



Environmental Report 2010

Summary Document

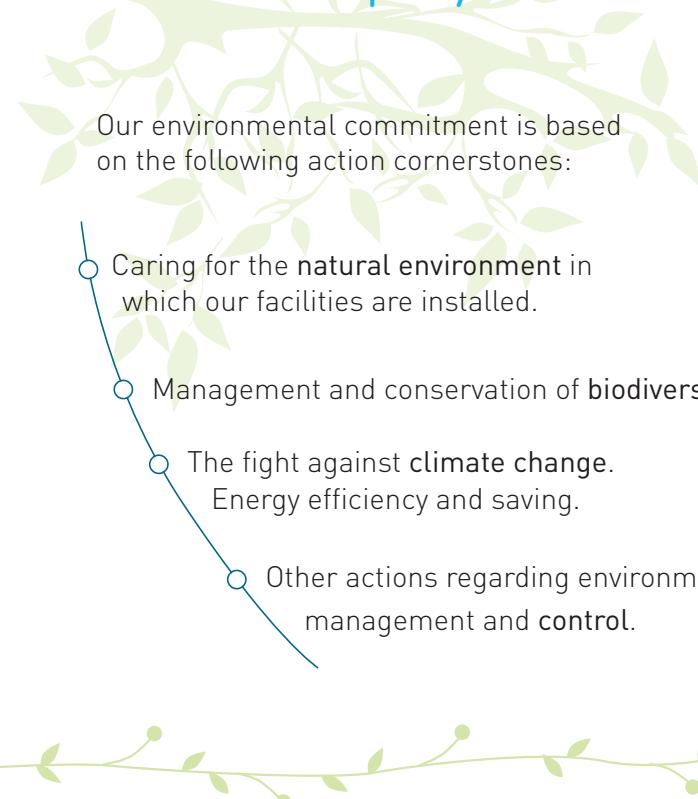


RED ELÉCTRICA DE ESPAÑA



Respect for the natural environment and the conservation of biodiversity are key principles of our business management.

For this reason, all our activities are carried out in accordance with strict environmental criteria, in line with the principles assumed in our environmental policy.



Our environmental commitment is based on the following action cornerstones:

- Caring for the natural environment in which our facilities are installed.
 - Management and conservation of biodiversity.
 - The fight against climate change.
Energy efficiency and saving.
 - Other actions regarding environmental management and control.
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ISO 14001 Certification for all our activities and facilities

100% of the projects are submitted to an evaluation of an environmental nature



Caring for the natural environment where our facilities are located



In Red Eléctrica we make a significant effort to avoid or to minimize the possible impact our facilities may have on the environment. All our projects are subject to an environmental impact assessment and they are designed seeking out locations and planned routes of least impact for the natural environment.

In addition, in order that the possible impacts are minimized or the resulting impacts are compatible or non-significant, we apply strict environmental criteria in all the development phases of the transmission grid.

Grid planning phase

- Collaboration with the Ministry of Industry in the strategic environmental evaluation of the Electricity Infrastructures Plan.
- Collaboration with the autonomous communities on the development of regional plans.

Project phase

- Environmental assessment of all new facility/installation projects.
- Definition of the best locations and routes.
- Definition of preventive and corrective measures.

Construction phase

- Environmental supervision to ensure compliance with environmental requirements.
- Verification of the efficiency of the preventive and corrective measures put in place.

Maintenance phase

- Definition of the environmental requirements to be observed during works.
- Revision and audit of the degree of compliance with the environmental requirements.

Actively working on biodiversity conservation

Biodiversity conservation is a basic principle within our environmental policy and of our business strategy. During 2010, we have strengthened this commitment approving the strategy for biodiversity and drawing up the pertinent action guide.

Biodiversity in our day-to-day activity

...biodiversity protection during the construction of our facilities



- Increasing the height of line towers above the tree line in order to protect woodlands.
- Interruption of works during the periods of bird nesting and breeding, and other potentially sensitive fauna species.
- Hanging of cables by helicopter, or by hand, and the use of a boom crane for hoisting electricity line towers in protected spaces or with sensitive fauna.
- Relocation of species affected by works carried out.
- Fencing off and marking of areas to avoid affecting habitats or species of interest.
- Restoring areas affected by construction activities with indigenous species.

