

ENVIRONMENTAL REPORT
2007



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PRESENTATION

2007 has been an extraordinary year from an environmental point of view, where important courses of action have been defined, such as the «The Spanish Strategy for Climate Change and Clean Energy 2007-2012-2020» and «The Spanish Strategy for Sustainable Development 2007», both of which will be the underlying pillars to bear in mind when developing our work over the next few years: the efficient use of resources, the fight against climate change, and land conservation.

In addition, the energy programme for the electricity sector has been approved for 2008-2016, where environmental strategy assessment has been included for the first time. In this direction, during 2007 we have collaborated at the request of the Ministry of Industry, Tourism and Commerce, in the elaboration of the environmental sustainability report regarding the infrastructures scheduled for the electricity sector planning.

In terms of our company, this new operation environment has been marked by the consolidation of Red Eléctrica as the Spanish TSO (Transmission System Operator), thereby becoming the only Transmission System Operator on the national electrical system. In line with this mission, we have to confront the new challenges facing the electricity system, especially when it comes to attending the growing demand and ensuring a safe, efficient electricity supply which provides quality to the consumer, without losing sight of our commitment to respecting the environment and both accepting and implementing, to the full extent of our responsibility, the previously mentioned strategies and plans.

Throughout 2007 we have continued to conduct environmental impact studies on all projects for new facilities, looking for traces of minor environmental and social impact. We have also worked to improve the energy efficiency of our facilities with the introduction of control measures and the reduction of consumption, especially in the electrical substations and

company buildings. Similarly, we have fostered good environmental practices among employees in conducting their daily activities.

However, the clearest example of our commitment to sustainability has been the start-up of the special regime control centre (CECRE), the world's first centre designed to integrate safely into the electrical system the maximum possible production of energy from renewable sources. This control centre has been awarded the European prize for the best Spanish sustainable development product.

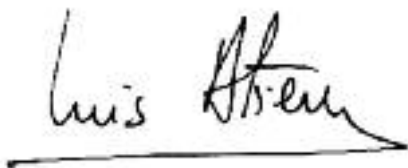
Besides encouraging the development of renewable energies, another of our contributions to the fight against climate change has focused on identifying and controlling our emissions.

On that score, we have recently signed an agreement with the Ministry of The Environment aimed at reducing sulphur hexafluoride, a greenhouse gas used as an insulator in transformers and electrical appliances in our facilities.

In terms of the management of natural resources and land conservation, the effort carried out during the year to formalise collaboration agreements with the regional authorities for the prevention and fight against forest fires. The implementation of preventive measures dedicated to this activity has meant more than 80% of the environmental spending for 2007.

All these achievements are fruit of the important effort we dedicate to making the development of electrical infrastructures compatible with the safe-keeping of the natural and social ecosystem where the projects are put in place, and not only do they show our commitment but they also confirm it as a strategic value. This has been demonstrated in the recent implementation of our ethical code, which includes among its main aims the conservation and improvement of the environment, the fight against global warming and safeguarding of the flora and fauna.

This report we offer you shows yet again our decided effort to stay on track, convinced of the importance of environmental protection and the responsibility we have to ensure that our company is in this field too, an exemplary citizen.

A handwritten signature in black ink, reading "Luis Atienza Serna". The signature is written in a cursive style and is underlined with a single horizontal line.

Luis Atienza Serna
Chairman of RED ELÉCTRICA DE ESPAÑA





01

WHO IS RED ELÉCTRICA

We are the leading company in
electrical energy transmission.

We are responsible for the operation
of the Spanish electrical system and
for the transmission grid operations.



We operate the peninsular and extra-peninsular Spanish electrical system, guaranteeing the technical conditions for the electricity to flow constantly from the generating centres to the consumption centres through a transmission grid that distributes electricity throughout the entire country.

We own practically all the Spanish high-voltage electricity transmission grid. Our facilities comprise: the electrical control systems which direct and supervise the system operation, along 33,669 kilometres of high voltage transmission lines and through 3,043 positions in substations with a transformation capacity of 58,022 MVA.

Evolution of the facilities

		2005	2006	2007
Lines	Kilómetros de circuito	33.096	33.503	33.669
	400 kV	16.808	17.005	17.134
	220 kV y menor	16.288	16.498	16.535
Substations	Número de posiciones	2.742	2.916	3.043
	400 kV	877	950	1.004
	220 kV y menor	1.865	1.966	2.039
	Transformación (MVA)	54.272	56.072	58.022

All the activities we carry out are done in accordance with a strict environmental policy, based on an ethical commitment to society and integrating environmental protection into our business management, in order to create ongoing added value. To do this we hold the Environmental Management Systems UNE-EN ISO 14.001:2004 certified in May 1999 and registered at the EU Eco-Management and Eco-Audit System (EMAS) under registration number ES-SB-000013 from October 2001.

We are the first business group in the energy sector to hold the triple comprehensive quality, environmental and occupational health and safety certifications for all its companies.

Our Environmental department comprises a group of 21 professionals, with widely varying educational backgrounds who are experts in environmental affairs, who actively support all the organisational units in all their affairs. Respect for the environment is the task of all our employees and collaborators in carrying out our everyday work and contributes to conserving the habitat, correct waste management and reducing the consumption of natural resources to a minimum in our work stations.



Red Eléctrica has consolidated its position in the main Dow Jones Sustainability Indexes (DJSI), DJSI World Index, and the DJSI STOXX Indexes. 2007 saw us obtain a score of 76 points out of a total score of 100 and for the second year running we have improved our score and are closing in on the best in the sector, on a global level, which have a score of 81.

These indexes review the social, environmental and economic management through the use of more than fifty different general and specific criteria for each sector. In the environmental section, the company obtained the highest score in biodiversity management, environmental actions and climate strategy.

In addition, in 2007 Red Eléctrica was selected by the European Environmental Awards to Industry in the category of a sustainable development Product, for the implementation of the Special Regime Control (CECRE) which enables the maximum amount of renewable energies to be integrated into the Spanish electricity system constantly and in safe conditions.





02

ENVIRONMENTAL POLICY

As a group, we at Red Eléctrica express our commitment to protecting the natural environment through our environmental policy.



The RED ELÉCTRICA group expresses its commitment to protect the natural environment and undertakes to ensure that each employee in the group carries out their daily work with the maximum respect for the environment, through ongoing improvement in complying with their responsibilities and functions.

The principles of our environmental policy are as follows:

- To guide the Group towards **sustainable development**, seeking commensurate balance between respect for the environment, the promotion of progress and social well-being and economic interests, with a view to creating permanent value.
- To ensure **leadership** in environmental issues in all the companies in the Group in all their areas of activities.
- Ensure **compliance with the environmental legislation, regulations and norms applicable** to the activities they carry out.
- To ensure **continuous improvement and prevent contamination** by updating and monitoring the environmental management systems, as well as the environmental goals and targets.
- To promote **research, development** and the use of new technologies and processes in order to reduce or minimise environmental impact.
- To **incorporate environmental variable** in the design and development of new plans and projects for facilities or in modifying already existing ones.
- To incorporate environmental requirements into the process of selecting and evaluating **suppliers and contractors**.
- Develop and deliver lifelong **learning, awareness and motivation** actions on environmental protection to achieve more active involvement of employees.
- Develop methods and channels of **communication** for informing and communicating with all interested parties on activities with respect to the environment.



Front cover of the Environmental Policy brochure.







03

INDICATORS

By way of introduction,
the following is a numerical
presentation of our most
significant environmental
actions.



By way of introduction, the following is a numerical presentation of the information deemed most relevant and which is developed throughout the Environmental Report, with the corresponding page number on the last column on the right.

Objectives		2005	2006	2007	Page
Environmental Compliance Program	Environmental objectives completed / Total environmental objectives (%)	84,55	60,90	54,84	20
Activities affecting Red Natura 2000		2005	2006	2007	Page
Land surface area located in biodiversity-rich habitats	km lines LIC/km total lines (%)	13,12	12,45	14,28	38
	Surface of LIC lines/ total LIC surface in Spain (%)	0,097	0,099	0,12	38
	km lines in SPA/ total km of lines (%)	9,10	9,31	11,6	38
	Surface of SPA lines/ total SPA surface in Spain (%)	0,096	0,10	0,14	38
	No. substations in LIC/ total No. substations (%)	8,37	7,06	8,98	38
	No. substations in SPA/ total No. substations (%)	7,41	5,70	7,3	38
Impacts on biodiversity	km of lines built in LIC this year / km of lines built during the year (%)	1,82	1,18	5	32
	km of lines built in SPA in the year/km of lines built during the year (%)	1,82	1,18	0	32
	No. substation built in LIC in the year/No. substations built in the year (%)	0	0	0	32
	No. substation built in SPA in the year / No. substations built in the year (%)	0	0	0	32
Restoration and protection of habitats and species		2005	2006	2007	Page
Habitat restored	No. of new facilities constructed in the year including the restoring of landscapes* / No. of new facilities constructed in the year* (%)	50	55	54	32
	No. of new facilities in which archaeological exploration in the year during construction has been conducted / No. of new facilities built in the year (%)	65	73	75	32
	km of lines marked with bird saving devices	631	686	779	38
Objectives and programs to protect and restore eco-systems and native species	km of lines marked with bird saving devices / km of existing line (%)	2,84	2,89	3	38
	km of marked lines in SPA / km total lines which pass through SPA (%)	10,21	9,38	7,1	38

* New facilities built whose construction was completed within the year.

Consumption of natural resources			2005	2006	2007	Page
Consumption of natural resources	Power consumption	Control Centres (kWh)	8.885.276	8.735.875	8.984.653	40
		Workplaces (kWh/employee)	14.769	18.280	16.193	40
	Water consumption (m ³ /employee)	Headquarters	9,22	14,22	12,46	41
		Work Centres	26,8	38,5	27,52	41
	Paper consumption (kg/employee)	Todos los centros de trabajo	ND	63	48	42
	Cars Consumption (litros/100 km)	SUV/truck fleet	ND	10,22	19,81	42
Cars		ND	7,70	6,89	42	
ND-no data Regarding the reports of previous year's data does not have traceability given that the system of calculation and the source of the data have been improved.						
Waste Generation			2005	2006	2007	Page
Total production of waste	kg of hazardous waste		106.415	247.343	764.741	44
	kg of non-hazardous waste		1.838.057	1.169.021,87 ^(*)	2.195.127	44
(*) Data from non-hazardous waste relating to 2006 has suffered a slight variation with respect to that published last year as it has been subsequently adjusted.						
Accidents			2005	2006	2007	Page
Oils and fuel spills	No accidents involving oil and fuel spills in the year arising from maintenance activities		6	14	14	47
	No oil spill accidents in the year and fuels derived from construction activities		15	6	2	47
The data relating to maintenance has been reviewed with respect to the memories of previous years.						
Research and Development			2005	2006	2007	Page
Environmental R+D+i	Spending on environmental R+D+i/ Total expenditure on R+D+i. (%)		8,85	11,56	6,10	50
Training and awareness			2005	2006	2007	Page
Environmental Education	Employees who have received environmental training in the year/ Total employees (%)		5,30	3,66	3,34	54
Communication with stakeholders			2005	2006	2007	Page
Environmental Communication	No. visits to the environment section of the external Web		54.486	88.915	89.039	58
	No. downloads of environment publications in the external Web		11.552	131.044	244.242	62
Contributors			2005	2006	2007	Page
Supplier environmental behaviour	Suppliers with USG certificate (ISO 14,001 or EMAS) (%)		22	38	40	66
Disciplinary measures			2005	2006	2007	Page
Incidents and fines for non-compliance with environmental standards	No. of sanctions resolved with a fine in the year		1	5	4	70
	Total amount of fines in the year (€)		360	6.385,25	491	70
Regarding the reports of previous years data has no traceability since it incorporates information from records resolved with a fine and the amount of these once resolved. There are still unresolved cases from 2005, 2006 and 2007.						
Environmental costs			2005	2006	2007	Page
Environmental Investment	Environmental investment (€)		2.074.968,98	6.293.732,62	2.086.624,86	74
	Environmental investment/Total investment (%)		0,57	1,22	0,35	75
Environmental expenditure	Environmental expenditure (€)		5.879.716,37	9.321.594,39	15.359.789,82	74
	Environmental expenditure / Total expenditure (%)		2,18	2,03	2,11	75
	Environmental taxes (€)		901.695,48	971.902,75	1.102.378,74	75





04

OBJECTIVES

The Environmental Programme of Red Eléctrica contains an overview of the combination of environmental improvements that Red Eléctrica intends to carry out throughout the year.



