

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- **4. Creating sustainable value**
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

4

QUALITY, EFFICIENT MANAGEMENT AND SUSTAINABLE DEVELOPMENT

We work towards making
the challenge of a sustainable
energy model a reality



GRI indicators reported
on within
this chapter:
EU4, EU6, EU7, EU8,
EU10, EU23, EU28, EU29,
EC1, EC4, EC6, EC9.



■ Interview with the Chairman	■ 3. Management approach
■ Company highlights	■ 4. Creating sustainable value
■ Challenges	■ 5. Committed to employees
■ 1. The Company	■ 6. Committed to society
■ 2. Corporate governance	■ 7. Committed to our environment
	■ Annexes

Global challenges

- » Quality and security of supply.
- » Reduction in energy dependence.
- » Energy saving and efficiency.
- » Promotion of renewable energies.
- » Development of the internal energy market.
- » Development of interconnections.
- » Reduction of emissions.

Our response to these challenges

- » Development of a transmission grid which is both meshed and robust.
- » Development and strengthening of interconnections.
- » Technical solutions for system operation for the safe integration of renewable energies.
- » Fostering demand-side management measures.
- » Smart grids and solutions for electric vehicles.
- » Participation in important projects regarding supranational supergrids.
- » Technological innovation.

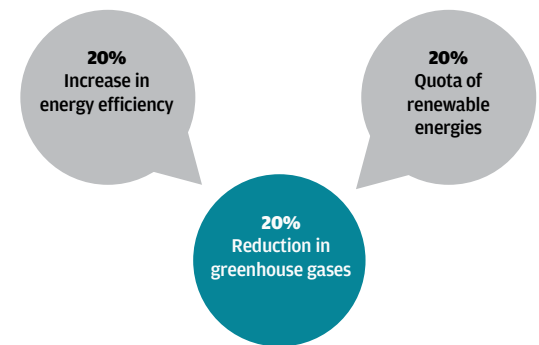
Electricity has become the energy vector of the 21st century. The technological development of its new uses makes it ever more present in our day-to-day lives and better tailored to the needs of developed societies. Furthermore, due to the diversity of primary energies and technologies that allow its generation, electricity represents the key element to progress towards a more sustainable energy model.

THE PILLARS OF THE ENERGY POLICY at a European level are based on competition through the development of a single market and on sustainability through energy efficiency, utilisation of renewable energies and innovation, resulting in the commitment known as 20/20/20. These energy objectives respond to the need for reducing dependence on foreign energy and meeting the challenge of fighting climate change.

Electricity grids are the essential elements that facilitate the achievement of these commitments. It will be necessary to develop large supranational grids that are highly interconnected, which can guarantee the stability of the electricity supply in systems with increased penetration of renewable energies.

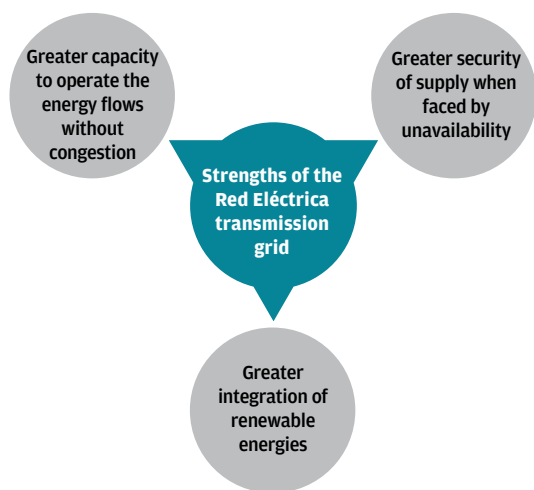
Red Eléctrica is successfully contributing to the realisation of this challenge. Thus, during 2012, we continued investing in the development of electricity infrastructure, in as far as possible making them compatible with the environment, and implementing new technical operating solutions. These will allow renewable energies to be taken greater advantage of and will provide a more efficient operation of the electricity system.

■ Pillars of the energy policy for 2020



- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

■ Strengths of REE's transmission grid



QUALITY AND SECURITY OF ELECTRICITY SUPPLY [EU6]

Red Eléctrica, as transmission agent and system operator, is responsible for contributing to making energy policy objectives viable with regard to a secure, efficient and sustainable electricity supply.

We are thus working on developing a transmission grid that is ever more meshed, robust and better interconnected with our neighbouring countries, so that it can provide greater transmission capacity and the highest level of quality of service to all consumers.

Planning the transmission grid [EU10-EU23]

Current energy planning is reflected in the document “Planning for the energy and gas sectors, 2008-2016. Development of the transmission grids,” approved by the Council of Ministers in May 2008; and in the annual programmes of November 2010 (ITC Order 2906/2010) and of January 2013 (the resolution of 27 December 2012).

In December 2009, Red Eléctrica, as the operator of the system and manager of the transmission grid, requested the start of a new planning process from what was then the Ministry of Industry, Tourism and Commerce (MITYC).

This process, begun in 2010, was suspended by Royal Decree Law 13/2012, which in its Article 10, “Planning of the electrical energy transmission grid,” which requests a new proposal for the transmission grid, separate from the process reflected in Royal Decree 1955/2000:

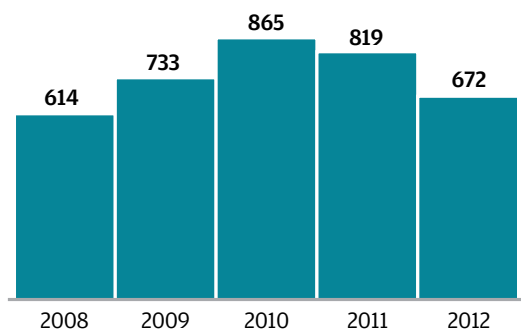
“The System Operator will submit to the Ministry of Industry, Energy and Tourism, before 30 June 2012, a proposal for planning of the transmission grid, based on the current macroeconomic scenario and the most probable forecast and the expected development of demand and generation, both in the ordinary regime and the special regime. The proposal submitted will have among its objectives the minimisation of costs in transmission activity and in the electricity system as a whole.” In accordance with said Royal Decree, Red Eléctrica sent to the Ministry, on 29 June 2012, the document entitled “Planning in the electrical energy transmission grid for the period 2013-2022”.

