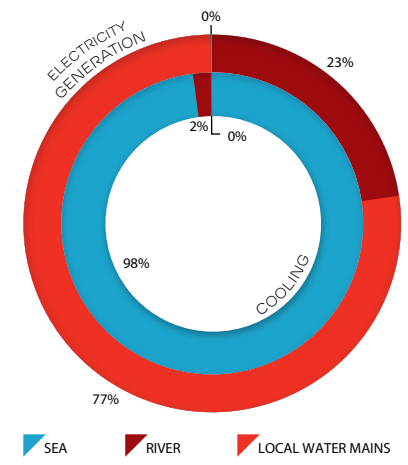
FUEL CONSUMPTION (% as per type of energy)



WATER ABSTRACTION IN THERMAL POWER PLANTS

2012	UNIT	COOLING	ELECTRICITY GENERATION
Sea	m ³ /año	436,090,462	0
River	m ³ /año	10,764,077	536,024
Local water mains	m ³ /año	75,853	1,830,279
TOTAL	m ³ /año	446,930,392	2,366,303
Cooling water recovered	m ³ /año	440,760,586	
% water recovered of water abstracted	%	99	

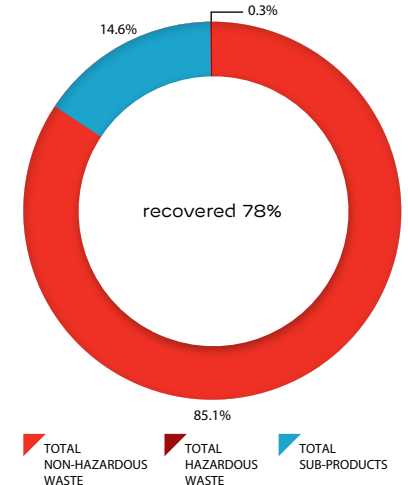
WATER ABSTRACTION IN THERMAL POWER PLANTS (m³/year)



SUB-PRODUCT AND WASTE PRODUCTION

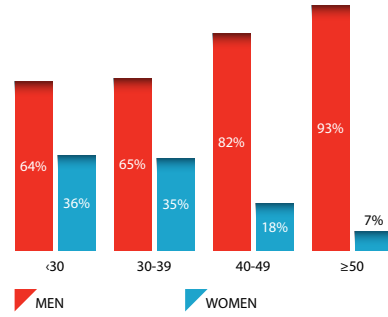
	UNIT	
Total hazardous waste	Tons	1,211
Total non-hazardous waste	Tons	355,902
Total sub-products	Tons	60,984
Total generated	Tons	418,097
Total recovered	Tons	325,818
Recovered	%	78

SUB-PRODUCT AND WASTE PRODUCTION

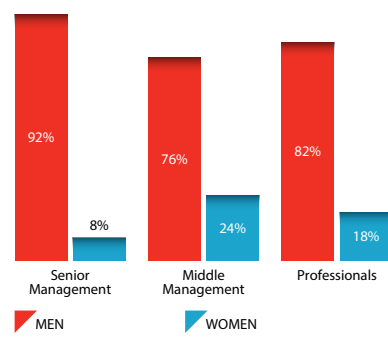


EMPLOYEE DATA

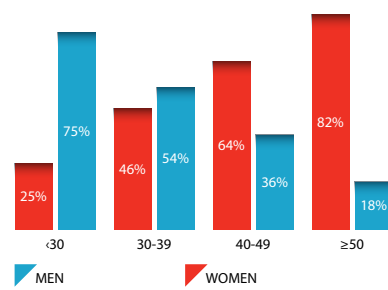
EMPLOYEE PROFILE BY AGE
Electricity business



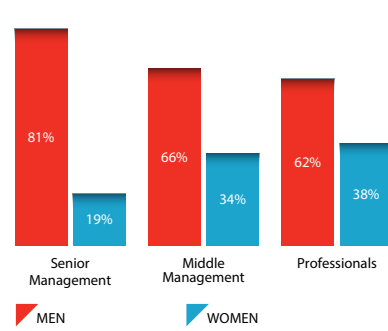
EMPLOYEE PROFILE BY PROFESSIONAL CATEGORY
Electricity business