The Environmental Programme describes the environmental objectives which may be annual or multi-year and the targets during the year for achieving each of these objectives.

For the degree of complexity of the activity carried out by Red Eléctrica, the geographical distribution and the multiplicity of actions, the Environmental Programme defines targets that are tied directly in with various environmental and other objectives that contribute to environmental improvement long term. In the various chapters of the Report, information is provided on how environmental issues are associated with different activities.

The overall compliance of the Environmental Programme 2007 has been 54.84%. The following is a table that summarizes the objectives discussed during 2007 indicating their weighting within the Programme and what was their level of compliance.

Action areas	Objectives	Weighing the objectives in the Programme	Degree of compliance
Improvement actions associated with the prevention of causing any effect on the environment			
Improvement in the environmental management system	Homogenization of documentation that conforms environmental impact assessments.	5	5
	Portal for inventory and management of environmental information of Red Eléctrica's main assets. ⁽¹⁾	7	7
	Environmental certification of works ⁽¹⁾	5	0 ⁽¹⁾
Preservation of birdlife	Preventing effects to birdlife in sensitive areas. ⁽¹⁾	5	5
Environmental criteria for planning	Development of environmental criteria for environmental assessment of the electrical energy transmission grid.	Eliminated ⁽²⁾	Eliminated ⁽²⁾
Improvement actions associated with significant pollution prevention			
Improvement of emission control.	Actions to mitigate noise in substations.	5	0 ⁽¹⁾
Improvement actions associated with significant environmental aspects			
Preservation of vegetation	Prevention of effects on vegetation. Defining criteria for drawing up plans for logging and pruning.	7	7
Reducing the risk of accidental spills	Update environmental inventory of Red Eléctrica's assets. ⁽¹⁾	9	9
	Improvement actions in substations for the prevention of soil contamination by oil from power equipment, trafos and expansion tanks. ⁽¹⁾	9	4,5 ⁽³⁾
Waste management	Review of the final management of waste generated by maintenance and improvement proposals, if any.	5	0 ⁽¹⁾
Consumption control	Implementation of consumption control measures for natural resources. ⁽¹⁾	9	0 ⁽¹⁾
Improvement actions associated with other environmental aspects			
Relation with suppliers	Supplier environmental awareness.	5	2 ⁽³⁾
Training	8% Increase in the number of employees receiving environmental training. ⁽¹⁾	5	0 ⁽¹⁾
Comunicación	Improving the relationship with stakeholders. ⁽¹⁾	7	4
	Flora and fauna guides.	5	5
Environmental responsibility	Adaptation by Red Eléctrica to the future Law on environmental liability. ⁽¹⁾	5	2,5 ⁽⁴⁾
TOTAL		93	51
% COMPLIANCE			54,84

⁽¹⁾ Multiannual objectives.

⁽²⁾ Objectives not covered due to lack of resources or redefinition of these.

⁽³⁾ Dropped from Program for being considered a target of legal compliance in the EMAS 2006 audit. 100% compliance.

⁽³⁾ Continues in 2008.

⁽⁴⁾ Pending final report from Legal Consultants.

The total compliance of the environmental program is the result of calculating the percentage of the degree of compliance of the objectives with respect to the total weighting.

Overall, the decline in compliance of the Environmental Programme compared to previous years has been mainly due to internal organizational changes that have resulted in turn in the redefinition of tasks and responsibilities in the environmental field.

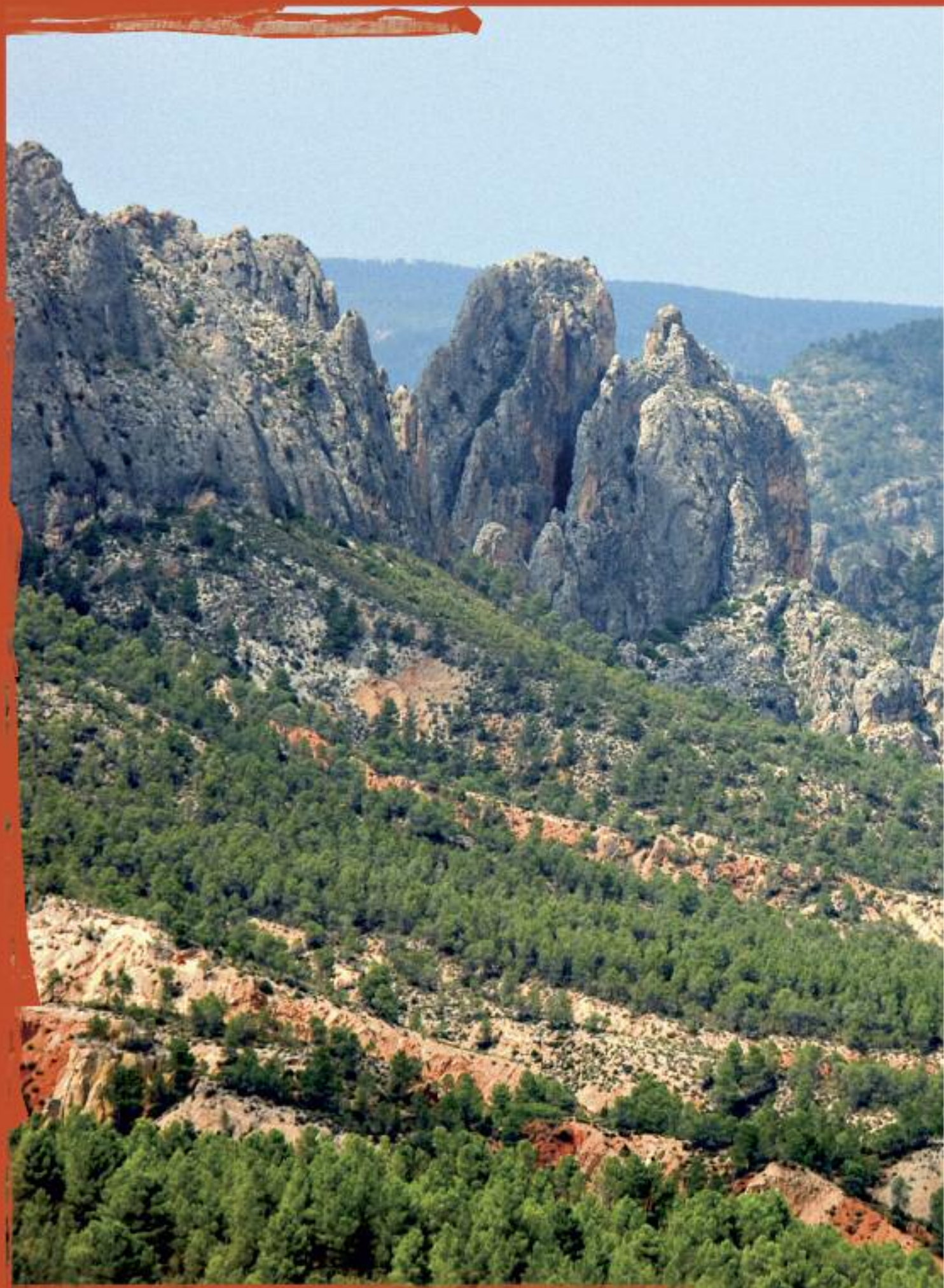
The following is a table that summarizes the environmental objectives adopted by the Management for 2008.



Environmental Programme 2008

Action areas	Objectives	Weighting of the objective in the Programme
Improvement actions associated with the prevention of causing any effect on the environment		
Improved environmental management system	Portal for inventory and environmental information management of Red Eléctrica's assets: Development of 2 new software applications for environmental management. ^(*)	10
	Improvements in the design of new substations: Integration of environmental criteria in the engineering substation standardisation.	8
	Review of environmental criteria in the process of construction.	10
Preservación de la avifauna	R+D+i for nature conservation: Birdlife(2) ^(*)	8
Inventario ambiental	Updating of the environmental inventory of Red Eléctrica's assets: 60 substations and incorporation of environmental criteria in roadmaps for line maintenance. ^(*)	8
Improvement actions associated with pollution prevention		
Improvement in emission control	Improvement in the integral management of SF6. Reducing emissions. ^(*)	8
Improvement actions associated with significant environmental aspects		
Reducing the risk of accidental spills	Improvement actions in substations to prevent contamination of soils: Actions intended in 18 power machines, 16 auxiliary machines; 8 fuel tanks, 5 spillage units; 9 in land cleaning; 19 in storage and waste management and equipment; 2 in improving waste storage area and 7 in compressors. (*)	20
Consumption control	Creation of the group «Red Eléctrica Eficiente» (REe).	8
Improvement actions associated with other environmental aspects		
Relation with suppliers	Supplier environmental awareness: E-training for level 4 qualified suppliers and training of works supervisors and managers.	6
Relationship with stakeholders	Awareness of environmental stakeholders: SEPRONA. ^(*)	5
Communications/Awareness	Promoting good environmental practices among construction, gardening and cleaning contracts.	9
TOTAL		100

^(*) Multiannual objectives





05

ENVIRONMENTAL ACTIVITIES

We are committed to
integrating environmental
protection in the normal
development of the activities
that we conduct every day.

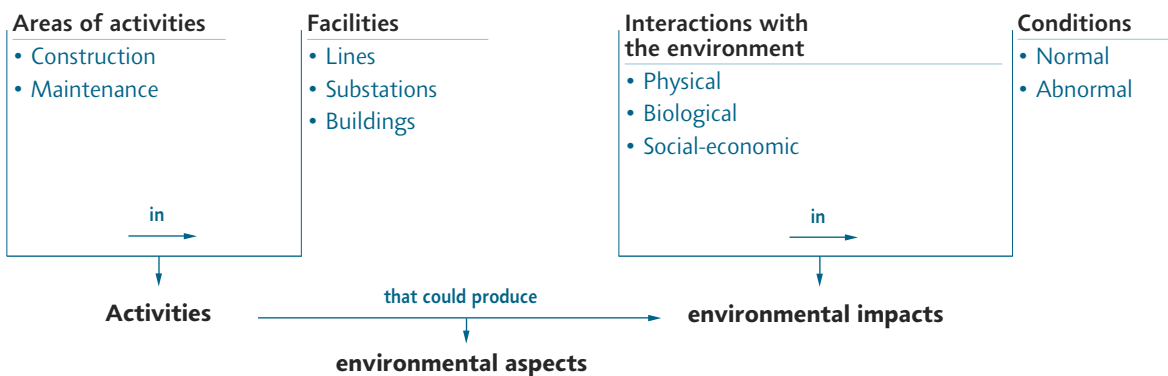


During **the design** phase we perform environmental studies on all our facilities and define the alternatives, which are technically and economically feasible and have the least possible impact on the environment and society.

During the **construction phase** we conduct comprehensive environmental monitoring of all the works being executed both for new facilities and modifications to existing ones.

During the **maintenance phase** we carry out systematic, periodic reviews and audits on the facilities in services which allows us to define and implement preventive and corrective measures, detect environmental impact and verify the effectiveness of the measures in place during the construction phase.

In all design and construction projects and in the maintenance activities conducted at facilities in operation, we identify and assess the direct and indirect environmental aspects that could interact with the environment, producing any kind of negative impact, both in normal and abnormal operation conditions.



5.1. Environmental activities in facilities being planned

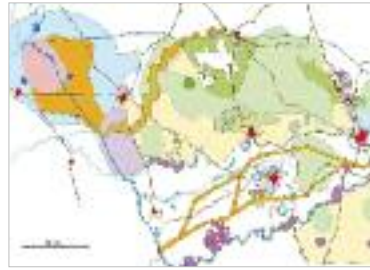
During 2007 the Ministry of Industry, Tourism and Trade (MITYC) carried out the planning of the electricity and gas sectors for the period 2007-2016. One of the priority objectives of this planning is to reconcile the preservation of environmental quality with the principles of efficiency, safety and diversification of the production, transformation, transmission and use of energy.