On 5 December 2012, through the publication in the BOE (Official State Gazette) of IET Order 2598/2012, a new planning process was initiated for the 2014-2020 horizon and the processes begun previously were abandoned.

The aforementioned Royal Decree Law 13/2012, Article 10, Points 2 to 4, suspends the concession of administrative approvals, the issuance of favourable reports, in the case of transmission facilities authorised by autonomous communities, and actions that are unnecessary for international connection. All these suspensions will remain in effect until a new planning is approved. However, administrative authorisation could be granted, on an exceptional basis, to those facilities that could pose an imminent risk to the security of supply, or a negative economic impact on the electricity system should they not be constructed.

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

■ Investment in the transmission grid
(million euro)



In this context, the actions planned to increase exchange capacities with France and Portugal are considered priority and are continuing as planned.

Transmission grid development [EU4]

In 2012, the investment efforts of Red Eléctrica continued to focus on the development and structural strengthening of the transmission grid. This grid strengthening, in addition to improving security of supply, is also helping to integrate renewable energies and to provide an efficient functioning of the electricity market and foster competition within it.

In this fiscal year, 860 kilometres of new lines and 188 new substation bays were put into service. Additionally, transformer capacity was increased by 4,820 MVA.

During 2012, the most significant actions carried out regarding the transmission grid, per geographical area, were the following:

- » **Northern zone.** In order to strengthen the transmission grid in Asturias, Cantabria and the Basque Country, construction has continued on the northern axis. The Cicero 220 kV substation was put into service and the enlargement of the Vitoria 400/200 kV substation took place as part of the developments for the high-speed train.
- » **Galicia.** Grid meshing work continued in the region. During 2012, the principal axis of the connection with Castile and Leon, consisting of the Trives-Aparecida and the Aparecida-Tordesillas (400 kV) lines, was put into service.

» **Catalonia.** Strengthening of the transmission grid has continued with 27 switchgear bays of 220 kV being put into service at the Gramanet, Palau and La Espluga substations and several existing substations were enlarged.

» **Aragon.** This year, the Calamocha-Mezquita service line was put into service, to improve the meshing of the transmission grid and to support distribution in the Teruel area, as well as to facilitate the development of the high-speed train. The Fuendetodos-Maria line was also put into service, to reinforce the meshing of the transmission grid in south and central Aragon.

» **Central zone and Extremadura.** Construction work is very advanced on the 400 kV Tordesillas-Galapagar-S.S. Reyes axis, to improve the meshing between the communities of Castile and Leon and Madrid. The Castile and Leon section is finished and work is continuing in the Community of Madrid.

» **Andalusia.** Progress has been made on the supporting works for the 220 kV grid in the Seville area, from the 400 kV grid. Additionally, the Tabernas-Benahadux line was put into service and at the end of the year, the Caparacena-Fargue line. Together, they account for more than 100 kilometres of circuit.

» **Levante.** Activities to strengthen the grid in this area have continued, with the commissioning of the new Catada-Valle Del Carcer, Bernat-Valldigna

More info
Video: 'New electricity line between Spain and France: a key infrastructure and technological challenge'.



■ Interview with the Chairman	■ 3. Management approach
■ Company highlights	■ 4. Creating sustainable value
■ Challenges	■ 5. Committed to employees
■ 1. The Company	■ 6. Committed to society
■ 2. Corporate governance	■ 7. Committed to our environment
	■ Annexes

THE NEW INTERCONNECTION with France will double the exchange capacity from 1,400 to 2,800 megawatts

Characteristics of the interconnection project with France

- » This is a 400 kV direct current line that will increase the exchange capacity from 1,400 to 2,800 megawatts.
- » With a length of 65 kilometres, it will be entirely buried through means of a trench system and its chosen route will make use of existing infrastructure whenever possible.
- » Two converter substations are to be constructed, one at each end of the line: Santa Llogaia (Spain) and Baixas (France), through which the transformation from direct to continuous current shall be carried out, and vice versa. Construction work on these substations is underway and the civil works have been completed.
- » A tunnel (8.5 km long and 3.5 metres in diameter) will house the cables in the stretch that crosses the Pyrenees. To date, 47% of the route has been completed.

and Bernat-Catadau lines, along with the new substations at Sax, Bernat, Peñarubia and Santa Pola, as well as the enlargements of Catadaui and Carril.

- » **Balearic and Canary Islands.** Work continued on the reinforcement of the transmission grid meshing to improve safety and quality of electricity supply on the Islands.

Spanish peninsula-Balearic Islands electricity interconnection

The electricity interconnection between the Spanish peninsula and the Balearic Islands, after an exhaustive testing stage, has, since August 2012, been running under normal operation. The Iberian system provides the equivalent of 15% of the electricity consumed in the Islands and improves the reliability of electricity supply of the Balearic Islands' system.

In the first months of full operation, the electricity link has already demonstrated, on various occasions, its effectiveness in stabilising the Balearic Islands electricity grid when faced with incidents, such as on 30 August, 13 September and 14 November 2012. ON these days, storms on the island of Majorca triggered faults in different lines, causing frequency variations that were offset thanks to the interconnection with the peninsula.

International interconnections

For an efficient operation of the Spanish electricity system, it is essential to strengthen international

interconnections. Having a greater electricity exchange capacity with our neighbouring countries provides greater security of supply and a better use of renewable energy.

In the case of Spain, the need for investment to strengthen interconnections is very important, as we have a very limited degree of interconnection with Europe. In this regard, strengthening interconnections and, in particular, the new interconnection line with France is the top priority in the development of the transmission grid.

New interconnection with France

This new interconnection axis will double the existing capacity of electricity exchange between Spain and France, which will result in greater security and stability of the two electricity systems.

The interconnection is a project which has been declared of European interest and is funded by the European programme EEPR (European Energy Program for Recovery). The new line, whose commissioning is scheduled for 2014, will be the first European grid interconnection to have been put in service in 30 years.

During 2012, all the necessary permits and administrative proceedings required for the project were completed, and work has continued to advance on the construction of the line.