EMPLOYEE PROFILE BY AGE
Gas sector



EMPLOYEE PROFILE BY PROFESSIONAL CATEGORY
Gas sector



WORKFORCE DIVERSITY | ELECTRICITY BUSINESS

	2012			2011			2010		
	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN
TOTAL WORKFORCE⁽¹⁾	1,217*	984	233	1,250	1,015	235	1,251	1,030	221
EMPLOYEE PROFILE BY AGE									
<30	36	23	13	54	34	20	67	40	27
30-39	352	229	123	363	242	121	366	253	113
40-49	366	300	66	377	310	67	371	316	55
>50	463	432	31	456	429	27	447	421	26
EMPLOYEE PROFILE BY PROFESSIONAL CATEGORY									
Senior Management	63	58	5	65	60	5	64	58	6
Middle Management	293	223	70	229	190	39	223	185	38
Professionals	861	706	155	956	765	191	964	790	174
AVERAGE AGE OF THE WORKFORCE	46			45			44		

(1) Data as of 31 December. 100% of the Saltos del Navia and CHC Energía workforce included.
(*): 1,215 full-time contracts and 2 part-time contracts.

WORKFORCE DIVERSITY | GAS BUSINESS

	2012			2011			2010		
	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN
TOTAL WORKFORCE⁽¹⁾	428	277	151	429	282	147	415	278	137
POR EDAD									
<30	16	4	12	18	4	14	20	3	17
30-39	103	47	56	110	53	57	107	57	50
40-49	153	98	55	161	111	50	165	119	46
>50	156	128	28	140	114	26	123	99	24
EMPLOYEE PROFILE BY PROFESSIONAL CATEGORY									
Senior Management	37	30	7	36	31	5	34	29	5
Middle Management	111	73	38	111	74	37	98	66	32
Professionals	280	174	106	282	177	105	283	184	99
AVERAGE AGE OF THE WORKFORCE	45			45			44		

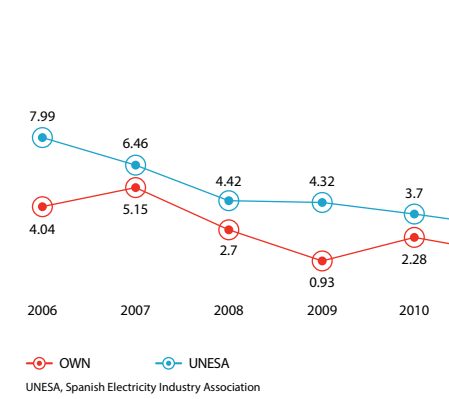
(1) Data as of 31 December.

ACCIDENT RATES

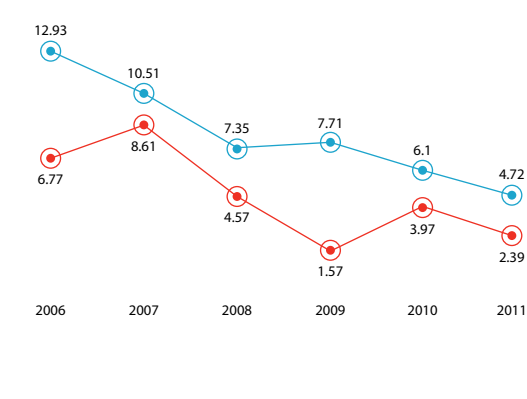
ELECTRICITY BUSINESS ACCIDENT RATES	2012	2011	2010	2009
Absenteeism (% hours lost in terms of hours worked)	3.7%	3.4%	3.1%	3.5%
Incidence index (No. of accidents resulting in time off work/people exposed*1000)	0.82	2.42	3.97	1.57
Frequency index (No. of accidents resulting in time off/hours worked*10*6)	0.48	1.43	2.28	0.93
Severity Index (No. days lost/hours worked*1000)	0.01	0.07	0.08	0.21

