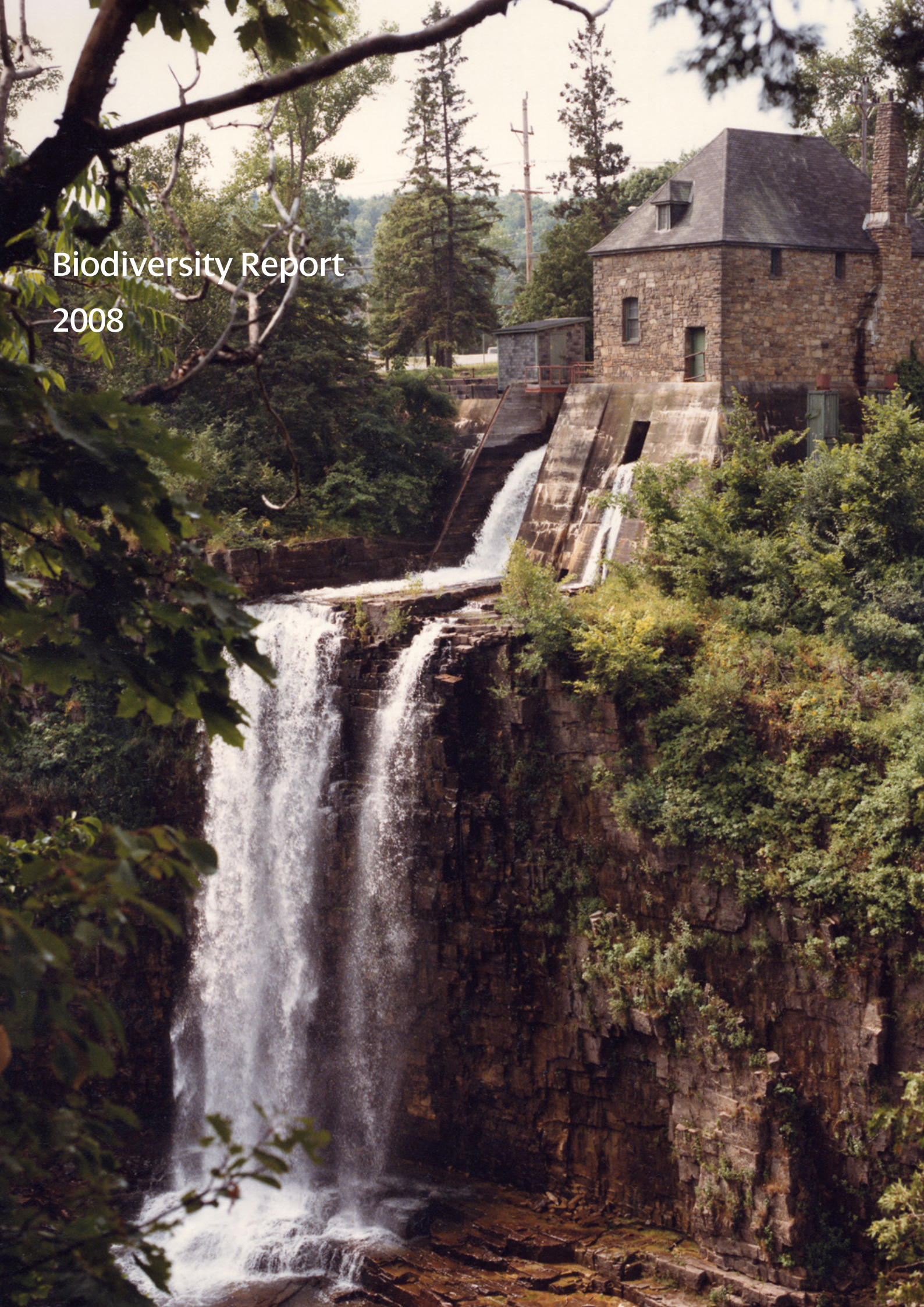
Biodiversity Report 2008



IBERDROLA

Biodiversity Report 2008

Contents

Introduction

Over the past fifty years, ecosystems have been transformed by human action more rapidly and extensively than in any comparable period in human history. As a result, the Earth's biodiversity has been considerably impoverished.

IBERDROLA has a biodiversity policy in place, approved by the Board of Directors on 18 December 2007, which applies to all business companies and regions where the Company operates. In addition to this Policy, which is applied generally, ScottishPower has its own biodiversity policy, in line with its longstanding practice of biodiversity management.

In the European Union, biodiversity is one of the key objectives of the sustainable development strategy and of the Sixth Environmental Action Programme. EU initiatives in this respect are based on the provisions of the Birds Directive and the Habitats Directive (collectively the "Nature Protection Directives"). Community policy recognizes that biodiversity is not uniformly distributed, and that some habitats and species are more threatened than others. Special attention is given to creating and protecting a major network of sites with high natural value: the Natura 2000 network programme.