A new addition and following the approval of Law 9/2006, of April 28, for assessing the effects of certain plans and programmes on the environment, the planning of the electricity sector must be subject to a process of strategic environmental assessments. In this regard, we have worked, at the request of MITYC, in developing the Environmental Sustainability Report.

We have also conducted environmental impact studies of all new projects or facilities whether or not they are subject to the procedure for environmental impact assessment.

During the preparation of the studies, we have consulted and come to an agreement on the alternative of lesser impact for each project with the environmental agencies of the corresponding autonomous communities.





Map with alternative corridors

Logging Map

In 2007 the positive environmental impact statement (DIA) for six lines and substations was obtained from the Ministry of Environment (MIMAM):

Environmental Impact Statements

L/Cabra-Guadame

SS. Gazules
L/Gazules-L/Alcores-Pinar del Rey
L/Gazules-L/Casares-Puerto-Real

SS. Grado
L/Salas-Grado
L/Grado-L/Soto-Tabiella

L/Aparecida-Tordesillas

SS. Jordana
L/Jordana-L/Pinar del Rey-Tajo de la Encantada
L/Jordana-L/Bahía de Algeciras-los Ramos
L/Jordana-L/Alhaurín-Pinar del Rey

SS. Muniesa
SS. Mezquita de Jarque
L/Fuendetodos-Muniesa-Mezquita de Jarque

During the year the total number of electric lines and substations involved in any of the procedural stages of environmental impact assessments (prior consultations, public information or resolution) was 38 (see Annex).



5.2. Environmental activities in facilities under construction

We carry out environmental monitoring of the construction of new lines and electrical substations as well as extensions, renovations and upgrading of facilities already in service. This supervision consists mainly in checking the implementation of preventive and corrective measures defined in the project and verifying their effectiveness.

Throughout the year we made environmental monitoring work in the construction of 15 new lines and 17 new substations (see Annex).

Here are the construction activities of new lines and substations capable of generating environmental aspects:

Activities causing environmental aspects

Use of machinery
Storage and transfer of oils and fuels
Storage and waste management
Excavation and filling work
Compaction
Concreting and cleaning containers
Clearing, pruning and harvesting
Laying of conductor and ground cables (lines)
Mounting equipment (substations)
Work camps (substations)





Lifting of support with crane



L/José María Oriol-Arañuelo (Repowering)

The environmental aspects that have proved significant in building new lines and substations are those detailed in the table.

Significant environmental aspects in the construction of lines and substations		Means susceptible to impact
Noise		Socioeconomic/Biological
Generating dust (1) ⁽¹⁾		Physical/Biological/Socioeconomic
Affecting the fauna		Biological
Affecting vegetation ⁽¹⁾		Biological
Affecting the soil		Physical/Biological
Tipping from work camps ⁽¹⁾		Physical
Affecting the historical heritage		Socioeconomic
Risk of fire		Physical/Biological/Socioeconomic
Risk of oil and fuel spillage during use of machinery ⁽¹⁾		Physical
Risk of dumping oil and fuel during storage and transfer of oil and fuels ⁽¹⁾		Physical
Risk of oil spills during assembly of equipment		Physical
Risk of affecting water during earthmoving		Physical
Risk of affecting birds ⁽²⁾		Biological
Non-hazardous waste	Inert waste (left over from excavation)	Physical
	Solid urban waste	Physical
	Plastic	Physical
	Wood	Physical
	Paper and cardboard ⁽¹⁾	Physical
	Scrap	Physical
	Vegetable waste	Physical
Hazardous waste	Rags impregnated with dangerous substances	Physical
	Containers that have had hazardous substances	Physical
	Land contaminated by hazardous substances	Physical
	Lubricants ⁽²⁾	Physical
	Greases ⁽²⁾	Physical

⁽¹⁾ Not identified in lines

⁽²⁾ Not identified in substations

During 2007 we have implemented corrective and preventive measures in new lines and substations aimed at mitigating the effect that the construction of this facility causes to the environment.

Preventive measures

Archaeological prospection
Hoisting of supports with jib crane
Saving topsoil
Installation of bird saving spiral
Transfer of nests

Corrective measures

Restoring of slopes via hydro-sowing and top soil
Regeneration of paths
Landscaping
Forest repopulation

Measures aimed at **protecting vegetation:**

- Notable actions were conducted in facilities located in the Regional Park of the Upper Basin of the Manzanares (Biosphere Reserve) defined in collaboration with the Autonomous Community of Madrid and aimed at protecting vegetation.

Facility	Action
S.S. La Cereal	Transplant of oaks located near the substation.
E/S in the SE. Galapagar	Replanting of 25 ht with indigenous species.
L/Galapagar Junction - S.S. Reyes Junction	Replenishment of plants and restocking of indigenous species.



Marking of the oak during cable laying.

- Also noteworthy:

Facility	Action
S.S. Garraf	Substation located between the Natural Park of Garraf, a quarry and two roads. adapting them to increase their chances of survival.
L/Zierbena-Abanto	Botanical study of the course.



L/Galapagar Junction - S.S. Reyes Junction (Cable laying).

Measures aimed at **protecting birdlife:**

- Signalling lines. Following cable and ground cable laying the land is marked in certain sections deemed as sensitive. We have marked a total of 33 kilometres of newly constructed lines in Andalucía, Extremadura, Murcia, Navarra and Valencia.

SS Salas. Preparing of an area to safeguard protected species of plants and amphibians.



Photograph 1. Detail of placing protected amphibians.



Photographs 2 and 3. Moving of habitat substrate of protected amphibians and plant species in the area which crossed the work area of



the substation, to a receiving area, capable of supporting and maintaining conditions that guarantee the survival of protected species.



Photograph 4. Conditioning of an area, recreating the required conditions.

- Biological stoppages. During the nesting of the most sensitive species construction activity stops in certain sections.

Facility	Action
L/Galapagar Junction-SS. Reyes Junction	Biological stoppage between the months of March and September due to the proximity to areas of black stork nesting.
L/Tordesillas-Segovia	Biological stoppage between March and September due the proximity to areas of nesting for the short-toed eagle, kite, hawk and the feeding area of the imperial eagle.



SS. El Palmar (landscaping)

Landscaping:

- Has been carried out in 7 lines and 11 substations in order to reduce the visual impact and integrate installations in the environment.

Facility	Action
SS. Hueneja, SS. Gazules, SS. Jordana, SS. Salteras, SS. Cartaza, SS. Trives, SS. Salas	Restoration of slopes with previously stored top soil minimizing the chromatic contrast between the deep layers and the surface layers and with hydro-sewing of indigenous species.
SS. Brovales	Landscaping by providing topsoil and plantations of bushes and trees indigenous to the area.
SS. Juiá	Landscaping of the environment.
SS. El Palmar	Landscaping of the substation.
SS. Gausa	Landscaping of the substation. Shielded substation 75% hidden from view by the mountains (preventive measure of the project), the other 25% has been hidden by landscaping. A drip irrigation system has also been installed with a by-pass so as to fill the water tank that exists to satisfy the services of the substation.
S/S en la SS. Gazules, S/S en la SS. Jordana, S/S en la SS. Salteras	All the bases of the supports have been replaced with topsoil previously gathered at the excavation stage.
L/Penagos-Güeñes	Hydrosewing of slopes.
L/Puentes de García Rodríguez-Mesón do Vento, L/Pesoz-Salas and L/Robla-Lada	The best possible accesses to new support sites were defined and the roads were regenerated. Manual sowing on all movements of land was carried out.



Photographs 1 and 2: SS. Gausa (landscaping)



Photographs 3 and 4: SS. Trives (embankment restoration)

Measures aimed at **protecting historical and artistic heritage:**

Facility	Action
L/Penagos-Güeñes	Line situated in the catchment area of the Cobrante cave (cave engravings). A vibration test was carried out in the Cobrante cave



Archaeological supervision (photograph archive)

Programs of social and environmental integration of the new facilities:

- Second interconnection cable Spain-Morocco

March 5, 2007 saw the inauguration of the second Spain-Morocco interconnection and the environmental educational classroom; "Conserve to Live Better", located on the main walkway of the Alameda in Tarifa.

This exhibition reflects the technical characteristics of the project and the environmental and social projects associated with the second Spain-Morocco interconnection and carried out in the Natural Park of the Straits of Gibraltar. This classroom is designed to make visitors (schoolchildren and the general public) aware that individual behaviour is very important for sustainable and responsible energy consumption. During 2007 this classroom received 1,227 students and 3,550 visits.

Throughout the year the following environmental projects initiated in 2006 have been completed:

- Characterization of river basins and the wildlife in rivers and streams between the Salado river (Conil) and the Guadiaro (San Roque).
- Study of the socioeconomic and conservation aspects of the cetaceous observation activity.

- Line Sama-Velilla

The environmental impact study has collected the routes proposed, in the prior consultations period, by the University of León and the FAPAS Foundation. These courses have been analysed by the Biological Station of Doñana (CSIC), and the route of least impact has been identified.

Moreover, all town councils have been visited to present the need for the installation and the least impact design.



Power cables L/Castejón-Muruarte.

• Underground Interconnection with Balearics

The route of least impact has been submitted to the social and environmental impact agencies and partners, both for the outlet in Sagunto (Valencia), and its arrival point in Calvià (Mallorca). It has also been submitted to the fishermen's associations.

As a result of environmental actions carried out during construction this year, the following describes some of the indicators.

Environmental performance indicators		2005	2006	2007
Impacts on biodiversity	km of lines built in LIC in the year/km of lines built in the year (%)	1,82	1,18	5
	km of lines built in SPA in the year/km of lines built in the year (%)	1,82	1,18	0
	No. substation built in LIC in the year/No substations built in the year (%) ⁽¹⁾	0	0	0
	No. substations built in SPA in the year/No. substations built in the year (%)	0	0	0
Restored/protected habitat	No. of new facilities constructed in the year, including the restoring of landscapes/number of new facilities constructed in the year (%)	50	55	54
	No. of new facilities where archaeological exploration during construction was carried out/No. new facilities built in the year (%)	65	73	75

⁽¹⁾ Buildings that have already been completed.

5.3. Environmental activities in facilities in operation

The following lists the activities carried out in facilities in service capable of generating environmental issues.

Activities causing environmental issues

Presence of the building
Presence of the line
Presence of the substation
Energy transmission and transformation
Maintenance of gardens and electricity farms
Maintenance of line lanes
Maintenance of line supports
Use of machinery in maintaining lines
Use and maintenance of equipment:
• Generator
• Fuel tanks
• Evaporative condensers
• Air conditioning equipment
• Intensity transformers and capacitor banks
• Power machines
• Auxiliary transformers
• Oil collection pits
• Equipment with sulphur hexafluoride
Transfer of oil for equipment maintenance
Storage of contaminating material
Consumption of natural resource
Waste



SS. El Palmar (landscaping)

Of all the environmental aspects identified, those which proved most significant after the assessment made in 2007 are listed below. For each one of them steps have been taken which are described throughout the publication.

Significant environmental aspects ⁽¹⁾	Means susceptible to impact
Environmental impact by clearing, pruning and harvesting	Biological
Environmental impact due to consumption of electricity, water and paper	Physical/Biological
Risk of affecting the environment due to leaks or spills of oil from power machines, power machines pits and auxiliary transformers	Physical
Risk of affecting the environment due to fire and/or explosion of power machinery and auxiliary transformers	Physical
Risk of affecting the environment due to leaks or spills of oil equipment que contienen PCBs	Physical
Risk of affecting the environment by spillage from fuel storage tanks	Physical
Storage and disposal of non-hazardous waste	Physical
Storage and disposal of hazardous waste	Physical
Significant environmental aspects occasionally detected ⁽²⁾	Means subject to impact
Effect on birdlife due to the withdrawal of bird nests	Biological
Risk of affecting the environment by fire	Physical/Biological/Socioeconomic
Risk of affecting the physical environment by oil spill IT and TC	Physical
Risk of affecting the physical environment by fire and/or explosion of IT and TC.	Physical

⁽¹⁾ Significant aspects in most workplaces
⁽²⁾ Significant aspects in a single workplace



Environmental birdlife monitoring.