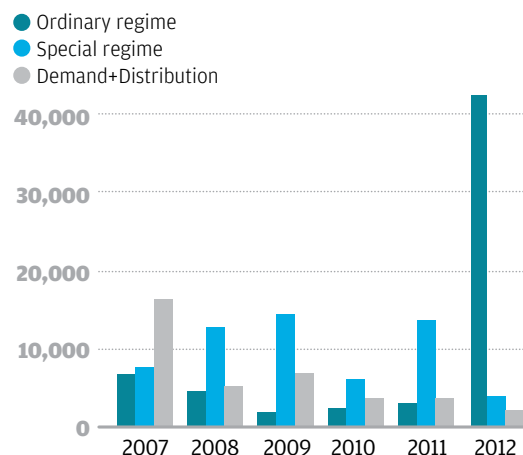
Interconnection with Portugal

During 2012, work progressed on the southern axis (Andalusia), which is scheduled for commissioning

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

Transmission grid access requests received

(MW/MVA)



Service quality indicators [EU28, EU29]

	2008	2009	2010	2011	2012
Grid availability (%)	98.08	98.04	97.93	97.72	97.78
Energy Not Supplied (ENS) (MWh)	574	437	1,552	259	113
Average Interruption Time (AIT) (minutes)	1.147	0.914	3.135	0.535	0.238

during 2013. At the same time, the administrative proceedings continued for the new northern interconnection (Galicia-Oporto). With these interconnections the objective of reaching a commercial exchange capacity with the neighbouring country of 3,000 MW continues to be the aim.

Transmission grid access

During 2012, Red Eléctrica continued to manage the procedures for access and connection to the transmission grid (and to assess the acceptability of access to the distribution grid), with transparency and equality for agents planning to

incorporate facilities into the electricity system: generators and distributors and consumers.

In 2012, there was a decrease in the total number of requests received (but not in associated power), amounting to a total of 206 access requests for direct connection to the transmission grid.

Demands for access (distributors and consumers) from new projects has been moderate compared to recent years, although numerous revisions of previously initiated access requests (particularly with regard to changes in conditions of consumption) have been incorporated.

Peninsular and extra-peninsular transmission grids [2.8, EU4]

	2008	2009	2010	2011	2012
Km of circuit (400 kV)	17,727	18,019	18,792	19,671	20,104
Km of circuit (220 kV)	16,600	16,732	17,565	18,412	18,836
Km of circuit (150-132-110 kV)	75	75	280	295	295
Km of circuit (<110 kV)			1,991	1,991	1,994
Total km of circuit	34,402	34,825	38,629	40,369	41,229
Substation bays (400 kV)	1,057	1,118	1,189	1,253	1,319
Substation bays (220 kV)	2,113	2,280	2,662	2,819	2,941
Substation bays (150-132-110 kV)	4	4	47	52	52
Substation bays (<110 kV)			723	741	741
Total substation bays	3,174	3,402	4,621	4,865	5,053
Transformer capacity (MVA)	62,772	65,547	71,170	73,220	78,050

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

2012 [EU4]

Overhead lines

39,886 km

Submarine cable

602 km

Underground cable

741 km

Regarding access for special regime generation (both for connection to the distribution network as well as the transmission grid), there has been a moderate increase in the number of access requests as well as associated power in recent years as a consequence of the current regulatory environment. However, the management level associated with the incorporation of revisions of access requests filed and initiated in previous years is maintained.

The most significant aspect in 2012 was the increase of access requests in the scope of the ordinary regime, mainly due to the appearance of large photovoltaic power stations. Thus in 2012, there were 144 access requests received (more than 10 times the number received in 2011), totalling 42,410 MW for facilities with direct connection to the transmission grid.

SERVICE QUALITY OF FACILITIES [EU28]

The quality service indicators during 2012 showed a notably higher performance regarding the figures of last year. In this sense, the global indicators regarding continuity of supply (ENS and AIT) show a high level of quality in the service supplied provided by the facilities, registering values lower than those of previous years as well as in relation to reference values established in the current legislation - set at 15 minutes. These values are equally favourable when compared to international benchmarks of European transmission companies.

MAR Project (Mejora de Activos de Red - Grid Asset Improvements)

With the aim of adapting the integration of the assets

Objectives of the MAR project

- » Adapt the grid infrastructure of the Islands to the quality standard on the Spanish peninsula.
- » Address the deficiencies of the existing transmission grid.
- » Integrate the assets acquired into Red Eléctrica's control systems.
- » Apply a specific maintenance plan for the improvement of the transmission grid.

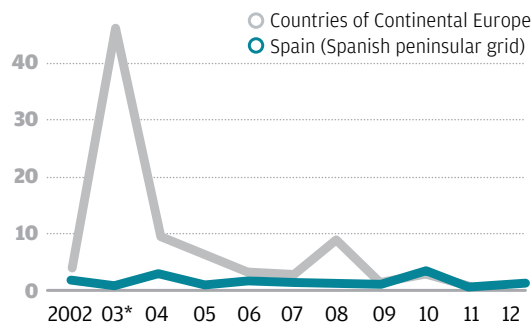
acquired from the electricity companies, especially those on the Islands, to the Company's quality standards, Red Eléctrica is carrying out an ambitious plan, begun in 2011, to modernise and improve the facilities.

This project represents a programme of actions to be carried out in the period 2011-2015, with an estimated budget of 132 million euros in the Canary Islands and 160 million in the Balearic Islands.

It should be emphasised that in the Canary Islands in 2012, thanks to the intense work done on the maintenance and renewal of the transmission grid, the quality of supply indexes has been stabilised at values well below the average registered in previous years despite the high number of disconnections carried out. New adjustments, resulting from the coordination study of the protection systems of the Tenerife electricity system, have also been implemented, significantly improving reliability when confronted by incidents.