In Spain, the purpose of the Natural Heritage and Biodiversity Act 2007 (No. 42/2007, 13 December) is to establish the statutory framework for the conservation, sustainable use, improvement and restoration of natural heritage and biodiversity. The Act envisions the creation of a range of instruments for determining and planning natural heritage and biodiversity by the Ministry of the Environment, in collaboration with the regional governments, and includes: a Spanish Natural Heritage and Biodiversity Inventory, a State Natural Heritage and Biodiversity Strategic Plan, and Natural Resources Management Plans.

EFFECT OF IBERDROLA'S BUSINESS ON BIODIVERSITY

01

Effect of Iberdrola's Business on Biodiversity

IBERDROLA produces, distributes and sells energy across a vast geographical ambit, and these operations entail interactions with diverse ecosystems, landscapes and species. The effects are felt both during the construction phase (e.g. the bringing on-site of vehicles and machinery, opening of tracks, disturbance of the plant cover and prolonged human presence, which affects the behaviour of animal species only temporarily and is generally reversible) and the operations phase (e.g. alteration of the natural courses of rivers, barrier effect in hydroelectric sites that affect the ecosystems and habitats of certain species, species mortality from collisions and electrocution, and disturbance of vegetation to maintain power-line paths).

The background against which the Company operates likewise poses major challenges to biodiversity management, such as achieving a balanced portfolio of facilities so as to minimise the ecological footprint of its energy production, and making its businesses compatible with the preservation of the biological wealth of countries with areas of high biodiversity.

To face these challenges, the Group has adopted a range of management instruments: the Group's biodiversity policy; environmental impact assessment of new infrastructure projects, deploying analysis and impact prevention mechanisms that consider different alternatives and stipulate corrective measures; environmental management systems to control and rectify impacts arising in the course of operation and maintenance; and biodiversity plans.

The effects of the Company's operations on biodiversity are described in the documents *Electricity Generation and Distribution: Their effect on the environment and Introduction to the Concept of Biodiversity Management within the Company, available at www.iberdrola.es.*

Pedegal Windfarm. Muros. Spain

PRESENCE IN PROTECTED AREAS

02

Presence in Protected Areas

The operations of the various business divisions in protected areas are mostly concentrated in **Spain**:

In the **Liberalised Business,** reservoirs in biosphere reserves, national parks, Ramsar wetlands and nature parks account for 1.17% of the surrounding protected areas.

The reservoirs managed include 13,271 hectares in Natura network sites.

Type of Space	Name of the Space/Area (ha)	Region	Reservoir	Reservoir Area in Natura Space (ha)	Proportion of Reservoir Space (%)
Biosphere Reserves	330,460			2,365	0.72%
	Monfragüe/116,160	Extremadura	Torrejón Tajo, Torrejón Tietar, Alcántara	2,301	1.98%
	Sierra de Cazorla Segura y Las Villas/214,300	Andalucia	La Vieja Anchuricas	64	0.03%
National Parks	Monfragüe/18,396(*)	Extremadura	Torrejón Tajo, Torrejón Tietar, Alcántara	1,135(*)	(*)
RAMSAR Spaces	Colas del Embalse de Ullibarri/397	Basque Country	Ullibarri	397	100.00%
Natural Parks	136,965			3,986	2.91%
	Sierra de Cazorla Segura y Las Villas/209,920(*)	Andalucia	La Vieja Anchuricas	64(*)	(*)
	Montes Invernadeiro/5,772	Galicia	Las Portas	93	23.95%
	Arribes del Duero/106,105	Castilla León	Villalcampo, Castro, Aldeadávila y Saucelle	1,203	1.13%
	Tajo Internacional/25,088	Extremadura	Cedillo	1,400	5.58%
Total BiosphereReserves, National and Natural Parks and RAMSAR Spaces	467,822			5,458	1.17%
Total Natura Network Areas (SICs and SPAs)	648,744			13,271	2.05%

(*) Included as Biosphere Reserves. Not included in the accounts.

España	Zepa	Special Protection Area for birds
	Lic	Site of Community Interest
UK	SSSI	Site of Special Scientific Interest
	SAC	Special Area of Conservation
	SPA	Special Protection Area
USA		Areas of high biodiversity value
		Protected areas

(*) The various names and initials designating sites of high biodiversity value are set out in the table below

In the **Networks Business**, IBERDROLA has 6,584km of very-high-voltage power lines, 17.7% of which are in protected areas (1,166km), and 99,291km of medium- and high-voltage lines, 18.36% of which are in protected areas (18,271km). This makes a total of 19,887km of power lines in protected areas.