...actively working on the protection of vegetation, fighting forest fires and their prevention



- Adequate maintenance of lines and security corridors (100% of the facilities are revised annually).
- Minimum impact on the species during corridor maintenance activities: respecting scrubland and the arboreal species which contain small and slow growing species, minimizing activities on protected species (pruning only) and repopulating degraded zones.
- Non-use of chemical methods regarding the treatment of the security corridors.
- Collaboration with the responsible public administration areas.
- The establishment of fire fighting agreements with public administrations (three new agreements in 2010). Collaboration with different organisms in the development of R&D&i: Vulcano project.



...working to reduce the risk of birds colliding with overhead electricity lines



- The marking of electricity lines with devices (bird flight diverters) to avoid bird collisions with lines.
- Immediate intervention when faced with hazards for fauna.
- Knowledge improvement regarding the behaviour of species which could collide with the lines: cartography of bird flight paths.
- R&D&i oriented to the prevention of that which may affect fauna: design of a collision detector.

...committed to the fight against the loss of biodiversity



- Collaboration with public and private organisations on projects of common interest for the conservation and improvement of biological diversity.
- Development of environmental projects with local communities via the company's Sustainability Laboratory.
- Internal company training and awareness.

Noteworthy projects

Project for the reintroduction of the Black Vulture

first recorded successful breeding of the Black Vulture in the Pyrenean massif for more of a century.

Involvement in the Life Project

conservation and management in special protection areas for Steppe birds in Andalusia.

The Red Eléctrica Forest

the repopulation of 85 hectares of hills affected by fire in the province of Teruel.

Marking of lines with bird flight diverters



Efficiency and climate change

The fight against climate change

Our active contribution, as transmission agent and system operator, regarding the development of a more sustainable energy model that mitigates the effects derived from climate change, is aimed at:

Constructing more kilometres of grid to integrate the new installed renewable power and to power the High Speed Trains

Constructing grids which facilitate the evacuation of renewable energies and the application of operation solutions via our Control Centre of Renewable Energies (CECRE), to maximize the safe integration of clean energies into the system.

Various recharging points for electric vehicles have been installed at our offices

Promoting energy efficiency by means of the development of demand-side management initiatives directed towards the efficient and responsible use of energy, noteworthy is the implementation of the electric vehicle.

We have compensated for 49% of our direct emissions through the planting of 103,000 trees in Teruel

Controlling emissions derived from our activities, where we maintain the objective to reduce to the maximum those related to SF₆ gas (sulphur hexafluoride), as well as to compensate a great part of our direct emissions by means of the planting of trees.



Other environmental actions



7,182 hours
of specialised training
(more than double that
of 2009)

Waste management

The waste our activities generate is separated, stored and managed according to the legal requirements and to the criteria of contamination prevention.

The main activities for their optimal management are focused on:

- Seek the best management options with our suppliers.
- Foster best practices by means of training and awareness programmes.

Management of equipment with PCBs

During 2010, the plan for the decontamination / elimination of transformers contaminated with PCBs has successfully been completed.

Preventive measures for leaks and spills

Thanks to the application of preventive and corrective measures, these accidents occur on very few occasions and their consequences are generally not significant. During 2010, the spillage containment measures at 16 substations were improved for power transformers as well as for auxiliary transformers.

Control of electric and magnetic fields

The electric and magnetic field values of our facilities are below those recommended by the European Union due to the preventive measures we apply in the design of lines and substations. Nonetheless, we keep up to date with scientific advances and we develop research projects in this field.

Protection of the socioeconomic environment and the landscape

During the construction phase of our facilities we carry out archaeological and paleontological supervision in all the projects which require it and the necessary preventive measures are established for the protection of cultural patrimony.

In addition, conscious of the relevance of the impact of our facilities on the landscape, we carry out projects for the integration from a landscaping standpoint of the buildings in the substations.



Under the brand “Red Eléctrica eficiente” the initiatives the company promotes regarding energy efficiency are included.

Key actions in 2010

Implementation of efficiency measures

- Replacing current lighting elements for more efficient ones.
- Implementation of other efficiency means at work centres: insulation and the fitting of glass.
- Installation of recharging points for electric vehicles.
- Holding meetings via video conferencing.
- Definition of the efficiency requirements that the company vehicles must comply with.
- Application of efficiency measures for IT systems.

Research, development and innovation

- Participation in the following projects: Active Demand Management (ADM), electric vehicle (VERDE, DOMOCELL y MERGE) and the integration of renewables (TWENTIES).
- Presence in national and international working groups and forums.

Communication and awareness

- Awareness campaigns regarding energy efficiency and responsible consumption both internally and externally.



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