Of all the environmental actions carried out during facility maintenance in 2007, the following are noteworthy:

With regard to activities aimed at **protecting birdlife**:

- **Monitoring of collisions on lines:**

The collision of birds with transmission lines is usually produced on ground cables (that protect the lines from electric discharges during storms), and as they are of less diameter than the conductors they are less visible. Therefore, actions aimed at reducing the risk of collision are based on the marking of these cables with devices that increase their visibility.

Overhead lines have been marked in Aragón (within the framework of the project Life-Naturaleza: “Making Power Lines in the SPAs in Aragón Suitable”), Álava (within the framework of the multi-year contract signed with the Provincial Council of Álava for making power cables suitable), Castilla-La Mancha and Madrid.

To date a total of 779 kilometres of line have been marked of which 213 are located in special protection areas for birds and the rest in areas close to nesting or feeding sites of sensitive species, migratory routes, ultimately in those spaces where species likely to collide are detected.

- **Monitoring of nesting in supports:**

The supports for power lines are used by many species of birds in those areas without other suitable material, for hunting -for perching or for cutting up prey-, for rest areas -roosts-, for breeding -supports for the nests-, or as shelters.

- **Raptors:** The nesting of birds of prey on support of lines power does not increase the risk for individuals or alter the normal operation of the facility.
 - Two imperial eagle nests (*Spanish imperial eagle*) and three Bonelli's eagle (*Hieraetus fasciatus*) have been identified on support of lines located in Extremadura. Maintenance actions on these supports are subject to measures that ensure the conservation of those species.
 - Peregrine falcons (*Falco peregrinus*): On an annual basis during the resting and breeding period, an inventory of the falcons located in nests on transmission support lines; in the province of Valladolid is carried out (*Territorial Wildlife Service of the Ministry of The Environment of Castilla y León*).





- Waders: the nesting of the white stork on supports of power lines is now a major problem for companies in the sector. Studies carried out so far have involved the design, testing and tracking of breeding and nesting deterrent devices for the white stork (device registered as a public utility model in 2000).
 - White stork (*Ciconia ciconia*): Annual monitoring is carried out on support lines occupied by stork nests in the nesting period. In 2007 a total of 800 supports distributed on lines in 36 communities located in Andalucía, Extremadura, Castilla-La Mancha, Castilla y León and Madrid have been inventoried. Overall effectiveness of the measures is calculated to be above 50% (percentage of nests located in non-conflicting points on protected supports).



SS. Lora. (Evacuation of energy from the wind farm.)

Evolution of the white stork population in Spain

Year of census	Nº of mates surveyed
1992	10.000
1994	16.643
2004	33.217

Information extracted from "The White Stork in Spain". VI international census (2004) "(SEO/Birdlife)



SS. Aguayo.

With regard to the activities of **pollution prevention**:

- During 2007 improvements have been made to facilities, making the systems for containing oil spills in six substations more suitable (four refurbishments of power machines and two auxiliary machines).
- A plan for decontamination/disposal of equipment contaminated with PCBs. Red Eléctrica has 21 units currently listed (> 50ppm) and this year has conducted the decontamination of two auxiliary transformers in the substation of Guillena and a power reactance in Almaraz (leaving 19 remaining units, which will be progressively decontaminated until 2010).



L/Castejón-Muruarte. Compatibility of electrical infrastructure (solar farm/transmission grid.)

With regard to actions taken on **noise pollution**:

During 2007 acoustic screens attached to the transformers banks were installed at the substation of Cartelle (Ourense). This action stems from the results of the R+D project that took place during 2006.

The acoustic screens installed are 10 meters high and about 100 meters long and consist of panels of galvanized steel with a rock wool padding to cushion the sound intensity.

Predictably, in areas closer to the screen noise levels have dropped significantly and the noise level in Reigoso (the village that was affected by noise) has been reduced by about 6 dB (A). This is very significant because this would amount to the emission of four times less noise. It is worth noting that the previous values were 37 dB (A), already far below the legal limit, set at 55 dB (A), and now are 31 dB (A).

Currently the substation is virtually inaudible from the homes of Reigoso, as the threshold for human ear perception is around 30 dB (A), therefore the annoyance has disappeared.

With regard to **electromagnetic field control activities:**

We are aware of the social interest and concern that electric and magnetic fields generated by facilities produce in the population. For this reason we are working day by day on:

- Remaining alert to all scientific advances and media and social developments that are generated (we have been signed up for more than ten years to an international information service, ELF Gateway, which reports almost daily by e-mail to all its customers on developments that appear globally) and participating in various working groups.



Junction support for the power line from the SS. Haro



L/Tibo-Louiza



L/Benejama-Catadau





- Knowing the values that are generated in our facilities: Red Eléctrica have been carrying out over the past few years a comprehensive action plan in which values were measured at more than 2,000 points next to their facilities. The results obtained show that the overhead high voltage power lines do not generate a magnetic field more than 100 μ T, even at the closest point to the conductors and that only in very specific circumstances would there be an electric field close to 5 kV/m (just below the conductors on some 400 kV lines). These values (5 kV/m for the electric field and 100 μ T for the magnetic field) are those, which after establishing different safety factors, that the European Union Council recommends for the public at sites where they can remain quite some time, therefore we can say that the high-voltage electrical installations comply with the European recommendation.

- Informing openly and honestly (we publish in collaboration with UNESA a quarterly newsletter on developments in the EMFs of 50-60 Hz), responding to public inquiries and working with the Administrations and Institutions.

More information on this environmental issue in Chapter 6.

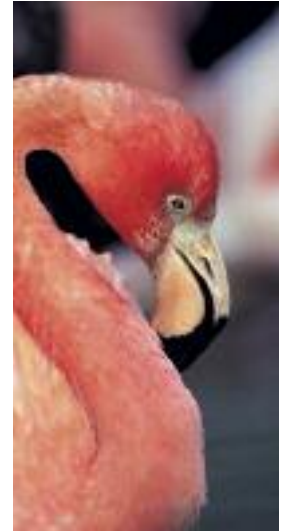
Environmental performance indicators		2005	2006	2007
Surface soil in habitats rich in biodiversity^(c)	km lines LIC/km total lines (%)	13,12	12,45	14,28
	Surface lines in LIC/ Total area of LIC in Spain (%)	0,097	0,099	0,12
	km line at SPA/ Total km of lines (%)	9,10	9,31	11,6
	Surface lines in SPA/ SPA Total area in Spain (%)	0,096	0,10	0,14
	No. substations in LIC/total No. Substations (%)	8,37	7,06	8,98
	No. substations in SPA/total No. Substations (%)	7,41	5,70	7,3
	Objectives and programs to protect and restore ecosystems and native species in degraded areas	Km of lines marked with bird saving devices	631	686
Km of lines marked with bird saving devices/km of existing Lines (%)		2,84	2,89	3
km of marked lines in SPA/total km lines passing through SPA (%)		10,21	9,38	7,1

^(c) During 2007 enormous work has been done on updating the georeferenced inventory of facilities. Many of the variations in the indicators presented are related to the increase in facilities inventoried..

5.4. Consumption of natural resources ⁽¹⁾

In our daily work we consume natural resources which form part of our environment, excessive consumption will lead to depletion. We are aware of this fact hence we try to work within a line aimed at reducing consumption of commodities such as water, electricity, paper, fuel, etc.

In June and July 2007 Red Eléctrica launched the press campaign "**Ask to have the air turned down**" to make consumers aware of the importance of the rational consumption of electricity, especially air conditioning, from a double point of view: the individual economic benefits associated with this and the overall energy savings and environmental benefits for pollution and climate change. This was not an energy saving campaign but one for efficient intelligent use of energy. This campaign lasted 15 days and had a budget of 508,707 Euros.



Electricity consumption

Electricity consumption at the head office and the building of Tres Cantos are not comparable to those of an average office. The head office comprises a complex of four buildings dedicated to office activity; one of them houses the Electricity Control Centre (CECOEL) - where the operation and coordination in real-time monitoring for generation and transmission facilities of the electrical system in Spain are conducted and the Special Regime Control Centre (CECRE) - to control special regime facilities (renewables and CHP). Tres Cantos houses the Grid Control Centre (CECORE), a back-up system to the existing system in the Head Office. The three control centres require electronic equipment and air conditioning which continuously operates 24 hours a day, seven days a week.

The power consumption of the work centres is equivalent to the consumption of an office.

⁽¹⁾ During the past 4 years we have worked on improving the collection of data on consumption of natural resources and their subsequent treatment in order to define some indicators that reflect, with the greatest possible consistency, the behaviour of Red Eléctrica in relation to this environmental issue. Thus, in 2007 these indicators have been redefined, broken down by centre or adjusted depending on the information obtained.

The indicators presented throughout this chapter have been calculated retroactively (2005 and 2006) to verify their evolution.



The table below shows the evolution of electricity consumption for the period 2005-2007.

Control centres	2005	2006	2007
Head Office (kWh)	7.652.526	7.359.126	7.414.516
Tres Cantos (kWh)	1.232.750	1.376.749	1.570.137
Total control centres (kWh)	8.885.276	8.735.875	8.984.653
Places of work	2005	2006	2007
Places of work (kWh/employees)	14.769	18.280	16.193
No. Centres for which yearly data is available	9	13	14

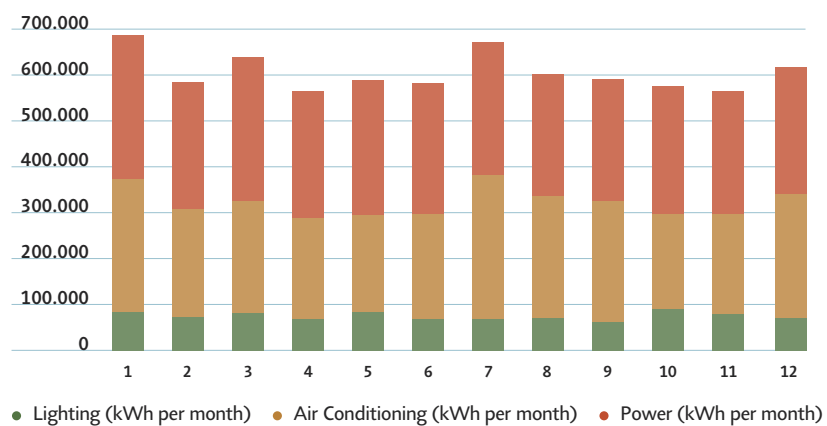
	2005	2006	2007
Emissions associated with the consumption of electricity (*) (t CO2 equivalent)	4.421	4.887	5.848

(*) Source used for the calculation: International Energy Agency 2006 (corresponding to Spain 2004, mixed generation).

During 2007 an integral energy audit was conducted on the four-building complex that makes up the **head office of Red Eléctrica** (Alcobendas-Madrid).

- The table shows the annual distribution of electricity consumption.

Annual distribution of consumption



- Determination of energy saving and efficiency methods, in addition to contemplating the integration of renewable energies. The implementation of the measures is validated through their use in the buildings at head office (all measures implemented in the head office buildings are installed in branch buildings). So far the measures have been successful and are as follows:
 - Acclimatisation management system: (benefits: reduces air conditioning consumption).
 - Temperature regulation in offices, adapting the temperature thresholds to those recommended by the RITE (Regulation for Technical Installations in Buildings) from 23 to 25 degrees in summer and from 20 to 23 degrees in winter.
 - Solar controlled sheets on the windows (Benefits: high light transmission and low solar reflection).
 - Lighting timer in toilets (Benefits: guarantees that lights are switched off).
 - Installation of lights with electronic ballasts rather than electromagnetic ones: (benefits: saving electricity consumption and longer life).
 - Installation of Led type lighting as a decorative lighting system.(benefits: Electrical consumption savings and longer life).