POWER LINES AND SUBSTATIONS IN PROTECTED AREAS

	Substations	Power lines (km)	
		Medium and high voltage	Very high voltage
Total number in IBERDROLA	879	99,291	6,584
Protected areas (SPAs and SCIs)	145	18,271	1,166
Operations (%) in protected areas	16.5	18.36	17.7

United Kingdom

ScottishPower production facilities in protected areas:

Elements of the Galloway hydropower scheme are located in a designated Ramsar wetland as well as being a SSSI, and the Lanark hydropower scheme, at the Falls of Clyde Reserve near New Lanark, is designated as an SSSI and lies adjacent to a World Heritage site.

Facilities related to the Cockenzie thermal plant, included in the Firth of Forth SSSI, form part of the Firth of Forth SPA and Ramsar designation.

The Lindholme gas storage facility is located on Hatfield Moor, a designated SPA.

The Cruachan thermal plant is located next to the Coille Leitire woodland, which enjoys both SSSI and SAC status.

None of the production facilities in **Latin America** lies in a protected area.

United States of America

The Group operates 5,782km of high-voltage power lines, of which 396km (6.85%) run through protected areas (including those expressly designated as such by the Federal government, such as national forests, parks and wildlife shelters, and areas not expressly protected but considered to be of high environmental value).

ENERGY EAST POWER LINES IN PROTECTED AREAS

Company	Lines (km)	
	Total	In protected areas
New York State Electric & Gas	3,484	382
Rochester Gas and Electric	3.98	2.1
Central Maine Power	1,900	12

Iberdrola Renovables Group

The Group's renewable energy facilities barely operate in protected areas. Some of the facilities, especially small scale hydro stations, already existed in areas that have subsequently been declared Sites of Community Interest (SCIs) or Special Protection Areas for birds (SPAs). Wind farms impact a negligible proportion of the total surface area within the Natura 2000 network in Spain (see table below).

WIND FARMS IN PROTECTED AREAS IN SPAIN

Total surface area	LICs		ZEPAs		IBERDROLA Wind Farms		
	Total surface area SCIs (ha)	% of the region's territory	Total surface area SBPAs (ha)	% of the devolved region's territory	Total surface area in Natura Network (ha)	% in SPA	%in SCI
50,649,688	12,371,595	24.43	9,711,150	19.17	139.14	0.00038	0.00083

In Greece, the Company operates two wind farms in Natura sites:

WIND FARMS IN PROTECTED AREAS IN GREECE

Total Natura Network surface area (ha)	Iberdrola Wind Farms	
	Total surface area in Natura Network (ha)	% in Natura Network
3,902,206.88	15.64	0.0004

Windfarm Amelecourt. Francia

BIODIVERSITY MANAGEMENT APPROACH

03

Aldeadávila Hydroelectric station

Biodiversity Management Approach

It is IBERDROLA's longstanding practice to apply advanced biodiversity-preservation criteria. Even before the enactment of the Environmental Impact Assessment regulations that made this step a requirement, the Company conducted preliminary environmental studies on its infrastructure projects; it paid special attention to the potential effects of power lines on birdlife and operated its facilities in the awareness of their possible consequences for the natural setting.

This concern for preserving the environment was already implicit in the first environment policy subscribed to by IBERDROLA in 1992 (when the Company assumed the commitments of the UNIPEDE Policy) and is set out explicitly in the IBERDROLA environment policy approved in 2004 and in the current environment policy, adopted by the Board of Directors of the Company in December 2007.

To boost biodiversity management (policy, priorities, actions) an internal biodiversity working group (GTBio) has been set up in Spain, with members drawn from the Liberalised, Networks, Renewables, Engineering and Corporate Environment divisions. GTBio meets regularly to gain a better understanding of external expectations as to IBERDROLA's performance, coordinate biodiversity management, reduce the environmental risks associated with new infrastructure projects and with the operation of existing facilities, encourage cooperation with other organisations, share experiences, and keep the working group's member divisions regularly informed about biodiversity actions.

In September 2008, IBERDROLA set up an Environment Forum with external experts to hear their views and expectations regarding the Company's operations in this field. The forum was attended by senior management from the Company's Strategy and Development, Networks Spain, Liberalised, Corporate Environment and Corporate Reputation divisions, its Renewable Energy and Engineering subsidiaries, and ScottishPower. The external experts included 11 representatives of the Company's different stakeholders, such as non-governmental organisations, academic institutions, research centres, investment analysts, the media, regulators, customers and suppliers.

The monographic theme of the Forum's first session was biodiversity management in business. A wide range of suggestions for improvement were aired. GTbio's member divisions considered these suggestions and, as a result, made internal commitments to act, which have been communicated to Forum attendees and included in the Company's biodiversity management plan.

IBERDROLA's actions in this field implement the principles of the Company's biodiversity policy, in consonance with its adopted targets and with the identified priorities of the Company's core environmental stakeholders.