Average Interruption Time (AIT)

(minutes)

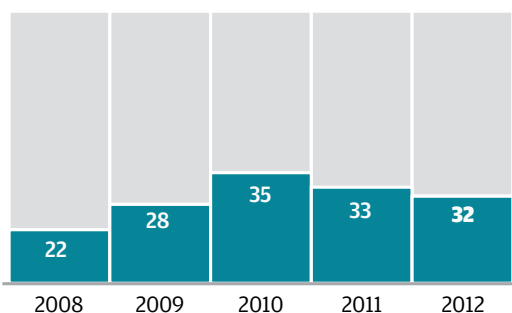


TIM = ENS/Average power of the system. * Includes power outage occurred in Italy in September 2003. Source: ENTSO-E, Spain REE

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

Demand coverage by renewables

(%)



INTEGRATION OF RENEWABLES

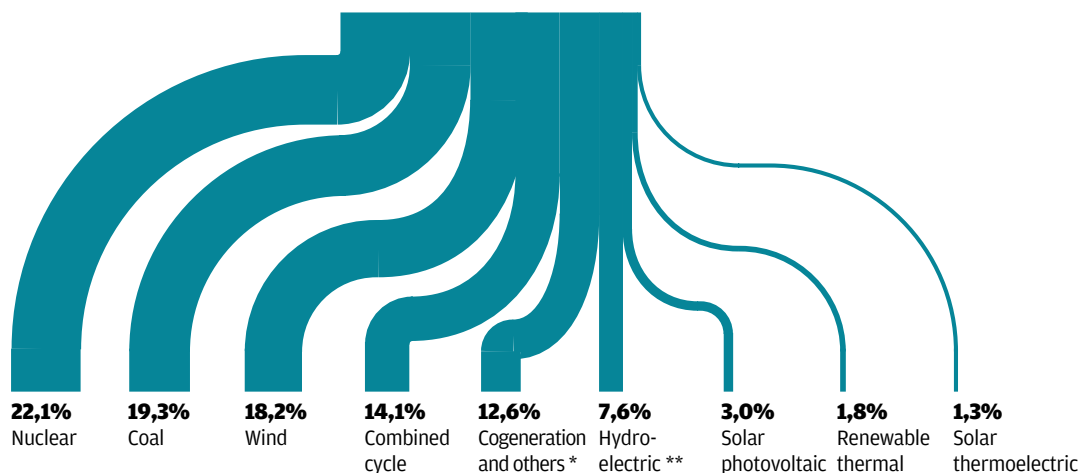
Red Eléctrica, following the path initiated in previous years, has continued to work in order to achieve increasingly better integration of renewable energy into the electricity system, reducing CO₂ emissions into the atmosphere and allowing the coverage of demand to be performed with intermittent energies without the security and quality of supply being affected.

The CECRE (Control Centre of Renewable Energies) continues to be a pioneer and world reference in the monitoring and control of renewable energy. Its functioning has made it possible for renewable energies to have represented 32% of the overall energy production in the peninsular electricity system in 2012.

For yet another year, the important role of wind power generation must be mentioned; its contribution surpassed all-time records: 64% of the demand coverage on 24 September; and 16,636 MW of instantaneous wind power reached on 18 April. The annual production of wind power represented almost 18%, which places this technology in third place in terms of participation of the different types of energy in demand coverage, only behind nuclear energy and just behind coal. Also, in the months of November and December, wind generation was the technology with the greatest contribution to total energy production in the Spanish peninsular system, reaching 21.3% and 23.9%, respectively.

Electricity demand coverage in 2012 (Generation mix)

(%)



* Includes fuel/gas and non-renewable thermal.

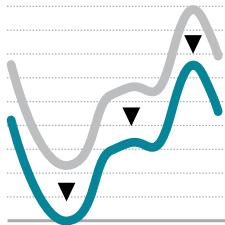
** Includes hydroelectric from ordinary and special regime. Excludes pumped storage generation.

Additionally, in 2012, with the aim of achieving a greater participation of the special regime in demand coverage, manageability tests were performed that allow special regime facilities that successfully pass to obtain the “manageable” accreditation. After completion of the aforementioned tests, manageable power on the Spanish peninsula electricity system was increased by 1,008 MW.

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

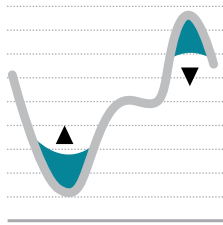
■ Demand-side management strategies

(Daily electricity consumption profile)



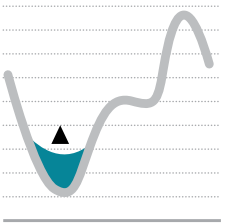
1 Reduction in consumption

- Improvements in the efficiency of equipment and processes
- Energy saving awareness



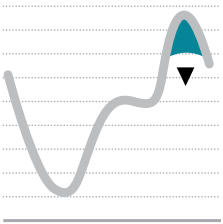
2 Displacement of consumption from peak hours to valley hours

- Hourly discrimination
- Active participation of demand in the markets



3 Filling valleys

- Pumped storage
- Future energy storage technologies
- Electric vehicles



4 Reduction in consumption during peak hours of the system

- Interruptibility service
- Automatic load management

ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT [EU7]

In Red Eléctrica we continue to work actively in the development and dissemination of demand-side management measures aimed at making the sustainable targets, set by the European Union in its energy strategy for 2020, viable.

In this regard, the demand-side management initiatives are aimed at promoting the sustainable use of energy in order to contribute to the reduction of pollutant emissions, integration of renewable energy and a greater efficiency for the electricity system as a whole.

Among these initiatives, noteworthy are those measures aimed at achieving a more balanced consumption profile, in order to flatten the demand curve and facilitate greater flexibility in demand.

Smart grid

The electricity system as a whole must evolve in order to respond to the challenges posed regarding greater flexibility in electricity supply, as well as a change in the traditional train of thought whereby electricity is not just a product which is consumed, but more importantly that all participants in the system be capable of associating this product with the services demanded by end users. In this context, the evolution towards a smart grid is a key element of success in responding to these challenges.

During 2012, Red Eléctrica took part in several initiatives carried out in this area. On the one hand,

it was part of a working group regarding the smart grid, managed by the National Energy Commission, along with the main participants of the sector. In this group, Red Eléctrica contributed to the consensus of the national electricity sector about the move towards the intelligent grid of the future, providing the system operator's viewpoint. On the other hand, the Company was also appointed representative of ENTSO-E in the European Commission's working group on smart grids (Smart Grid Task Force), specifically in the group of experts that has drawn up regulatory recommendations for the European Commission itself.

Furthermore, in this context of evolution towards the smart grid, Red Eléctrica continues to research and develop new models and technologies that enable the rapid incorporation of demand-side management measures in the electricity sector.

Noteworthy during 2012 was the **AGREGA Project**, led by Red Eléctrica, with the participation of the Basque energy entity, EVE (*Ente Vasco de la Energía*). This project aims to carry out a pilot experience that shows the technical possibility of having a product to respond to demand through the aggregation of consumption in the medium-sized industry sector and which could be used in an efficient, reliable and simple manner by the system operator, in a competitive market context.