The introduction of cost-saving measures and energy efficiency means savings in energy and the avoidance of CO₂ emissions into the atmosphere.

Water consumption

The table below shows the evolution of water consumption in the period 2005-2007 (data does not include water tanks). The water consumed on the premises of Red Eléctrica comes from diverse sources; the municipal supply, wells, tanks and cisterns, water tanks (for sanitary use and fire prevention).

	2005	2006	2007
Headquarters (m ³)	7.376	11.850	8.240
Headquarters (m ³ /employee)	9,22	14,22	12,46
Places of work (m ³)	7.179	12.245	10.846
Places of work (m ³ /empleados)	26,78	38,5	27,52
No. Centres for which data is available by year	14	17	20



Paper consumption

The following table shows the evolution of the consumption of paper from photocopies and printed documents in all the work centres during the period 2006-2007. Red Eléctrica implanted a system based on user a service, where the company contracted takes full care of the photocopiers installed in all the work centres and guarantees a more efficient use of them.

	2006	2007
kg	87.011	67.745
kg/employees	63	48

The table below shows the evolution of paper consumption in publications for the period 2005-2007.

	2005	2006	2007
kg	57.526	66.166	73.173
% FSC ^(*)	—	—	44,3

^(*) Paper certified in accordance with the Forest Stewardship Council standards.

Fuel consumption in fleet vehicles

The following table shows the evolution of the consumption of the vehicles from the float during the period 2006-2007.

	2006	2007
All road carriers/trucks (litres/100)	10,22	19,81
Cars (litres/100 km)	7,70	6,89

	2006	2007
Emissions associated the use of fleet vehicles (t CO2)	1.423,5	1.932 ^(*)

^(*) 869,838 km more have been used than in previous years.

In addition, Red Eléctrica carries out initiatives to reduce other indirect energy consumption sources, such as fuel consumption for transporting employees by putting a bus into service to bring employees to work at company headquarters (Madrid).

Analyzing the results we are committed to continuing improvement and to design measurements which enable us to gradually reduce the consumption of natural resources.

5.5. Waste

All the maintenance activities in the facilities as well as the construction of new facilities generate different types of residues which are separated, stored and managed in a suitable manner.

During **maintenance**, waste derives from repairs, replacements, oil filling, cutting and pruning, accidents, etc. Given these different sources, it is very difficult to establish production guidelines and therefore, reduction guidelines.

The amount of waste generated in maintenance is related with the quantity of installations in service and given that this has been increasing over the last few years, increases have also been produced in the quantity of waste generated. During 2007 the growth in the amount of the non-hazardous waste is associated to this, (increase in maintenance in facilities) and the significant campaign of retrofitting carried out. On the other hand, the increase in dangerous waste is mainly attached to the number and characteristics of the accidents which occurred during this year.

However we try to reduce the quantities as far as possible by carrying out the regeneration of transformer oil (extending its useful life) and trying to improve our processes.

Besides working to improve waste management, trying to segregate to the utmost, we look for the best options from our suppliers and encourage good practice through training and awareness.



Waste storage area in substation



Waste storage area on work site



Waste generated during maintenance activities

Amounts Managed (Kg)

		2005	2006	2007
Non-Hazardous waste	Sediment from septic tanks	79.060	51.412,6	177.148
	Scrap metal	691.856	998.545	1.876.311 ⁽¹⁾
	Inert substances	928.629	sd	sd
	Paper and cardboard	72.024	73.405	78.652
	Toner	1.253	343,6	186 ⁽²⁾
	Wood	64.850	42.455	58.380
	Non-hazardous electrical and electronic waste	65	473	230
	Plastics	sd	187,67	0
	Vegetable cooking oil	320	2.200	4.220
	Total non-Hazardous waste	1.838.057	1.169.021,87	2.195.127
Hazardous waste	Used oil	72.650	168.730	95.470
	Oil and water mix	0	0	110.960 ⁽³⁾
	Transformers with PCBs	459 ⁽²⁾	0 ⁽²⁾	2.413 ⁽⁴⁾
	Oil with PCBs	180	0	520 ⁽⁴⁾
	Lead batteries	1.102	311	338
	Nickel and cadmium cells	2.327	2.070	10.960
	Batteries	227	89	114
	Hazardous electrical and electronic waste	35	0	269
	Flourescent tubes	428	539	410
	Earth impregnated with hydrocarbons	26.940	14.253	161.151 ⁽³⁾
	Recipients which contained hazardous substances	673	1.113	1.604
	Absorbent filtering materials, cleaning rags, and protective clothing contaminated by hazardous substances	663	59.287	371.184 ⁽³⁾
	Silica gel	0	733	285
	Non-halogenated solvents	29	35	325
	Halogenated solvents	500	0	0
	Water based cleaners	200	0	50
	Paint waste	2	183	0
	Isolation material with and without asbestos	ND	ND	8.680
	Hazardous chemical lab products	ND	ND	8
	Total Hazardous waste	106.415	247.343	764.741

ND – no data

N.b.: For the calculation of non-hazardous waste, vegetable waste generated in 2007 (8,801.3 t) was not taken into account as most of it was delivered to the owner or incorporated into the land. In addition, other vegetable residues have been generated with the same end and have not been accounted.

⁽¹⁾ The majority of scrap generation is directly related with the installation programme campaign. (Data for 2006 has suffered a slight variation with respect to that published in 2006 as it has been adjusted after its publication).

⁽²⁾ Since July 2006 the correct management and replacement of equipment has been carried out by an external company. Only toner not included in the contract was accounted for.

⁽³⁾ It can be seen that most of the waste production corresponds with that associated to accidents: Water oil mixtures, contaminated and absorbent mixes.

⁽⁴⁾ Corresponding to equipment managed until the end of its working life. Not on the inventory but the administration was informed.



Types of management

Non-Hazardous waste	Sediment from septic tanks	Treated/Elimination
	Scrap metal	Recycling
	Paper and cardboard	Recycling
	Wood	Valorization/Elimination
	Vegetable waste	Back into the land/ Valorization/Elimination
	Vegetable cooking oil	Valorization
	Non-hazardous electrical and electronic waste	Recycling
Hazardous waste	Used oil	Regeneration/Valorization
	Lead batteries	Recuperation of lead/elimination
	Nickel and cadmium cells	Recuperation/Elimination
	Batteries	Recycling/Elimination
	Flourescent tubes	Recycling
	Earth impregnated with hydrocarbons	Elimination
	Recipients which contained hazardous substances.	Recycling/Elimination
	Absorbent filtering materials, cleaning rags, and protective clothing contaminated by hazardous substances	Valorization/Elimination
	Silica gel	Elimination
	Non halogenated solvents	Regeneration
	Paint waste	Valorization
	Isolation material (with and without asbestos)	Elimination
	Hazardous chemical lab products	Elimination



During **construction** of a new facility or the modification of an already existing one, the waste generated is disposed of by the suppliers, who are instructed to use the method that causes the least damage to the environment for disposing of it, from the generation thereof to its final destination.

Waste generated in constuction activities

Non-hazardous waste	Left-over earth from excavations
	Forest waste
	Rubble
	Papera and Cardboard
	Plastic
	Wood
	Scrap
	Solid urban waste
Hazardous waste	Paint waste
	Absorbents and rags contaminated with hazardous substances
	Earth impregnated with hydrocarbons
	Recipients which have contained hazardous substances



5.6. Environmental accidents

We are well aware of the devastating consequences that an accident may have on the environment, and for this reason, we apply preventive measures to prevent them from happening. Thanks to the application of these measures, the consequences of the accidents that have occurred in our facilities have been of only minor importance.

Preventive measures in the event of fire

- Selective pruning and felling of plants and trees to clear paths and maintenance of safety distances (in 2007 this item incurred expenses amounting to 12,654,662.30 Euros.)
- During the whole of 2007 contacts have been established with different regional authorities to emphasize the importance of exchanging information, identifying preferential areas in which to act, depending on the fire risk, and coordinating agreements in the future for preventing and combating forest fires. These contacts are established in collaboration agreements. (See chapter 8)

Preventive measures for leaks and spillages

- Preventive maintenance of equipment containing oil.
- Fitting of pits and/or trays below the equipment and/or storage of potentially contaminating substances.
- Manipulation of the equipment and contaminating substances on impermeable surfaces.

In addition the status of the preventive measures for dealing with oil leaks from power machines and auxiliary transformers has been revised.

The following table is a summary of the accidents which occurred and the number of times during the last three years.

Accidents	2005	2006	2007
Construction accidents	15	6	2
Oil and Hydrocarbon leaks and spills ⁽¹⁾	15	6	2
Maintenance activities	7	15	24
Line failure fires	0	1	7
Fire caused by substation failure ⁽²⁾	0	0	2
Oil and Hydrocarbon leaks and spills ⁽³⁾	5	10	7
Oil leak on the hydraulic section of the fibre optic cable ⁽⁴⁾	0	0	1
Explosions in transformers ⁽⁵⁾	1	4	6
Accidents causing SF ₆ leaks	ND	ND	1
Floods	1	0	0

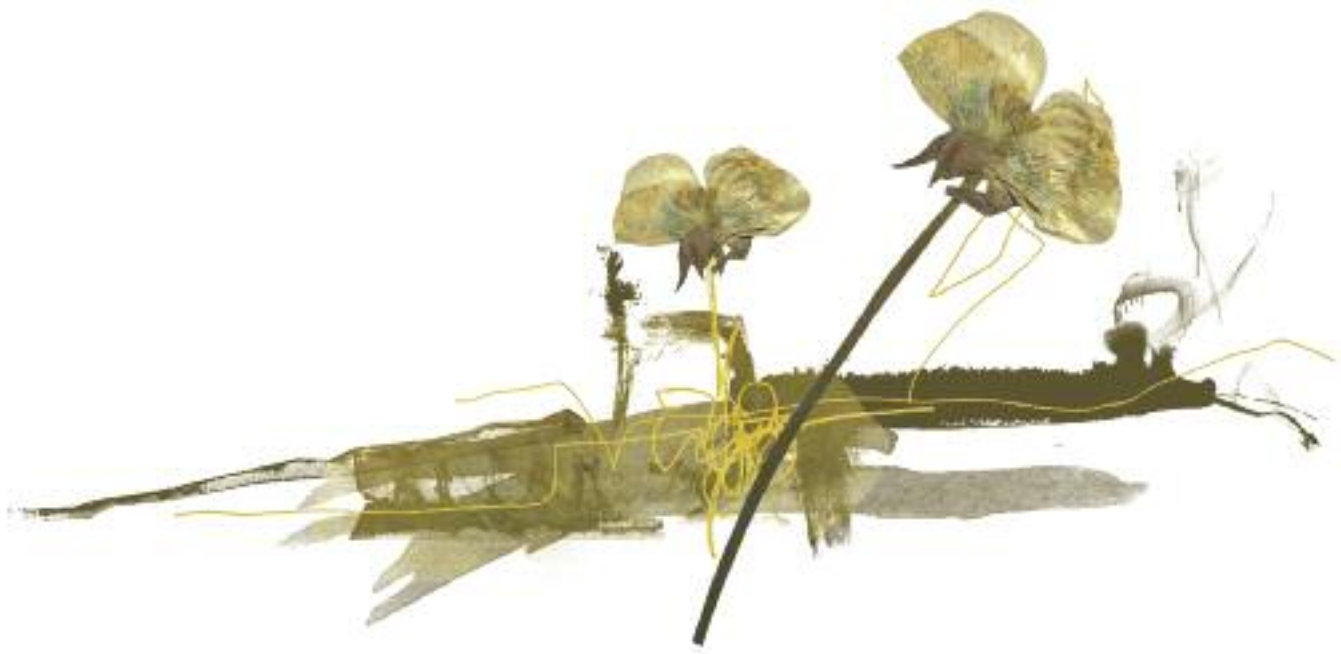
ND - no data

- ⁽¹⁾ The volume spilt is minimal, only a few litres.
- ⁽²⁾ This type of accident was identified for the first time this year. Noteworthy was the fire in the ES Boimente where most of the oil spilled went into the pit, thus indicating the good operation of the preventive measures installed.
- ⁽³⁾ Volume spilt is normally very small between 10 and 150 l. Noteworthy in the accident in SS. El Palmar due to a failure in the manipulation of the equipment. The 1,000 oil spill ended up in the quarry and was handled as dangerous waste.
- ⁽⁴⁾ This type of accident, identified for the first time, is the most significant occurred in 2007, as 26,000l were spilt in an urban area which were later managed as dangerous waste.
- ⁽⁵⁾ Volumes of oil spilt as a consequence of the explosions are not large, around 100l.