THE IBERDROLA GROUP'S BIODIVERSITY POLICY

The Board of Directors of IBERDROLA, S.A. (the "Company") is aware that social development is closely linked to the use of natural resources. It affects their availability, as well as natural systems and the services that ecosystems provide, sometimes resulting in a reduction in biological diversity. The scientific community agrees that we are currently seeing a rapid loss of this natural capital and biodiversity, which are essential for our survival as a species, for our welfare and for sustainable development.

Preserving biodiversity is also an issue of increasing importance for some of the Company's key stakeholders, such as non-government organisations ("NGOs"), public authorities and socially responsible investment groups.

The Company, aware of the importance of this issue, pledges to take into account the effects on biodiversity when planning, implementing and operating its energy infrastructures, and to help foster a corporate culture that focuses on raising society's awareness of the magnitude of this challenge and the potential actions that could contribute towards its conservation.

This commitment is assumed and driven via this policy, so that the various levels of the Company can gradually integrate the study of biodiversity effects and conservation actions when planning and carrying out their actions. In addition, all IBERDROLA employees will contribute in their day-to-day work towards complying with the targets set in this regard.

In order to put these commitments into practice, the Company's actions will be guided by the following basic action principles, which will be applied gradually to all our operations and business:

- **INTEGRATE** the conservation of biological diversity into Company strategy, including taking it into account in decision-making on the execution of infrastructure projects.
- **PROMOTE** in-house training of the Company's personnel in biodiversity-related topics.
- **APPLY** a preventative approach to minimise the impact of new infrastructures on biodiversity, bearing in mind their full life cycle, including the implementation, operation and dismantling phases, and drawing up environmental guidelines for each type of infrastructure project undertaken by the Company.
- **BUILD** this preventative approach into the environmental and social impact assessments (EIAs/SIAs) for new projects, especially in sensitive, biologically diverse or protected natural areas.
- **INTEGRATE** biodiversity into the Company's environmental management systems (EMSs), setting targets, indicators and criteria for its control, monitoring and auditing within the EMS framework.
- **PARTICIPATE** in research, conservation, education and awareness-raising projects, working in partnership with public authorities, NGOs, local communities and other stakeholders in the development of these projects.
- **REPORT** on the Company's biodiversity-related actions, on its facilities in protected areas and on research, conservation, education and awareness-raising initiatives.

In addition to this policy, which is applied across the entire geographical ambit in which IBERDROLA operates, ScottishPower is aware of the potential effects of its business on biodiversity. Its own environment policy contains a major chapter on biodiversity policy. ScottishPower's specific biodiversity policy is available at http://www.scottishpower.com/uploads/biodiversitypolicy.pdf.

LINES OF ACTION

The lines of biodiversity-protection actions in the various business units are:

SPAIN

Liberalised Business

There are no thermal plants in protected areas, nor is their influence significant in adjacent areas. Some hydro power stations, however, are located in protected areas managed by IBERDROLA under concession arrangements. Given the absence of any major development plans for these stations in the coming years, they are not expected to have significant environmental effects.

The SGAI (the group's global EMS) environmental guidelines issued in 2008 for hydropower identified two priorities:

Protection, conservation and sustainable use of the natural environment (air, water, soil)

Protection and conservation of wildlife, plant life and landscape.

These two priorities are implemented by the following actions:

- Integrating biodiversity conservation into new projects.
- Raising awareness of biodiversity among personnel.
- Applying preventative measures to minimise impact.
- Operating and maintaining facilities while minimising their environmental risks.
- Participating in awareness-raising and training programmes with stakeholders.

Networks Business

The biodiversity-management approach in the distribution division focuses on reducing effluent and fire risks and minimising birdlife-related incidents.

Lines of actions:

- Assessment of fire risk at medium-voltage pylons.
- Prevention of effluent risks at substations.
- Introduction of cross-pieces to reduce the risk of bird electrocution on overhead lines.

Alcántara Hydrielectric station

- Substation compaction.
- Burial of overhead lines.

For the purposes of birdlife incident analysis, the Company has a geographical information system (GIS) and an ordered wildlife inventory, based on national and regional catalogues and the IUCN Red List.

IBERDROLA Engineering and Construction

The lines of action include:

- Introducing the environmental variable in the design and construction of new infrastructure.
- Designing specific environmental solutions.
- Raising awareness of biodiversity among in-house and subcontracted staff.
- Using sustainable materials.
- Applying habitat, wildlife and plant life protection measures.

UNITED KINGDOM

ScottishPower's approach to biodiversity covers the following points:

- Tailoring biodiversity plans to each production facility. Implementing biodiversity action plans (BAPs) at all power stations and gas storage facilities in the UK so as to enhance habitats at the sites themselves and in their environs.
- Conserving species.
- Engaging in dialogue and partnerships on projects with entities specialising in biodiversity conservation.
- Developing biodiversity conservation strategies and policies in consultation with the bodies controlling natural heritage.
- Subsidising and co-funding training for gamekeepers and other environmental protection professionals.
- Following a biodiversity procedure to protect wildlife and habitats during the construction of overhead lines or substations.