In the area of residential demand, Red Eléctrica is one of the partners in the consortium carrying

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes



out the PRICE Project, which seeks to make a demonstration of the smart grid in *el corredor del Henares* (an area near Madrid). This project involves the installation of 200,000 smart meters. Its final goal is to develop a standard solution which assures the optimal integration of the electricity generation distributed, the demand, renewable energy, and the introduction of the electric vehicle in a generalised manner.

Finally, in the context of the demand-side management agreement of the International Energy Agency, Red Eléctrica has participated in several areas of research, in which the following have been analysed: “Standardisation of error savings calculations”, “Competitive energy services” and “Integration of distributed generation energy sources”.

Monitoring demand in industrial and service sectors

During 2012, in the area of improving knowledge regarding electricity demand, Red Eléctrica has given continuation to the system, initiated in 2009, for monitoring demand in the industrial and service sectors, broken down by activities. This system provides hourly information of more than 35% of the total demand, which makes it possible to have a relatively precise estimation of the behaviour of the different sectors of activity. Additionally, it represents an efficient tool to analyse demand performance in exceptional and one-off situations.

Interruptibility service

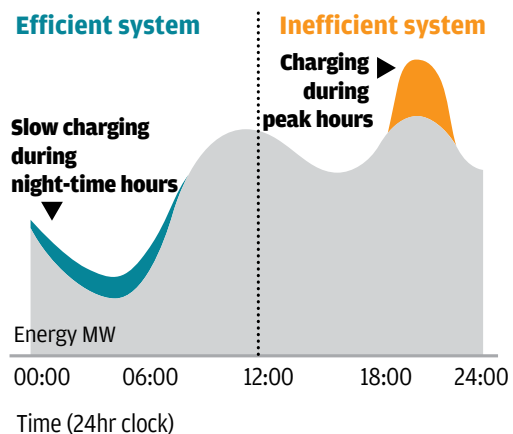
The demand-side management interruptibility service, provided by large industrial consumers that comply with regulatory requirements and have a contract formalised with Red Eléctrica, consists of the reduction of energy demanded from the grid at the request of the System Operator in accordance with pre-established values. At the start of the electricity season, on 1 November 2012, the System Operator had 146 consumers that provided the service, 132 of them in the peninsular system, 13 on the Canary Islands and one in the Balearic Islands, for a total interruptible power of between 2,000 MW and 3,600 MW.

During 2012, Red Eléctrica continued its commitment to continuous improvement in the management of the interruptibility service and in communications with the providers of this service by means of the development and launching of the Interruptibility Service Continuous Improvement Plan. Specifically, this plan has consolidated a stable relationship framework with the associations representing providers of this service: the Association of Large Energy Consumers (AEGE) and *Grup de Gestors Energetics de Catalunya* (GGE).

For 2013, one of the challenges is the implementation of demonstration projects in collaboration with industrial demand that will generate knowledge about how demand-side capabilities can enable a greater participation in the services of the system operation.

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

Diagram of the charging system for electric vehicles



Profiling services

At present, the majority of the households in our country do not have smart meters and, as a result, they do not have hourly measurement. However, in the electricity market all energy is charged on an hourly basis.

For that reason, it is necessary to estimate the behaviour, on an hourly basis, of those consumers who do not have hourly measurement. To make this estimation, the so-called “settlement profiles” are used. They assign a behaviour type to demand, depending on the power contracted and the voltage levels (access tariffs).

Since 2011, following the mandate of the Ministry of Industry, Energy and Tourism, Red Eléctrica draws up these settlement profiles, which are used as a reference to settle in the market the energy used by consumers who still do not have smart meters reporting on an hourly basis. In compliance with this mandate, Red Eléctrica has drawn up a proposal of profiles to be used during 2013.

Electric vehicles

The introduction of electric vehicles will represent a substantial change in the patterns of mobility for our society. Moreover, it can become an ally to operate the system more efficiently, facilitating the integration of renewable energies, if and when the charging takes place in valley hours.

To improve the efficiency of the electricity system, it is very important that the electricity demand shifts to the hours of less consumption (valley hours), and that is when the slow charging during night-time hours of the electric cars can play a key role in the flattening of the demand curve.

Within this field, during 2012, Red Eléctrica participated in several projects and initiatives related to the introduction of electric vehicles, such as the **DOMOCELL project** or the **CENIT VERDE project**. Additionally, it also takes an active role in various working groups and dissemination initiatives in order to prepare the system operation for the introduction of this new type of demand.

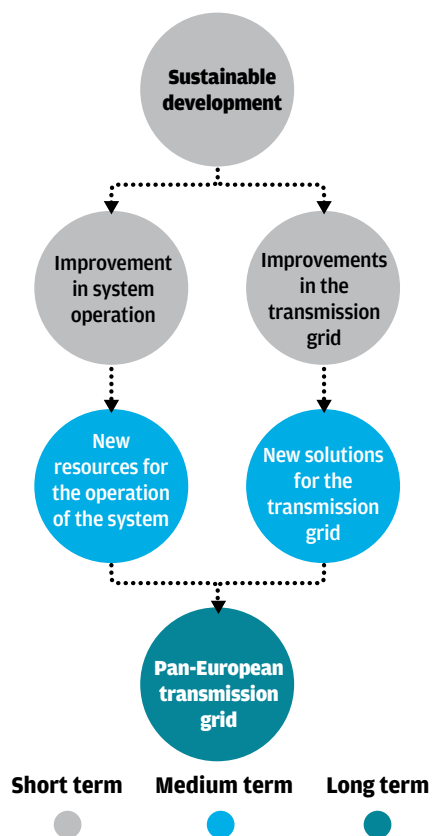
Other activities

Red Eléctrica has participated in 2012 in the Association of Large Electric Operators Association (GO15), a voluntary initiative made up of the largest power grid operators, which represents over 60% of electricity demand in the world.

The vision shared by all participants in the GO15 initiative consists of undertaking leadership and acting as a catalyst in the transition of the electricity sector towards the electricity grid of the 21st century. Specifically, with respect to demand-side management actions, of note is the participation in the joint project regarding plug-in electric vehicles (*Proyecto Conjunto Sobre Vehículos Eléctricos Enchufables*).