GAS BUSINESS ACCIDENT RATES	2012	2011	2010	2009
Incidence index	4.64	4.75	5.66	6.27
Frequency index	2.79	2.86	9.62	3.47
Severity index	0.04	0.06	0.13	0.24

ELECTRICITY BUSINESS FREQUENCY INDEX
EDP SPAIN v. UNESA



ELECTRICITY BUSINESS INCIDENCE INDEX
EDP SPAIN v. UNESA



OWN - UNESA
UNESA, Spanish Electricity Industry Association

MILESTONES



2012 MILESTONES

1

We remained at the top of world sustainability.
In 2012, EDP continued to retain its position at the top of the Dow Jones Sustainability indexes, both worldwide and European, and achieved its best score ever (87 points), the highest in the electricity sector and of the utilities super sector.



2

We were named as one of the most ethical companies in the world in the electricity sector, highlighting the transparency practices in its operations and the management of its relations with its stakeholders.



3

We were prize-winners at the Excellence at Work Awards 2012.
EDP received the Excellence at Work award in the Large Companies category. This award recognises companies that encourages its employees, in clear recognition of the commitment to value and develop the talent of all the people that make up the EDP universe.

4

We were yet again the most highly-rated company in the electricity supply sector by Spanish consumers, according to the Stiga index.

5

We belong to GERG, European Gas Research Group, and five of the projects entered were selected for the 4th GERG Academic Network Event.
Along with a further 14 companies, EDP(Spain) signed the Articles of Association of GERG (European Gas Research Group), an institution that drives any activity related to research in the natural gas industry. In this context, five of the R&D&i projects entered by NATURGAS ENERGÍA were chosen for the 4th GERG Academic Network Event. Four of them were from the NATURGAS Learning Centre at the Bilbao School of Engineering, which seeks to attract university talent into the natural gas sector by means of collaboration projects researching into natural gas and another is from the Gipuzkoa Technical Research and Study Centre.

6

We yet again took part in the sessions organised by the group in Spain: We are edp.



7

We opened a new headquarters for the EDP Spain gas business in Bilbao.
The new EDP headquarters is an example of how an old pharmacy building, dating back to 1924, can be transformed into a smart building. The new building is designed with the aim of obtaining the highest rating for its energy efficiency, commitment to and environmental friendliness, the "A" energy rating, which is the one awarded in Spain. It has also been awarded the LEED certificate in its maximum category (Platinum).



8

"Advanced" level awarded for our Global Compact Communication on Progress.
For the second year running, EDP Spain attained "Advanced" level in its seventh Global Compact Communication on Progress for 2011, which is available to the general public in the Publications section of the Sustainability Website, as well as on the website of the Spanish Global Compact Association (ASEPAM) and on the UN Global Compact website.



9

In February 2013, EDP Spain sold its gas transport business to ENAGAS, pursuant to the provisions of the European Parliament and Council Directive 2009/73/EC, of 13 July 2009, regarding common rules for the Natural Gas Internal Market.

10

We were also awarded the Prize for the Best Oral Communication "Desempeño Preventivo de Empresas Contratista" ("Contractor Preventive Performance") as part of the EDP (Spain) Prevention Management System. This award came on top of the one in 2011 for "Slashing the Accident Rate by implementing the Safe Behaviour 24/7 Programme".



11

Our most outstanding employees were recognised with the Environment and Prevention Awards.
José Fernández Estrada and Luis Manuel del Coz received the individual Occupational Health and Safety Award and Carolina Álvarez the Environment Award. The collective recognition for Prevention went to the Distribution Central Office and for the Environment to the team implementing the ISO 14.001 Standard also in Distribution.



12

We welcomed 170 students from Oviedo University as interns with us.



13

We invested over 4 million euros in gas facilities in Cieza, Murcia.
This key gasification facility consists of a Liquid Natural Gas plant and the installation of 38.2 kilometres of distribution network. This development will mean that all local residents will have access to natural gas.



14

We kicked off work on the environmental recovery of the El Valledor forest, in Asturias, devastated by a fire in 2011, by holding the Environmental Volunteers Day with family and friends.