Finally it should be pointed out that during 2007 a new analysis of environmental risks was conducted to be included in the Red Eléctrica's Integrated Risk Management. With this analysis, the most significant environmental risks have been identified; actions have been proposed to reduce them and indicators have been suggested in order to check their situation.







06

RESEARCH AND DEVELOPMENT

In research, development and innovation, we work with prestigious research teams in order to achieve objectives and results that will add value to our business activities.



6.1% of total expenses allocated to R+D+I were dedicated to environmental projects. Last year the percentage was 11,56%.

Birdlife

Bonelli's eagle (*Hieraaetus fasciatus*): Determination of the relation which exists between Bonelli's eagle and electricity transmission lines (Biology team for the conservation of Bonelli's eagle of the Department of Animal Biology from the University of Barcelona).

Partial results: Recompilation of all the geographical information associated with the installation and base geographical information as a territorial reference. All this information was entered into the data base with the idea of georeferencing the example of radio tagged eagles.

"Bird saving device": Analysis of the efficiency and the working life of signalling (Biological Station of Doñana (CSIC)).

Partial results: Field tests completed to date show that the new model of bird saving device is more effective to avoid bird collision than the spirals previously installed. Monitoring continues on the bird spirals signalled and with the new model, and a new lab test to determine the influence of the wind on the prototype.

The new model of bird saving device of Red Eléctrica, is among the TEN BEST NATURE SAVING IDEAS, an initiative sponsored by the CAJA RURAL DEL SUR foundation with the aim of distinguishing people and organisations which have contributed this year to nature conservation.

Vegetation

Meadow grass under water vegetation:

Movement and later in-situ planting of the *Posidonia oceanica* (endemic in the Mediterranean) whose habitats have been declared as a priority habitat for the European Union (CSIC).

Partial results: The different methods to cut the tuft and the anchoring systems of the *posidonia* plots removed tested during the study, show that they are the most suitable for the species under study. The laboratory analysis has checked the vitality of the fragments treated and the favourable biological status of the rest of the *posidonia* meadow where the study was carried out.

Electromagnetic fields

Currents induced in the human body by electromagnetic fields of industrial frequency (Institute of Applied Magnetism «Salvador Velayos» (dependant on the Complutense University of Madrid, RENFE and the CSIC) and UNESA).

Final results: The research study started up in 2003. A calculation model of the density of induced in the interior of an organism was obtained from the metaphorical simulation which was as realistic as possible and the detailed knowledge of the electric and magnetic parameters of the different organs and materials of our body using experimental measurements.

The deed is essential because the international standard and recommendations on the exposition to electrical fields are based on the parameters of the density of the induced current. Thanks to the software developed its association has been able to be determined with the external value of the field. Thanks to this it has been tested that the induced current limit fixed by Directive 2004/40/EC has not been exceeded even when the magnetic field limit set by it as the reference level has reached ($500 \mu\text{T}$). From this it can be deduced that the magnetic field limit is more restrictive than the density limit of induced currency.



SS lighting



New model of bird saving device recognised among the ten best ideas for saving nature (initiative sponsored by the Caja Rural del Sur)

Electrical efficiency

SOLIDI: Integration of efficient and renewable energies in the Red Eléctrica facilities.

Partial results: After having analysed the 40 proposals on the renewable energy integration actions from the energy audit (results in chapter 5.4) in the company building at La Moraleja (photovoltaic, solar thermal, wind and geothermic, etc.) An innovation project to integrate solar energy into the headquarters was voted on.







07

TRAINING AND AWARENESS

We consider environmental training a strategic line in order to create a team increasingly concerned with protecting the environment.



Training goes even further than the mere professional area, with the aim being to contribute to improving environmental habits in daily work and family life.

During 2007, 3.34 % of the employees have received specialised environmental training -both in on-line courses and classroom based courses -during a total of 2,002 hours. In addition, Red Eléctrica has given a series of environmental courses to school children and university students.

Environmental training areas on which the following courses were given:

Environmental training areas
Environmental business management
Dangerous waste management at Red Eléctrica
Work site environmental supervision
Iberian fauna and flora
Appraisal and evaluation engineering for plant species
Environmental audits
Integrated management systems
EFQM excellence model
Climate change
Computer tools for environmental use
Communication skills and environmental forums

The task of awareness was done through the following communication channels.



Logotype for the «Green Box » competition

Green box. Collects proposals from all employees for protecting and improving the environment at work, with the aim of making each employee more environmentally aware. The best proposal received throughout the year is started up the following year and is awarded a prize of a weekend for two in a rural accommodation situated in a protected national space.



José Ignacio de la Fuente León. Winner of the 2nd edition of the Green Box competition for the best environmental proposal.

Internal portal «miRed». Presents user friendly information for our employees on environmental activities carried out by the company, and best practises for putting into operation in both the home and at work, external events and publications or articles on environmental topics promoted by the company.

Three monthly **bulletin** of innovation on electric and magnetic field 50/60 Hz. The bulletin has been published since 1999.

“Entre Líneas”. A magazine which includes, important company events, news and activities and includes articles on the environment.

Similarly, and in order to improve the communication on prevention and the fight against forest fires, a **training course was given to 42 forest rangers** of the Environmental Protection Service (SEPRONA) from the Region of Valencia, including issues such as the identification of electrical installations, Red Eléctrica's actions for fire preventions and ways of acting when faced with a forest fire near an electricity substation. This training is to be extended to the rest of the autonomous communities.

Finally, a course also worth noting was the teacher training course on energy in short supply in collaboration with the Official College of Physicists.



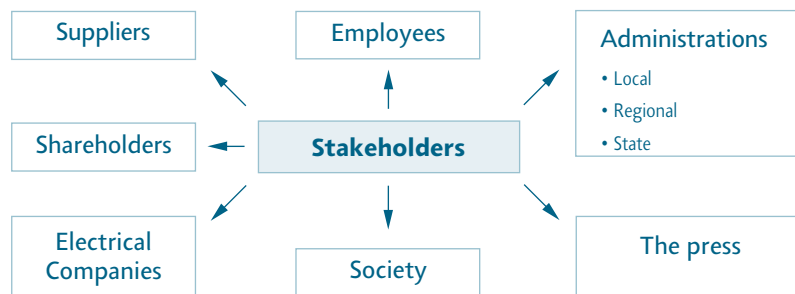




08

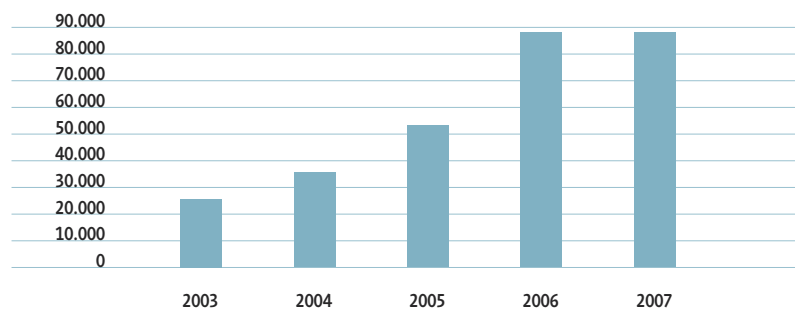
COMMUNICATION

Conscious of the social interest in the activities we carry out, we provide information and are in permanent communication with all interested parties.



To do so, we make different environmental communication channels available which include the annual publication of our environmental report and the website (www.ree.es) which contains a special section on the different environmental aspects of the company. During 2007 this section received 89,039 visits from different countries.

 Visits to the environmental sections



We attend and monitor all environmental queries and claims which reach us via the electronic mail provided for the purpose on our website (www.ree.es).

At present a project is running to improve computer management tools on this area.

Through **collaboration agreements** we work with institutions to carry out R+D+i projects or activities related with the environment and sustainable development which is of interest to both parts. Human and economic resources are invested in these initiatives. The cost of this collaboration in 2007 totalled 245,482.94 €.

Collaboration with the administration

Bodies	Action areas
Government of Aragón	Conservation of bird life (Life Naturaleza)
Junta de Andalucía	Conservation the environment and fire prevention
Junta de Castilla - La Mancha	Conservation the environment and fire prevention
Diputación Foral de Álava	Conservation of birdlife
Diputación Foral de Vizcaya	Conservation of birdlife



In terms of fire prevention, noteworthy is the effort carried out to obtain collaboration agreements in preventing and tackling forest fires with different regions, with our sights set on covering the entire country in the medium term. These agreements include exchange of information which enables the autonomous regions to pass the Red Eléctrica programme on revision and actions to prevent fires and identify the electricity transmission facilities and for Red Eléctrica to know the priority forest areas in each region.

Collaboration with research centres

Bodies	Action areas
Higher Council of Scientific Research (CSIC)	Framework Collaboration Conservation of posidonia oceanica (R+D+i project)
Biological Station of Doñana	Conservation of Birdlife (R+D+i project)
Official School of Physicists (COFIS)	Electromagnetic fields
(Institute of Applied Magnetism «Salvador Velayos» (dependant on the Complutense University of Madrid, RENFE and the CSIC) and UNESA)	Electric fields (R+D+i project)
University of Barcelona	Conservation of Birdlife (R+D+i project)



Collaboration with other organisations

Bodies	Action areas
Group for the rehabilitation of the indigenous fauna and its habitat (GREFA)	Group for the rehabilitation of the indigenous fauna and its habitat (GREFA). Contribution of feeding wild animals, hospital and veterinary expenses.
Spanish Ornithology Society (SEO/Birdlife)	Study of the coexistence of electricity lines with the conservation of birdlife.
"Fundación Entorno"	Collaboration in training and information activities for employees and suppliers.
Fund for the protection of wildlife (FAPAS)	Conservation of the environment.
Association for the comprehensive development of Sierra de Gata (Adisgata)	Sustainability project.
"Fundación Migres"	Collaboration project for the conservation of the rural environment in general and migratory species in particular.
"Fundación Doñana 21"	Collaboration agreement to enable the development of a pilot project on renewable energies, called Bosque Solar.
"Fundación + Árboles" (foundation + trees)	Collaboration in the first international encounter of Friends of the Trees.
"Fundación CONAMA"	Sponsorship and collaboration in the Iberoamerican Meeting for the Environment and sustainable development (EIMA 5)..
"Fundación Alternativas"	Agreement for the development and diffusion of studies on different areas.

Collaborations with educational centres and communication

Bodies	Action areas
University of Barcelona	Collaboration in the Masters Degree in Social Corporate Responsibility Social Accountancy and Auditing.
Menéndez Pelayo International University	Collaboration agreement for the development of the «Electrical Energy encounter: Guarantee for supply, sustainability and safety».
Association of Environmental information Journalists (AIPA)	Sponsorship of the 7th Environmental Journalism Congress.
Solar Spain Festival	Collaboration on holding the Spanish Solar encounter.
Excellence in Sustainability Club and Environmental Foundation in Asturias.	Sponsors of the website «Responsabilidad i +» where new tendencies in corporative responsibility are explored.
Asociación a la revista RedLife	Sponsorship of the bustard and kestrel.

We also collaborate on several social and cultural activities aimed at improving the life of the citizen:

- **University Autónoma de Madrid**
Collaboration agreement with the international cooperation office, for the development of awareness activities in the Sahara region.
- **“Fundación de Estudios Rurales”**
Collaboration agreement targeted at stimulating rural development. During 2007 the company collaborated in the 1st Competition for Photography in the Spanish rural world.
- **“Fundación Encuentro”**
Collaboration agreement for the development of the foundation’s activities. In 2007 a donation of computer equipment as well as the definition of a sustainability project: The Efficient use of energy which will be developed during 2008 in Las Arribes del Duero, was conducted.