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

Key actions



TECHNOLOGICAL DEVELOPMENT AND INNOVATION [EU8-EC9]

In 2012, the implementation of the Innovation and Technology Development Plan commenced, whose main objective is to establish the framework for action of the technology strategy of Red Eléctrica for the period 2012-2016. The key actions into which this plan is divided for the coming years are those that appear in the “Key actions” graph:

The plan also aims to represent a qualitative leap in the dissemination of R&D+I activities, both internally and with regard to the relevant participants at national and European level.

In the international arena, of note is the Company's participation in ENTSO-E's Research and Innovation Roadmap 2013-2022, which establishes the technological strategy of the European TSOs to meet

the goals of the European Union's energy policy (20/20/20), as well as the Implementation Plan 2014-2016, which sets out the technological actions that should be taken in the next three years within the framework of this plan. Also during 2012, the first monitoring report was published in which compliance with the plan was evaluated. Work is also well advanced on a document for defining the indicators that measure the contribution of R&D+i in achieving the energy policy goals of the European Union.

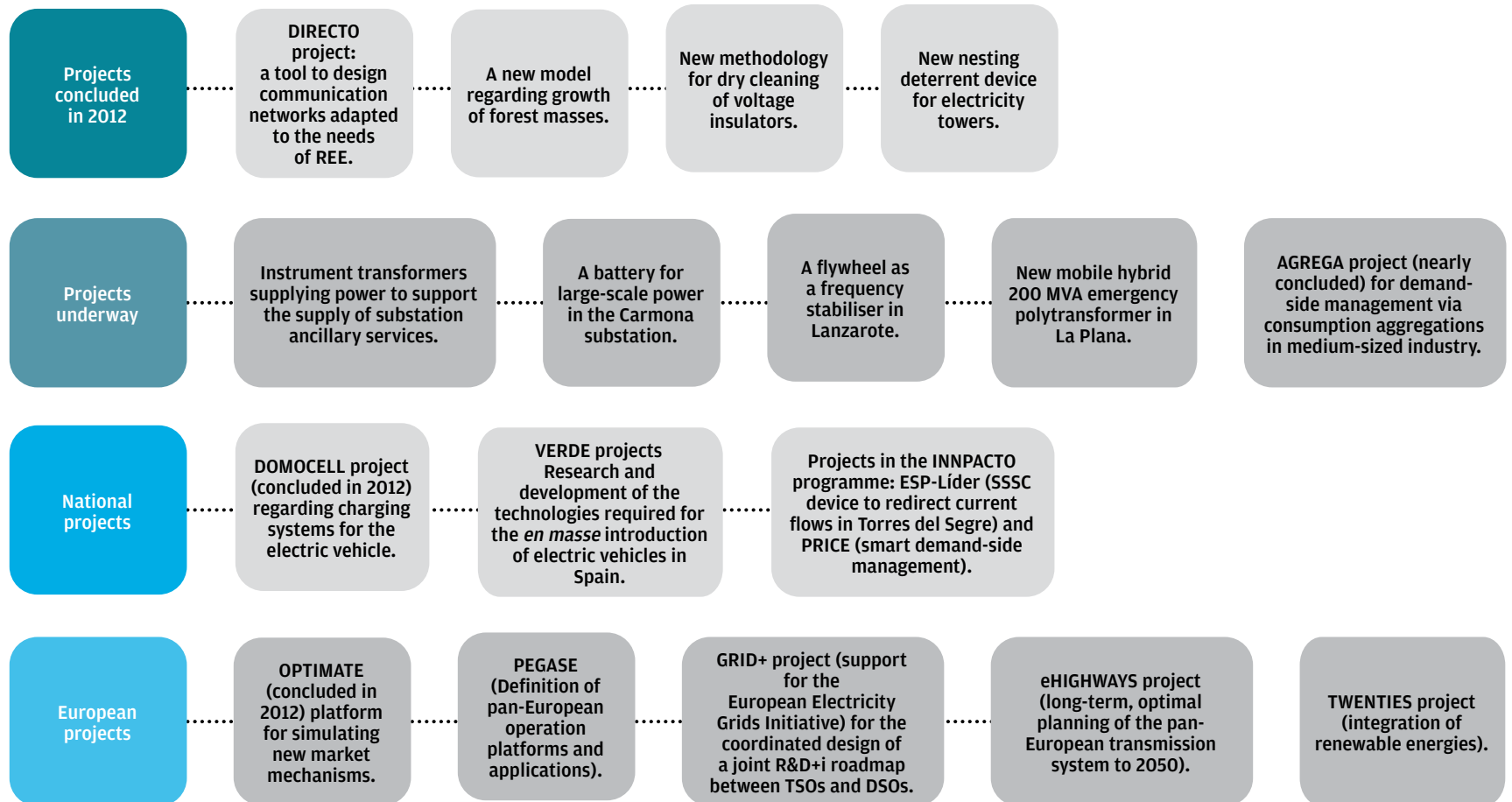
As regards resource allocation, during 2012, a total of 168 technicians collaborated on the R&D+i projects, 10.2% of the Red Eléctrica workforce, dedicating 38,121 hours of work to them. Of these people, 26 are women (15.5%). The cost of the projects is reflected in the following chart.

Cost of projects

	2008	2009	2010	2011	2012
Expenditure on R&D+i (million euro)	7.01	6.78	5.02	7.22	7.64
% of regulated income	0.66	0.61	0.39	0.47	0.46
Number of projects	62	64	64	56	50

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

Relevant R&D+i projects



- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes



TWENTIES PROJECT

The objective of the TWENTIES project (Transmission System Operation With Large Penetration of Wind and Other Renewable Electricity Sources in Networks by Means of Innovative Tools and Integrated Energy Solutions) is to make significant progress in demonstrating and implementing new technologies that make a definite contribution to achieving the 20/20/20 objective of the European Union for the year 2020 regarding the integration of renewable energies, and especially, in wind power, both offshore as well as large onshore wind farms.

The common pattern of such technologies is that, having practically completed the research and development stage, they are still not available in the market in a standardised form and their implementation is very scant or, in some cases, non-existent.

This project, which began officially in April 2010 and will finalise in 2013, is the most ambitious of the research framework programmes of the European Union, with a total budget in excess of 58 million euros and a requested financing of over 32 million euros. Among the 26 partners involved, noteworthy are the TSOs of Belgium (ELIA), Denmark (ENERGINET,DK), France (RTE), Holland (Tennet) and one of the four German TSOs (50HzT), and promoters of renewable energies such as IBERDROLA (Spain) and DONG (Denmark).