15

We launched the IV PhD Grant for Employees scheme.
The beneficiaries will receive financial help with training and enrolment costs for their research work, which must be part of an EDP Spain R&D&i project.

16

We hosted an international talent-search task force.

EDP Spain hosted in Bilbao the first meeting in 2012 of the Task Force 1 of the International Gas Union (IGU), whose goal is for university students to learn about the advantages and benefits of working in the gas sector as a talent recruiting scheme. Seventeen people from ten countries, including two EDP representatives, exchanged experiences and points of view in order to analyse the best practices of the industry and prepare a document of conclusions. EDP Spain is one of the active members of the IGU through Sedigás, the Spanish Gas Association.

19

Over 3,500 people were gathered in the Laboral University in Gijón for the "Viaje Energético" (The Energy Trip), with the characters of "Viva nuestra energía" (Long live our energy!) program.



20

We donated "Solidarity Oil", a new social initiative.

The initiative implemented by the Cogeneration Division, that donated 700 litres of oil from the olive trees surrounding the BIONENER plant (Jaén), raised over 2,000 euros, which will be earmarked in full to a Solidarity Project.

21

We volunteered to clean up the beaches after the fuel oil spillage in the Aboño estuary.

After the accident at the Aboño Thermal Power Plant, the EDP Spain employees in Asturias volunteered to help and join in the clean-up of the affected beaches. The company's management accepted the employees' proposal and coordinated their involvement in the cleaning operations with the local authorities.



22

We donated the financial prizes for improvement initiatives to NGOs.

Seven EDP Spain work teams donated to non-governmental organisations the prizes received for initiatives developed within two internal programmes: LEAN Programme, aimed at involving all employees in the continuous improvement process, and the SKIPPER Project, to improve information management as a tool to achieve greater efficiency.

23

We organised volunteering days with the Cáritas children on Zuatza Island (Álava).

The environmental volunteering day when the EDP Spain workers in the Basque Country and their families spent time with a group of 21 children from the Bizkaia Cáritas programmes. They spent the day on Zuhatza Island planting native species of trees provided by Álava Provincial Council.

24

Archaeological discoveries in Bilbao-Treto.

We have also contributed to research on an important event of the last Carlist War, such as Las muñecas battle, which marked the end of the siege of Bilbao. The documentation work prior to laying out the gas pipeline, the archaeological survey before starting on the work and the subsequent archaeological monitoring of the work (in other words, all the archaeological measures funded by EDP Spain) have helped to clarify part of our recent history, the details of which are unknown and which was key to the outcome of the Spanish Carlist wars.

25

We implemented new energy efficiency measures at our facilities, involving replacing fluorescent by LED lamps and fitting presence sensors, energy saving in computers and other IT equipments, best practices in handling the climate control and air conditioning devices, along with awareness raising among employees by means of disseminating consumption.

26

We provided the Prince of Asturias Foundation with two electric vehicles in order to meet the green goal of the prize ceremony of that year being certified as a Zero Emissions event.



27

We worked with Belmonte de Miranda Local Council to mark the 50th anniversary to build the Miranda hydraulic plant.



28

For the second year running, we took part in the European Week for Waste Reduction, organised by the European Commission through the LIFE+ programme. COGERSA was the entity entrusted with coordinating the week in Asturias.



29

We opened the first phase of the natural gas network in Santillana del Mar. The total investment envisaged in this network is 1.7 million euros. It is a complex project given the need to preserve the façades of the municipality.

30

We opened a new communication channel with our suppliers: Contact Center.

ESP Spain opened a contact center service (telephone 984492750) for suppliers to deal with billing queries, outstanding payments or accounts status, along with many other aspects related to billing.

31

We unveiled the Naturgas Energía U-23 cycling team for the 2012 season.

The Naturgas Energía Under-23 amateur cycling team is a key link between grassroots cycling with the professional riders of the Basque Cycling Foundation. It is the first level that the promising young riders can build their career and consolidate their skills to make the leap to join the teams of the sport organisation of the Basque Cycling Foundation.



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