High-voltage power lines

- Working in conjunction with fisheries boards, particularly at hydroelectric facilities, to protect and enhance the aquatic environment, and linking in to local authority biodiversity plans and projects.
- Carrying out EIAs before initiating construction of major new power lines and substations, and ensuring environmental management plans are drawn up for projects where conservation issues are identified.

UNITED STATES OF AMERICA

The priority lines of action are:

- Identifying areas of high biodiversity relating to new projects so as to avoid developing infrastructure in those areas.
- Minimising impacts on birdlife (osprey) and other endangered animal species.
- Improving aquatic habitats.

LATIN AMERICA

At the distribution companies in which IBERDROLA holds an interest, action will focus on:

- Initiatives to reduce the risks of releasing effluents into the natural environment.
- Using insulated cable to avoid harm.
- Managing pruning along line routes.
- Participating in selected species-conservation projects.

IBERDROLA Renewables Group

The lines of action are:

- Monitoring of wildlife, birdlife and bats at wind farms and small scale hydro power stations (operation phase).
- Monitoring of environmental and vegetation restoration work at wind farms (operation phase).
- Channel fencing and clearing projects.
- Action towards the fitting of fine-mesh screens in channels and sound barriers.
- Fishway inspection and conservation projects.
- EMS study to minimise the environmental impact on local wildlife and plant life of the use of oils, greases and lubricants at small scale hydroelectric stations.
- Improving the management of environmental emergencies caused by fires at wind farms.
- Implementing a GIS to monitor aspects of environmental management of facilities from design to operation.
- Preparing a best environmental practices manual for wind farm implementation.
- Environmental and vegetation restoration work at wind farms.
- Bird-protection facilities for evacuation lines.

In the United Kingdom, the group has a wind farm biodiversity conservation strategy and a wind farm sustainable development policy to integrate sustainability with development processes.

The approach covers the following aspects:

- Developing wind farms and power lines in accordance with careful site selection, extensive consultation with experts and proactive conservation management.
- Developing wind farm habitat management plans to create HMAs that help preserve selected animal species.
- Going well beyond any statutory obligations or planning conditions with respect to biodiversity work. The group not only attempts to mitigate the effects of wind farms, but aims to preserve special wildlife species such as golden eagles, hen harriers, black grouse and otters.

ACTIONS

SPAIN

Liberalised Business

Biodiversity management actions entailed expenditure[1] of €2,837,200 distributed over:

- Provision of the required ecological flow for conservation of river stretches downstream of dams.
- Freshwater monitoring studies at Agavanzal, San Roman, Azutan and Valdecañas reservoirs.
- Water quality controls on the Tormes and Tera rivers.
- Environmental diagnosis study at Tagus-system reservoirs related to IBERDROLA hydroelectric facilities and water quality monitoring for those reservoirs.
- R&D project to oxygenate turbine-released water in the summer season at the Valdecañas hydropower station.
- Installation of fencing, passes and exit devices for wildlife on a range of hydropower station channels.
- Study of the ecological state of the regulated river Tormes.
- Research studies on the environment and water quality in the Extremadura region, within the framework of the partnership agreement entered into with the University of Extremadura, with a budget of €50,000.
- Start of the partnership project with Global Nature and the management of Monfragüe National Park to build nesting places for rock-nesting species, thus aiding recovery of the population. (Further details in section 7.)
- Commissioning of the wet desulphurisation facility at Velilla thermal plant, which will reduce SO_x emissions by 90% and significantly enhance air quality in emission areas.
- As an improvement action to minimise environmental risks in operation and maintenance, continued efforts under the PRIMA environmental risk minimisation project. These actions include:
  - Increasing capacity of barriers, instrument controls and containment and absorption elements that minimise the scope of environmental impacts arising from accidental spillage of oils into the public waterway.
  - Improving handling and management of hazardous wastes; and.
  - Suppressing PCB-related risks, as part of the ELIRE project to decommission equipment containing PCB.
- The following actions continue at Cofrentes nuclear power station:
  - The hydrobiology programme conducted by the chemicals department with the Limnos firm, carrying out a study and follow-up of the environmental and biological conditions of the river and the reservoir.
  - The environmental radiological surveillance programme implemented by Risk Prevention in accordance with the MCDE dose calculation manual, involving sample-taking and analysis for all forms of exposure of living beings in the environs of the facility (soil, surface water, ground water, fish, game meat, etc). The results reveal a non-existent or negligible impact on the area's natural radiation level, with values similar to those obtained in the pre-operation programme before the station came on stream.
- At the Company's coal-, diesel- and gas-fired thermal plants, environmental management concentrates on minimising emissions and the risk of accidental discharge into rivers, effluent temperature control, water use management and, in general, reducing the impact of the plants on the local biodiversity. A highlight of 2008 was:
  - Commissioning of the wet desulphurisation facility at Velilla thermal plant, which will reduce SO_x emissions by 90% and significantly enhance air quality in emission areas.