In addition we actively participate in **working groups, congresses and debates** organised by entities, bodies and associations of recognised prestige.

New Working Groups	ORGANISED BY
Communication Strategies in Sustainable Development (WG C3 04)	CIGRÉ (International Council on Large Electric Systems)
Strategic environmental assessment (WG C3 06)	CIGRÉ (International Council on Large Electric Systems)
Environmental Committee	AEC (Spanish Quality Association)
Energy and Climate Change working group	“Fundación Entorno”

Working Groups:	ORGANISED BY
Subcommittee «Environmental System Management»	AENOR
AENOR Sustainable development performance indicators	CIGRÉ
Environment and society	EURELECTRIC
Regulation of the law on noise	Ministry of the Environment
Working group on electromagnetic fields	UNESA
Distribution environment working group	UNESA



Participation in discussion forums ORGANISED BY

New technologies in renewable energies. Impact of energy on the environment.	University of Cantabria
Corporate social responsibility and good governance.	University of Menéndez Pelayo
III Working day on sustainable development.	Fundación Doñana 21
Seminar on green public purchases.	ICLEI (Local governments for sustainability)
Bird migration and global change.	"Fundación MIGRES"
Iberoamerican encounter for the environment and sustainable development EIMA 5.	"Fundación CONAMA"
International conference on energy efficiency.	Instituto para la sostenibilidad de los recursos
Efficient management of energy as a limited resource.	Nuevo lunes
Permanent sustainability Forums.	Observatorio de Sostenibilidad de España
Round table on climate change, causes and consequences.	Residencia de estudiantes

Presence at fairs

España Solar
Madrid for Science
Science Pavillion of Saragossa
Science and Technology week in Bilbao

Finally, and continuing with the same approach as in previous years we do a great deal of work with respect to publishing and distributing publications.

Distribution of publications in e-format through the website www.ree.es, to enable information to be made available to all stakeholders, with an important saving in natural resources, a total of 244.242 downloads were made, of which 4.1% were documents in English.

The main publications in 2007 were:

- Environmental Report 2006
- Corporate Responsibility Report 2006

We continue to collaborate with the Publication Red Life - a magazine dedicated to nature in Andalusia that contains news items and reports on endangered species – and have sponsored two species of birds: Lesser kestrel and the great bustard. We have also participated in the publication on the business adaptation to the consequences of climate change promoted by the "Fundación Entorno".







09

COLLABORATORS

We consider our suppliers and contractors to be an essential link in developing our activities. Therefore, our commitment to the environment extends to each one of them.

Our suppliers also assume our commitment to respect the environment in their daily work. Proof of this is the increase in the number of suppliers having an environmental management system in place that is certified by an external entity, or who are starting to implement one.

Supplier behaviour on environmental issues

	2005	2006	2007
% of suppliers with certified environmental management systems (UNE-EN ISO 14001:2004 or EMAS registered)	22	38	40
No. of suppliers with environmental certification^(*)	213	198	195

(*) Including suppliers authorised by Red Eléctrica who provide products or services with some environmental consideration to take into account.

On the 31st of December, 195 suppliers were identified (corresponding to 44 supplies) who carried out a service or supplied a product with environmental connotations. Of these 195 suppliers, 40% (78 suppliers) have an environmental management system in place that is either based on the UNE-EN ISO 14000 or registered in EMAS.

Suppliers authorised by Red Eléctrica whose services or products have environmental connotations to be considered

Civil engineering in lines and substations	Assembly and maintenance of equipment in substations
Laying of conductors and ground cables	Supervision of facilities by helicopter
Brigades for supervising construction and maintenance of facilities	Painting of line supports
Topography in lines	Felling of trees
Conditioning of facilities	Application of weed-killer and rat poison
Environmental engineering	Supply of substation equipment (transformers, reactances, etc.)

In 2007 a methodology was developed in order to determine the level of interaction of the contracted service (suppliers included on the list of Red Eléctrica approved suppliers) on the environment according to the environmental risk criteria, to the required specialization for the service they provide, to the legal and environmental requirements and to the turnover with Red Eléctrica.







10

DISCIPLINARY MEASURES

Red Eléctrica continues with its line of ongoing improvement thanks to the increasingly intensive involvement of each employee in everyday activities.

During the year a total of nine new files were settled by payment of fines, five which corresponded to 2006 and four to 2007.

The following table shows the type of infringement committed and its cost in files involving the payment of fines from 2005-2007.

Infringement committed

	2005	2006	2007
Unauthorised construction of a path	—	—	100 €
Unauthorised construction of a hut	—	—	—
Lack of maintenance of vegetation	360 €	—	91 €
Unauthorised pruning and felling	—	6.385,25 € ^(*)	100 €
Unauthorised occupation of mountains	—	—	200 €
Fire	—	—	—
Diverting of a water channel	—	—	—
Total cost	360 €	6.385,25 €	491 €

^(*) The amount is relative to 5 files, opened in 2006 and settled in 2007. The amount of 3,166.02 Euros, which corresponds to the deposit paid with regards to repairs (once finished, this amount will be returned), is included.









11

ENVIRONMENTAL COSTS

The resources the organisation dedicates to environmental activities are valued by means of a cost analysis.



In 2007 we have made environmental investments in new facilities valued at 2,086,624.86 Euros, (the decrease with regards to the previous year is due to the heavy economic investment carried out in 2006 in the compensatory measures of the REMO project), which represent 0.35% of the total investments in the transmission grid.

These investments correspond to the preparation of environmental impact studies for all the projects, to the taking of compensatory and environmental measures, to the environmental supervision in electrical installations under construction, and to the taking of compensatory measures of an environmental nature.

Similarly, during 2007 we have incurred expenses for environmental protection and improvement for the amount of 15,359,789.82 Euros, which corresponds to 2.11% of the total operating costs.

The evolution of environmental costs over the last three years can be seen in the following table.

Environmental costs (€)	2005	2006	2007
INVESTMENTS	2.074.968,98	6.293.732,62	2.086.624,86
Engineering and construction of new facilities	2.074.968,98	6.293.732,62	2.086.624,86
EXPENSES	5.879.716,37	9.321.594,39	15.359.789,82
Environmental management system	19.811,05	7.365,73	12.131,82
Preventive and corrective measures for installations in service	4.387.809,48	7.489.289,72	13.791.959,98
Contamination prevention	326.713,67	305.488,98	430.610,98
Fire prevention	3.498.942,00	6.664.040,20	12.654.662,30
Protection of birdlife	228.796,37	225.921,67	194.255,84
Environmental improvement of facilities	42.441,61	188.903,42	403.132,54
Electromagnetic field and noise management	45.348,06	34.515,34	3.095,16
Waste management	58.144,38	70.420,11	106.203,16
Research and Development	217.744,19	355.327,92	283.641,08
Training and communication	266.392,94	451.197,98	408.741,33
Training and environmental awareness	17.500,00	38.130,00	19.476,16
Communication	248.892,94	413.067,98	389.265,17
Environmental taxes and levies	21.660,37	16.820,04	37.232,61
Expenses on personnel dedicated to environmental activities	966.298,34	1.001.593,00	826.083,00



The following table shows the evolution of the percentage of environmental expenses over total expenses and total investments in the transmission grid, respectively.

% of investment and expenses on the environment		2005	2006	2007
Porcentaje de inversión en medio ambiente	Environment investment/total investment in transmission grid	0,57	1,22	0,35
% environment expenses	Environment expenses/total operating expenses	2,18	2,03	2,11

In addition to the costs indicated above, we have paid out an important sum of money corresponding to environmental taxes for setting up our electricity transmission system in the autonomous regions of Catalonia and Extremadura.

Environmental taxes (€)

Autonomous Community	2005	2006	2007
Catalonia	60.101,16	61.272,48	61.663,80
Extremadura	841.594,32	910.630,27	1.040.714,94
TOTAL	901.695,48	971.902,75	1.102.378,74





12

FREQUENCY OF THE ENVIRONMENTAL DECLARATION

This Environmental Report has been published with the purpose of providing information to all stakeholders on the environmental activities carried out by Red Eléctrica during 2007.

The Environmental Declaration is published every year in the form of an Environmental Report. However, if it is considered that no important changes have taken place since the last Declaration, it is published as an additional chapter of Red Eléctrica's Annual Report.

The Spanish Association of Standardisation and Certification (AENOR), with headquarters at Génova 6 -28004 Madrid and Accredited Certifying Body Number E-V-0001, is the entity certifying that the Red Eléctrica Environmental Report complies with the requirements set forth in Regulation (EC) No. 761/2001 of the European Parliament and Council, dated March 19, 2001, permitting organisations to voluntarily join a community management and environmental auditing system (EMAS).

The next declaration will be presented and published during the first half of 2009.









13

GLOSSARY OF
TERMS



Environmental Aspect:

Any element of the activities, products or services of an organisation that may interfere with the environment.

(European Parliament and Council Regulation no. 761/2001 dated 19 March 2001, permitting companies in the industrial sector to voluntarily join a community environmental management and auditing system (EMAS)).

Significant environmental aspect:

All environmental aspects having or which may have a significant impact on the environment.

(UNE-EN ISO 14001:2004 Environmental management systems. Requirements and guides for their use).

Environmental audit:

A management instrument which includes a regular documented systematic and objective evaluation of the organisation, its management systems, and the procedure for protecting the environment with a view to facilitating operational control over practices that could have an impact on the environment and evaluates compliance of the environmental policies of the organisation, and in particular, its environmental objectives and goals.

(European Parliament and Council Regulation no. 761/2001 dated 19 March 2001, permitting companies in the industrial sector to voluntarily join a community environmental management and auditing system (EMAS)).

Electric field:

In a point in space, the force exerted on a static load located at that point. Expressed in volts per metre (V/m).

(50 Hz. Electrical and Magnetic fields REE and UNESA, 1998).

Magnetic field:

In a point in space, the force exerted on a live element located at that point. Expressed in amps per metre (A/m). The international measuring unit is Tesla (T) or any fraction thereof, and in particular the microtesla (μT).
(50 Hz. *Electrical and Magnetic fields. REE and UNESA, 1998*).

Nest-preventing device:

A device formed by several elements made of galvanised steel, of different sizes, that prevents birds from building their nests and settling in the places where they are installed or on the device itself.
(Own definition of REE).

Environmental impact:

Any change in the environment, either adverse or beneficial, that is caused in full or in part by the activity, products or services of any organisation.
(*European Parliament and Council Regulation no. 761/2001 dated 19 March 2001, permitting companies in the industrial sector to voluntarily join a community environmental management and auditing system (EMAS)*).

Environmental behaviour indicator:

Specific expression providing information on environmental behaviour in an organisation.
(*Standard UNE-EN ISO 14031 Environmental management. General Guidelines*).

Place of community importance (LIC):

A place that, based on the biographic region or regions where it is located, contributes greatly to maintaining or restoring a type of natural habitat (...) in a favourable state of conservation so that it can help considerably in establishing the cohesion of Natura 2000 (...) and/or contribute noticeably to maintaining biological diversity in the biogeographic region or regions in question. For the animal species occupying large areas, the places of community importance will usually correspond to specific locations inside the area in which that species is naturally distributed, presenting the physical or biological elements that are essential for them to live and reproduce.
(*Directive (92/43), of May 21, on the conservation of natural habits and wild fauna and flora*).

Environmental objective:

A general environmental aim, which has its origin in the environmental policy laid down by the organisation itself and which, insofar as is possible, is quantified. (*European Parliament and Council Regulation no. 761/2001*





dated 19 March 2001, permitting companies in the industrial sector to voluntarily join a community environmental management and auditing system (EMAS)).

Environmental policy:

The general objectives and principles of action of an organisation with respect to the environment, including compliance with all the regulatory provisions related to the environment and the commitment to continuously improve the environment. Environmental policy constitutes a framework for establishing and reviewing environmental objectives.