Besides leading the project, Red Eléctrica is also responsible for the practical demonstration of two technologies:

- A FACTS (Flexible Alternating Current Transmission System) device installed in the Magallón substation, which can vary the direction of current flow in an electricity line, in order to accommodate more renewable energy from a given area.

- A RTTR (Real Time Thermal Rating) system for continuous temperature monitoring of the María-Fuendetodos line to determine in real time the transmission capacity of the electricity line based on its real temperature.

More information about the objectives and development of this project can be found on its website:
<http://www.twenties-project.eu>.



- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes



CREATING VALUE FOR OUR STAKEHOLDERS

Red Eléctrica's corporate management maintains a clear orientation towards efficiency and the permanent generation of value.

In 2012, Red Eléctrica has been able to show stable growth. The Company achieved sound results, and an important strengthening of its main solvency ratios.

Evolution of the main financial highlights

Consolidated net revenue grew by 7.2% to just over 1.755 billion euros, mainly due to revenues associated with assets commissioned in 2011 and offset by 45 million euros as result of the impact of the measures outlined in the Royal Decree Law 20/2012 of 13 July (which determines that the remuneration of transmission assets in service not amortised will be based on their net worth), and due to the deconsolidation of TDE from the Group following its expropriation.

The **gross operating result (EBITDA)** reached just over 1.299 billion euros, signifying a growth of 6.9% with regard to 2011, reasonably in line with the consolidated net revenue, which demonstrates Red Eléctrica's commitment towards efficiency.

The **after tax result for the year** grew to 492.3 million euros which represented an increase of 6.9% on that achieved during the previous fiscal year.

Investments carried out by the Group during the 2012 fiscal year reached 705.8 million euros. Of these investments, 671.6 million euros correspond to the development of the national transmission grid.

The **net financial debt** of the Red Eléctrica Group as at 31 December 2012 reached just over 4.872 billion euros. Regarding the interest rate, 87% of the net debt of the Group is fixed rate, whereas the remaining 13 % is variable rate.

The **net equity** of the Red Eléctrica Group reached just over 1.991 billion euros, as at 31 December 2012, representing an increase of 9.8% with respect to 2011. This increase is due mainly to the results obtained during the fiscal year partly compensated by the distribution of the 2011 results and the interim dividend corresponding to 2012.

On the other hand, as at 31 December, 2012, the credit ratings awarded by Moody's and Standard & Poor's stood at Baa2 and BBB, respectively.

■ Interview with the Chairman	■ 3. Management approach
■ Company highlights	■ 4. Creating sustainable value
■ Challenges	■ 5. Committed to employees
■ 1. The Company	■ 6. Committed to society
■ 2. Corporate governance	■ 7. Committed to our environment
	■ Annexes

Economic value generated and distributed [EC1]

This indicator, calculated according to GRI (Global Reporting Initiative) methodology, collates the generation of economic value of the Red Eléctrica Group and its distribution among the various stakeholders.

■ Economic value generated and distributed (Group)

(million euro)

	2008	2009	2010	2011	2012
Economic value generated	1,160.7	1,239.2	1,441.9	1,677.6	1,802.0
Consolidated net revenue	1,125.9	1,200.1	1,397.3	1,637.3	1,755.3
Other net incomes and losses ⁽¹⁾	34.8	39.1	44.6	40.3	46.7
Economic value distributed to stakeholders	(792.2)	(798.6)	(981.6)	(1,133.9)	(1,177.6)
Employees: personnel costs	(93.9)	(104.2)	(112.7)	(128.8)	(129.1)
Company: tax on earnings ⁽⁵⁾	(128.9)	(130.7)	(170.3)	(223.4)	(188.4)
Investment in the community	(2.7)	(2.1)	(7.5)	(8.4)	(4.1)
Suppliers: other operating expenses ⁽²⁾	(283.8)	(277.3)	(308.4)	(312.9)	(355.4)
Shareholders: dividends ⁽³⁾	(172.8)	(199.8)	(253.6)	(299.3)	(319.9)
Other capital providers: net financial costs	(110.1)	(84.5)	(129.1)	(161.1)	(180.7)
Economic value retained	368.5	440.6	460.3	543.7	624.4
Reserves	113.3	130.6	136.6	161	172.4
Amortisation and depreciation ⁽⁴⁾	255.2	310	323.7	382.7	452.0

Note: Data obtained from Consolidated Annual Accounts.

(1) Includes other operating income/net results obtained via equity method/results from divestment of non-current assets (divestitures)/capital subsidies/other deferred incomes transferred to the fiscal year's results/works performed by the Company on its assets.

(2) Procurements and other operating costs (excluding investments in the community).

(3) Includes the interim dividend and complementary dividend.

(4) Includes amortisation/depreciation (includes mainly provisions for deterioration in asset value).

(5) In 2012, the effective tax rate was 27.7%, compared with 32.7% recorded the previous year.

Corporate Responsibility Report 2012 | 4. Creating sustainable value

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

■ Indirect economic impacts

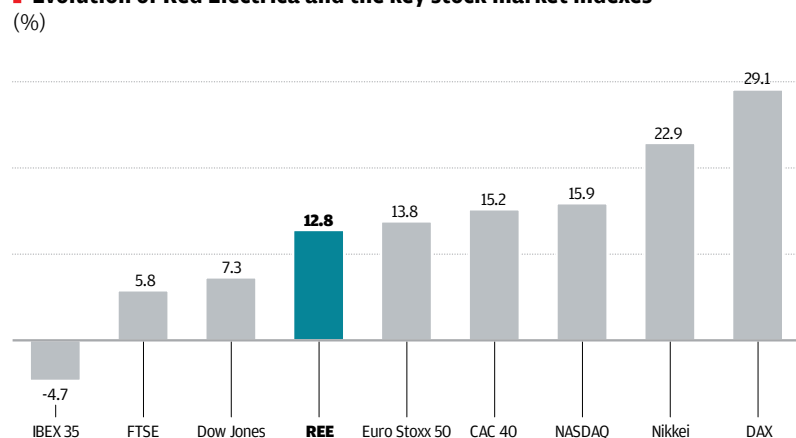
(million euro)