1 The figure given here excludes €42,812,000 spent in 2008 on the construction and commissioning of a desulphurisation facility at the Velilla thermal plant.

Networks Business

- 83 oil recovery tanks at substations were built in 2008, for an investment of €1,803,568, to minimise the environmental risk of spillage.

- Biodiversity agreements were entered into with stakeholders aimed at minimising the risk of birdlife electrocution. €1,117,417 was invested under the agreements, with IBERDROLA contributing €408,395. The agreements include:

  - Government of Navarre grant to reduce effects on birdlife by removing or modifying 24 sections of power line.

  - Power line modification projects to protect birdlife in La Rioja.

  - Improvements in overhead lines for biodiversity conservation through birdlife protection in the Urdaibai Biosphere Reserve, Biscay province. Phase I in 2007-08.

  - Partnership with SEO to reduce risks to the Bonelli's eagle on IBERDROLA'S overhead lines in Toledo and Guadalajara provinces.

  - Partnership agreement with the Region of Murcia's Department of Agriculture, Water and the Environment under which close to €1 million will be invested in the preservation of species endangered by hazardous overhead lines in the Murcia SPA for birds (2007-2010).

- Reform and adaptation completed on a 10km section of the 13kV power line STR Boca de Huergano – Posada de Valdeon (Leon) for an investment of €685,000. The line runs through wood grouse mating and breeding grounds in the Picos de Europa Regional and National Parks in Castilla y Leon and in the Picos de Europa SCI and SPA (birds) in that same region. (Further details in section 7.).

- Preparation of fire risk analysis studies for all medium-voltage pylons in all Spanish regions.

- Implementation in the West region of tubular cross-pieces preventing storks and crows from nesting and thus reducing electrocution risk. 134 cross-pieces have been installed in the past few years.

- Improved environmental training of in-house staff and contractors through environmental awareness-raising courses.

- Five pilot projects on power line and vegetation co-existence.

Power line with tubular crosspiece

Corporate actions in Spain

In 2008, in addition to the specific initiatives in each of its areas of business, the Company undertook a number of corporate biodiversity-related training, awareness-raising and partnership initiatives for various projects, with an investment of €282,000.

Among these projects we would highlight:

- The continued partnership with the Tormes–EB Foundation to develop the IBERDROLA Biodiversity Training Centre, with the purpose of training future environmental technicians nationwide and creating a forum for discussion and a point of reference in Spain for this topic. In 2008, three courses were given on environmental topics:
  - Fieldwork techniques in environmental intervention projects.
  - Innovation in sustainability-driven rural development programmes.
  - Creativity in the design of environmental education and interpretation programmes in protected areas.
- The continuation of the Cantabria wood grouse conservation project with the Spanish Ornithology Society and the Fundacion Biodiversidad, a body which reports to the Spanish Ministry for the Environment. A highlight was the media presentation of the project and its progress so far.
- The completion of the partnership agreement with Fundación Global Nature to signpost routes and erect information and educational panels illustrating the environmental values of Monfragüe National Park.
- The release, as part of the project to recover and conserve wild rabbit populations in Monfragüe National Park overseen by Fundación Global Nature and the University of Extremadura, of 200 rabbits in a specific area of the Park (Further details in section 7).
- The first Environment Forum with external experts. The monographic theme was biodiversity. The suggestions and expectations that arose at the environment forum are being considered internally for inclusion in the Company's 2009 Biodiversity Plan.

IBERDROLA Engineering and Construction

- The environmental variable has been introduced in the design and construction of new infrastructure, for which local environmental impacts are systematically identified and evaluated even if the project is not subject to EIA requirements.

- Raising awareness of biodiversity among in-house and subcontracted staff.
  - Issue of environmental specifications to contractors.
  - Issue of good practice guides and handbooks.
  - Signposting of sensitive areas and species at sites.
- Use of sustainable materials.
  - Objective set in 2007: 5% of the wood used for hydro construction projects (La Muela II and San Esteban stations) must be sourced from sustainably managed woodlands (FSC and PEFC certified).
- Preparation of on-site environmental management plans including protection measures.
- Implementation of measures to protect soil, wildlife and plant life from facility design to construction and operation.
  - Restoration of quarries.
  - Stoppage of work during breeding seasons.

- Demarcation on site of sensitive areas and species.
- Placement of spill walls and sound screens.
- Design and execution of hydrological/forest restoration projects.