(European Parliament and Council Regulation no. 761/2001 dated 19 March 2001, permitting companies in the industrial sector to voluntarily join a community environmental management and auditing system (EMAS)).

Waste:

Any substance or object belonging to any of the categories established in the appendix to the Waste Act, in which the owner disposes of or has the intention to dispose of it. In all cases, the items listed in the European Waste Catalogue (CER) will be classified as such.

(Law 10/1998, 21st April, on Waste).

Bird saving devices or “Spirals”:

A white or orange spiral made of polypropylene (PVC) in the shape of a spiral, measuring 30-35 centimetres in diameter and with a length of 1 metre, that is wound onto the ground cable or conductor to mark it and reduce the risk of accident due to birds colliding with them.

(Own definition REE).

Visual simulation:

An infographic technique (based on computer applications for graphic representation) applied to obtaining the representation of a project to give an approximate idea of what it will look like in the real future situation, and showing the elements that constitute it and its integration into the execution environment.

(Own definition REE).

Environmental management system:

Part of a general management system that includes the organisational structure, planning activities, responsibilities, good practices, procedures, processes and resources to develop, apply, reach, revise and maintain the environmental policy.

(European Parliament and Council Regulation no. 761/2001 dated 19 March 2001, permitting companies in the industrial sector to voluntarily join a community environmental management and auditing system (EMAS)).

Special birdlife protection zone (ZEPA):

An area of community interest for the protection of birds listed in appendix I of the Council Directive 79/409/CE of 2nd April 1979, on the conservation of birdlife.







VALIDATION

OF ENVIRONMENTAL
DECLARATION

ANEXO

**ESQUEMA EUROPEO DE ECOGESTIÓN Y ECOAUDITORÍA
(EMAS)**

Eco-Management and audit scheme (EMAS)

VDM-01/004

Los Centros Certificados del Sistema de Gestión Medioambiental de acuerdo con el esquema europeo de Ecogestión y Ecomoditoria (EMAS) de RED ELECTRICA DE ESPAÑA, S.A. nº VDM-01/004 son los siguientes: *Activities within the scope of the Environmental Management System according to the Eco-Management and Audit Scheme (EMAS) RED ELECTRICA DE ESPAÑA, S.A. nº VDM-01/004 include the following:*

Delegación Regional Oeste CL. ZALAETA, S/N EDIFICIO REE 15002 - LA CORUÑA (A CORUÑA)	Delegación Regional Norte AV DE ENEKURI, 40 EDIFICIO REE 48014 - BILBAO (VIZCAYA)	Delegación Regional Noroeste AV PARALELO, 55 EDIFICIO REE 08004 - BARCELONA	CECORE CL. ISAAC NEWTON, 13 EDIFICIO REE 28700 - TRES CANTOS (MADRID)
Delegación Regional Sur CL. INCA GARCILASO, 1 EDIFICIO REE 41092 - ISLA DE LA CARTUJA (SEVILLA)	Delegación Levante CL. PUEBLA LARGA, 18 46183 - LA ELIANA (VALENCIA)	Demarcación Duero-Sil (35 Subestaciones) CR N-601, MADRID- VALLADOLID-LEÓN, Km 218 47630 - LA MUDARRIA (VALLADOLID)	Demarcación Ebro (32 Subestaciones) CR ZARAGOZA-SARIÑERA, Km 9,2 50162 - VILLAMAYOR (ZARAGOZA)
Demarcación Mediterráneo (22 Subestaciones) CR ANTIGUA CASTELLBISBAL-RUBÍ, S/N PI CAN PI DE VILAROC 08191 - RUBÍ (BARCELONA)	Demarcación Tago (24 Subestaciones) CR N-1 MADRID-BURGOS, Km 20,7 28700 - SAN SEBASTIÁN DE LOS REYES (MADRID)	Demarcación Bética (24 Subestaciones) CR SEVILLA-UTRERA, Km 17 41500 - ALCALÁ DE GUADARRA (SEVILLA)	Dirección Operación Sistema Eléctrico Balear CAMI SON FANGOS Nº 100 EDIFICIO A 2ª PLANTA 07007 - PALMA DE MALLORCA (ILLES BALEARS)
Dirección Operación Sistema Eléctrico Canario (Sede Las Palmas de Gran Canaria) CL LEÓN Y CASTILLO Nº 1 35003 - LAS PALMAS DE GRAN CANARIA (LAS PALMAS)	Dirección Operativa Sistema Eléctrico Canario (Sede Tenerife) NUESTRA SEÑORA DE LA TERNURA (LOS MAJUELOS) 38108 - SAN CRISTOBAL DE LA LAGUNA (S.C. DE TENERIFE)		

Fecha de validación: 6 de mayo de 2008
Validation Date

AENOR Asociación Española de
Normalización y Certificación

Por AENOR. El Director General
On behalf of AENOR. The General Manager

**ESQUEMA EUROPEO DE ECOGESTIÓN Y ECOAUDITORÍA
(EMAS)**

Eco-Management and audit scheme (EMAS)

VDM-01/004

La Asociación Española de Normalización y Certificación (AENOR) a través de procesos de auditoría acreditados, certifica que:

The Spanish Association for Standardization and Certification (AENOR) through accredited audit processes certifies that:

RED ELECTRICA DE ESPAÑA, S.A.

tiene implantado un sistema de Gestión Medioambiental que cumple los requisitos del Reglamento Europeo 761/2001

has implemented an environmental management system that complies with the requirements of the European Regulation 761/2001

para las actividades de:

for the activities of:

LA INGENIERÍA, LA CONSTRUCCIÓN Y EL MANTENIMIENTO DE LÍNEAS Y SUBESTACIONES ELÉCTRICAS DE ALTA TENSIÓN, Y DE SISTEMAS DE TELECOMUNICACIONES.
LA OPERACIÓN DE SISTEMAS ELÉCTRICOS.
LA SEGURIDAD FÍSICA DE INSTALACIONES.
LOS PROYECTOS DE INVESTIGACIÓN, DESARROLLO E INNOVACIÓN TECNOLÓGICA.
LA CONSULTORÍA Y LOS SERVICIOS PROFESIONALES EN LAS ACTIVIDADES ANTES DESCRITAS.

THE ENGINEERING, CONSTRUCTION AND MAINTENANCE OF HIGH VOLTAGE, TRANSMISSION LINES AND SUBSTATIONS, AND TELECOMMUNICATION SYSTEMS.
THE TRANSMISSION SYSTEM OPERATION.
THE SECURITY OF PEOPLE, BUILDING AND FACILITIES.
THE RESEARCH, DEVELOPMENT AND TECHNOLOGICAL INNOVATION PROJETS.
THE CONSULTING AND PROFESSIONAL SERVICES OF ABOVE ACTIVITIES.

que se realiza/n en o desde los establecimientos:

which is/are carried out in or from the establishments:

Sede Social
PO CONDE DE LOS GAITANES, 177
28105 - ALCOBENDAS
(MADRID)

VER DIRECCIONES INDICADAS EN EL ANEXO

y que la información incluida en la declaración medioambiental se ajusta a los requisitos expresados en dicho Reglamento y ha sido validada con fecha 2008-05-06.

and the information included in the environmental declaration complies with the requirement of that European Regulation and has been validated on 2008-05-06.

Fecha de validación: 6 de mayo de 2008

Validation Date

AENOR Asociación Española de
Normalización y Certificación

Firma: D. Ramón NAZ PAJARES
Signature Director General de AENOR
General Manager of AENOR.

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Council) ensuring efficient use to
conserve forests.



APPENDIX

LOCATION

MAPS

Showing the environmental processing
and supervising of facilities both
planned and constructed in 2007.

Environmental processing of projected facilities

Facilities being processed by environmental bodies

L/La Serna-Magallón	SS. Ruidarenes
E/S Vitoria de L/Castejón-Muruarte	E/S Riudarenes de L/Sentmenat-Vic-Bescanó
L/Aldeadávila-Frontera portuguesa	L/Oncala-Moncayo
SS. Belinchón	SS. Laracha
SS. Santa Cruz	L/Laracha-L/Mesón do Vento-Vimianzo
L/Belinchón-Santa Cruz	SS. Mudéjar
E/S en Belinchón de L/Morata-Olmedilla	L/ Mudéjar-Morella
y Morata-Cofrentes	E/S Mudéjar L/Aragón-Teruel
L/Puebla de Guzmán-Frontera Portuguesa	Section Modification/Penedés-Viladecans
SS. Herreros	SS. Solórzano
L/Herreros-L/Segovia-Galapagar	SS. Cicero
L/Herreros-Otero	L/Solórzano-L/Penagos-Abanto
SS. Torrejón de Velasco	L/Cicero-Solórzano
L/Torrejón de Velasco-L/Morata-Villaviciosa	SS. Brazatortas
L/Torrejón de Velasco-L/Añoover-Pinto	E/S Brazatortas de
L/Torrejón de Velasco-L/Villaverde-Almaraz	L/Valdecaballeros-Guadalquivir Medio
L/Torrejón de Velasco-L/Pinto-Nueva Yeles	L/Brazatortas-Puertollano
L/Torrejón de Velasco-L/Torrijos-Villaverde	SS. Manzanares
SS. Moncada	L/Brazatortas-Manzanares
L/Moncada-Olmedilla	L/Manzanares-La Paloma
SS. Avenas	SS. Platea
L/Avenas-Requena	L/Mezquita-Platea
SS. Galera	SS. El Palo
L/Galera-Romica	L/El Palo-L/Pesoz-Salas
L/María-Plaza	L/Adrall-Andorra border
L/Mangraners-Juneda-Montblanc-Penedés-Viladecans	SS. Sama
SS. San Serván	L/Sama-Velilla
L/Brovaes-Guillena	L/Galapagar-Moraleja de Enmedio
L/Almaraz-San Serván	(Section Modification)
L/San Serván-Brovaes	L/Villaviciosa de Odón-Moraleja de Enmedio
L/Mérida-San Serván	(Section Modification)
L/Cartuja-Puerto Real	L/Trives-Aparecida
L/Soto-Penagos (Variante de Nava)	L/Segovia-Galapagar
L/Soto-Penagos (Variante de Piloña)	L/Mezquita-Morella
SS. Udalla	SS. Torrente
L/Udalla-L/Penagos-Abanto	L/Torrente-L/Catadau-La Eliana
Interconexión Península Baleares	SS. Cártama
SS. Conversora Morvedre	L/Cártama-L/Guadalquivir Medio-Tajo
SS. Conversora Santa Ponsa	de la Encantada
SS. Carmona	L/Cártama-L/Guadalquivir Medio-Tajo de la Encantada
L/Carmona-L/Don Rodrigo-Valdecaballeros	L/Cártama-L/Alhaurín-Tajo de la Encantada
L/Carmona-L/Dos Hermanas-Guillena	L/Cártama-L/Los Ramos-Casares
L/Carmona-L/Santiponce-Villanueva del Rey	L/Cártama-L/Alhaurín-Los Montes
	L/Boimente-Pesoz

Environmental supervision of new facilities under construction

Construction lines

L/Sentmenat-Vic-Bescanó
SS. Garraf en L/Begues-Vandellós
SS. en la SS. Salas-L/Narcea-Soto
L/Puentes de García Rodríguez-Mesón do Vento
SS. Jordana
SS. Salteras
L/Entronque en la SS. Galapagar-Entronque en la SS. San Sebastián de los Reyes
L/Castejón-Muruarte
SS. Gazules
L/Penagos-Güeñes
L/Zierbena-Abanto
L/Tordesillas-Segovia
L/Gausa-Morvedre
SS. Galapagar de L/Lastras-San Sebastián de los Reyes
L/Nueva Escombreras-El Palmar

New Substations under Construction

SS. Garraf
SS. Sagrera
SS. Sabón
SS. Cartaza
SS. Salteras
SS. Brovales
SS. Gazules
SS. Jordana
SS. Hueneja
SS. Abanto
SS. Ayora
SS. Gausa
SS. Morvedre
SS. El Palmar
SS. Totana
SS. Requena
SS. La Cereal



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