	2008	2009	2010	2011	2012
Shareholders					
Dividend per share (euro)	1.2797	1.4781	1.8751	2.2124	2.3651
Dividend over net consolidated profit (payout) (%)	60.5	60.5	65.0	65.0	65.0
Clients (Group)					
Net revenue	1,125.9	1,200.1	1,397.3	1,637.3	1,755.3
Total investments	635.1	758.7	2,308.8	844.3	705.8
Suppliers (purchases)⁽¹⁾ [EC6]					
REE Spain	902	687	781	1,371	670
Employees (Group)					
Total salary expenses ⁽²⁾	93.9	104.2	112.7	128.8	129.1
Capital providers (Group)					
Financial expenses	117.2	91.2	104.3	155.3	172.8
Reserves	1,066.0	1,168.6	1,352.3	1,541.3	1,716.6
Company (Group)					
Tax on earnings	128.9	130.7	170.3	223.4	188.4
Subsidies ⁽³⁾ [EC4]	12.9	13.7	18.4	11.4	12.6
Investment in the community ⁽⁴⁾	2.7	2.1	7.5	8.4	4.1

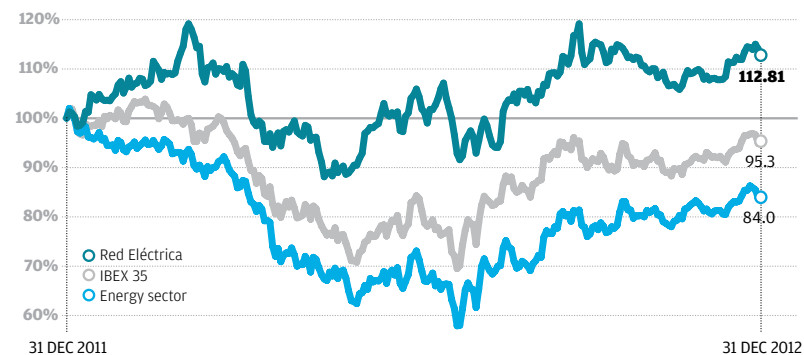
(1) Purchase orders executed. (2) Includes wages and salaries, social security, pension fund contributions and other concepts. Final figures refer to the consolidated Group and include International Financial Reporting Standards (IFRS) adjustments. (3) Capital subsidies and other deferred income transferred to the results. (4) Strengthening of ties with the community and social commitment actions in Spain.

- Interview with the Chairman
- Company highlights
- Challenges
- 1. The Company
- 2. Corporate governance
- 3. Management approach
- 4. Creating sustainable value
- 5. Committed to employees
- 6. Committed to society
- 7. Committed to our environment
- Annexes

Evolution of Red Eléctrica and the key stock market indexes (%)



Comparison Red Eléctrica–IBEX 35–Energy sector



STOCK MARKET PERFORMANCE

Overall, 2012 was a positive year from the point of view of the stock market; all the leading world indexes, with the exception of the IBEX 35, closed the year with gains, the most outstanding of them greater than 20%, such as in the German or Japanese markets.

This evolution of the markets has made clear the intensive use of monetary policy as a tool to combat the recession. The economic authorities of the leading world economies have applied expansive policies, expressed mainly through low interest rates and the extension of credit, in order to reactivate their markets.

Given this scenario, the atypical behaviour of our market stands out, as it is the only one among the most important ones to have a negative performance over the past 12 months.

Our country has suffered intensely during the sovereign debt crisis, with an accumulated decline of more than 25% at the beginning of the summer. Later, the decisive action of the European Central Bank and progress in economic matters by the European Union allowed it to recover, ending the year with a decline of 4.7%.

The performance of Red Eléctrica shares has differed substantially from that of the IBEX 35. At year-end, it had a gain of 12.8%, very much in line with the average increase in European markets. The defensive

character of our share has made it a preference of investors during 2012.

Shareholder remuneration

Red Eléctrica maintains the commitment to maximise value for its shareholders, offering on the one hand an attractive profitability per dividend and, on the other contributing to the revaluation of the share through an efficient management of its business.

In 2012, the payment to shareholders, in the form of a dividend, increased by 6.9% with regard to the previous year. The gross dividend proposed at the Annual General Meeting to be allocated to the 2012 fiscal year is 2.3651 euros per share. On 2 January 2013, a gross interim dividend of 0.6764 euros per share was paid out, leaving 1.6887 euros per share pending, as part of a complementary gross dividend for the 2012 fiscal year.



Corporate Responsibility Report 2012 | 4. Creating sustainable value

■ Interview with the Chairman	■ 3. Management approach
■ Company highlights	■ 4. Creating sustainable value
■ Challenges	■ 5. Committed to employees
■ 1. The Company	■ 6. Committed to society
■ 2. Corporate governance	■ 7. Committed to our environment
	■ Annexes

Principal stock market indicators

	2008	2009	2010	2011	2012
Total number of shares	135,270,000	135,270,000	135,270,000	135,270,000	135,270,000
Number of outstanding shares	108,216,000	108,216,000	108,216,000	108,216,000	108,216,000
Face value of the share (euro)	2	2	2	2	2
Daily trading volume (shares)					
Maximum	6,364,008	5,604,900	5,796,441	9,925,190	21,690,186
Minimum	239,541	191,510	186,526	288,027	81,925
Share price (euros)					
Maximum	46.00	39.80	40.755	43.89	39.75
Minimum	26.80	26.85	27.930	30.24	29.00
Average	38.51	32.68	34.730	37.13	34.55
Close	36.00	38.82	35.200	33.06	37.30
Market capitalisation at close of fiscal year (euro)					
	4,869,720,000	5,251,181,400	4,761,504,000	4,472,026,200	5,045,571,000
Earnings per share (EPS) (euro)					
	2.12	2.45	2.90	3.42	3.66
Share price/EPS (number of times)					
	17.02	15.84	12.14	9.66	10.19

STRATEGIC PLAN 2013-2017
Main strategic lines
Operational excellence

- A TSO of international reference
- Progress in improving the grid acquired in 2010 (Islands).
- Continuous improvement in operational efficiency.

Market integration and sustainability

- Optimal level of electrification.
- Development of international interconnections.
- High level of investment in the Islands.
- Adjustment to the investment plan on the Spanish peninsula.

Financial soundness

- Prudent and efficient financing policies.
- Anticipation in covering financial needs.
- Improving solvency ratios.