UNITED KINGDOM

Energy Wholesale

- Independent reviews have been conducted on the nine Biodiversity Action Plans established between 2004 to 2007. In respect of these plans, the Cockenzie and Longannet BAPs cover their nearby lagoons, and the Damhead Creek plan comprises a study of the mitigation area. BAPs are also in place for the Galloway and Lanark hydroelectric stations, the Cruachan pump facility and the Hatfield Moor gas storage facility.
- The Company's ecological consultants have concluded that many of the Company's biodiversity protection and development goals have been achieved, helping to protect and enhance biodiversity interests. The findings of the review process will help shape new BAPs being prepared for many sites.
- Continued to engage ecological clerks of works for major projects and co-sponsored Countryside Rangers at key sites to monitor the effects of our operations on land and the aquatic environment.
- Nestbox schemes for birds at many of Energy Wholesale's power stations resulted in a pair of peregrines and two pairs of barn owls successfully fledging young, while 120 pairs of sand martins bred in a purpose-created ash embankment at Cockenzie.
- A viewing gallery was established in summer 2008 at Cruachan Power Station where members of the public could gain close-up views of nesting ospreys.
- Lanark Hydroelectric Scheme funded and laid cabling for a high-definition video link to enable pictures from a peregrine nest to be beamed to a screen at the Falls of Clyde Scottish Wildlife Trust Reserve.
- An area of wet grassland used by breeding wading birds at Valleyfield Ash Lagoons is to be preserved following a review of the lagoons' future operational strategy.

Biodiversity Action Plans Site by Site	
Longannet and Valleyfield Lagoons	Habitats and key species: wetlands, grasslands, breeding and roosting waders, farmland passerines. Key actions: Island creation, nestbox scheme, ranger sponsorship.
Cockenzie and Musselburgh Lagoons	Habitats and species: wetlands, meadows, breeding and roosting waders and waterfowl, farmland passerines. Key actions: creation of wader scrapes, woodland and meadows, nestbox scheme, Ranger sponsorship.
Rye House	Habitats and species: grasslands, Great Crested Newt. Key actions: pond creation, bat and bird nest boxes.
Damhead Creek	Habitats and species: wetland, reedbeds, Water Vole, Barn Owl, roosting wading birds. Key actions: creation of wader scrapes, control of water levels, nestbox scheme.
Shoreham	Habitats and species: vegetated shingle, wildflowers. Key actions: fish monitoring, peregrine nestbox.
Cruachan	Habitats and species: native woodland, uplands, pearl-bordered fritillary. Key actions: bird, bat and insect nest boxes, woodland creation, removal of non-native species.
Lanark / Galloway Hydros	Habitats and species: native woodland, wetlands, willow tit (Galloway). Key actions: fish monitoring/management and support for salmon hatchery (Galloway), nestbox schemes, Ranger sponsorship (Lanark).
Blackburn Mill CHP	Habitats and species: woodland. Key actions: nestbox scheme, tree planting, coppicing
Hatfield Moor	Habitats and species: grassland, heathland, nightjar, wood lark. Key actions: creating grassland, enhancing scrub, recreating sandy heathland and protecting aquatic habitats

Further information on the BAPs at:
http://www.scottishpower.com/CorporateResponsibility.asp


Mini-Hydro station of Energy East

- An environmental study was conducted prior the demolition of the redundant Townhill Power Station on the outskirts of Dunfermline, Fife. A project team from Energy Wholesale worked closely with Scottish Natural Heritage to ensure the work did not affect wildlife or plant life on the site, formerly a gas turbine plant that closed in 1985.

- Installation of a flue gas desulphurisation (FGD) facility at Longannet thermal plant, which will reduce SO_x emissions by approximately 90% and significantly enhance air quality in surrounding areas.

- ScottishPower works closely with statutory agencies such as Scottish Natural Heritage, Natural England, Fisheries Boards and non-governmental organisations, including the Royal Society for the Protection of Birds (RSPB), WWF and Wildlife Trusts, in respect of our present sites and planned developments.

Energy Networks

- Continued to implement a Biodiversity Protocol for major Energy Networks projects, including the construction of overhead lines and substations. The procedure covers projects from the planning and consultation phase through to the development of site-specific plans to protect biodiversity and habitats during construction. Staff and contractors receive training in the plans which include, where appropriate, identification of species and procedures that must be followed to minimise disturbance to wildlife or habitats. A key part of the procedure is follow-up maintenance and monitoring when construction is complete.

- A 1.5km route for a cable pipeline was drilled beneath the Dovey Estuary by Energy Networks to avoid disturbance to a highly sensitive habitat for breeding wading birds and wildfowl, comprising marshes, mudflats, sand dunes and sandbanks. This site has numerous designations, including Natura, Ramsar, National Nature Reserve and Site of Special Scientific Interest. Part of the estuary is also a UNESCO (United Nations Educational, Scientific and Cultural Organisation) Biosphere Reserve.

- Plans progressed to create habitat corridors for wildlife during work to construct new substations at Coalburn and Elvanfoot, as part of the upgrade of the West Coast Interconnector. At Coalburn, mature trees are being planted, hedgerows reinstated and landscape features restored, while on the open moorland at Elvanfoot, trees and shrubs are being planted along water courses to enhance biodiversity and landscape character.

- Extensive Environmental Impact Studies were conducted in respect of a new power line that will provide a grid connection point for ScottishPower Renewables' Arecleoch wind farm of 180MW in Ayrshire (For further information see Key Initiatives section).

- Mitigation measures were developed to compensate for the loss of raised mire in respect of the new Denny substation that will form part of the Beauly-Denny transmission system upgrade. The new line will be essential to carrying electricity from new renewable energy projects in the north of Scotland to the rest of the UK.

Raised bog is a priority-listed habitat under Annex 1 of the Habitats Directive. Under normal circumstances we would avoid developing on such areas. However, there is no practical alternative that meets all the necessary site criteria, so we intend to compensate for the partial loss of this habitat at Torwood Mire through an extensive offset programme.

UNITED STATES OF AMERICA

The companies of the ENERGY EAST Group have undertaken a range of biodiversity actions:

Rochester Gas and Electric (RG&E) and New York State Electric & Gas (NYSEG) avoid routing new overhead lines through high biodiversity areas, protected or otherwise. NYSEG is working with the Audubon Society and the New York State Department of Environmental Conservation to provide nesting places away from power lines (e.g. for ospreys).

Central Maine Power (CMP) is taking the following actions:

- Developing a procedure to minimise impact on osprey (Pandion haliaetus) nesting and breeding in the company's distribution and transmission corridors.

- Working with the United States Fish and Wildlife Service on a study to identify and improve the habitat of the New England rabbit (Sylvilagus transitionalis), an endangered species, along its distribution corridors.

- Aquatic habitats: the company is working with landowners in two rustic river basins. These activities include prior processing of run-off water from impermeable sectors of the basin before it meets the river. The aim is to improve water quality and enhance the aquatic and riverbank habitats.

- Implementing erosion control measures (e.g. removable mats enabling excavator transit). This reduces the biodiversity impacts of facilities sited on wetlands and bodies of water. In 2008, restoration work relating to its Bath and Waterville plants was carried out.

LATIN AMERICA

In Mexico, the Altamira combined cycle power plant has undertaken a project to reinstate the ecosystem of the Garrapatas estuary.

In Brazil, the Group has engaged in actions to enhance the water treatment system at the Termopernambuco plant and cooperate with research on the development of artificial coral reefs near thermal power stations, and has entered into an agreement with the Department of the Environment and the Port of Suape to implement conservation units in the Zumbie and Dos Lagunas forests.

IBERDROLA RENEWABLES Group

SPAIN

The main initiatives - involving an investment of €3.5 million and expenditure of €2.7 million - include:

- Continued cooperation with Fundacion Patrimonio Natural to implement the joint programme for the conservation and management of the natural heritage of Castilla y Leon (2007-2011).

- Partnership between the Castilla-La Mancha public corporation for environmental management (GEACAM), the Castilla-La Mancha regional department for the environment and rural development, and IBERDROLA RENOVABLES Castilla-La Mancha, S.A.U. for the use of residual forest biomass.

- Partnership between the Castilla-La Mancha public corporation for environmental management (GEACAM), the Castilla-La Mancha regional department for the environment and rural development, and IBERDROLA RENOVABLES Castilla-La Mancha, S.A.U. to reforest 30 hectares in Cuenca province.

- Partnership between WAVES (Wild Animals Vigilance Euro-Mediterranean Society) and IBERDROLA RENOVABLES Castilla y Leon, S.A. for the creation of a master's degree course in wildlife and protected area management and conservation at the University of Leon.

- Cancellation of sewage discharge. In 2008, almost all the company's septic tanks were closed down. 13 facilities were shut down in Castilla y Leon, 24 tanks were closed in Castilla-La Mancha, and 2 facilities are in the process of being closed down.

- Channel fencing at small scale hydroelectric stations.
- Channel ramp installation at small scale hydroelectric stations.
- Study of Dupont's lark and marking of its habitat.
- Recovery of plant cover over 1.7 ha in Larrea, Avila province.
- Preservation of green spaces at substations and plant screens.
- Sowing to feed prey species for avian predators.
- Creation of dung heap and maintenance of network of dung heaps in Guadalajara.
- Installation of bird protection devices on high voltage power lines in Muela-Pinilla and Maranchon.

UNITED KINGDOM:

Biodiversity enhancement efforts focused on implementing Habitat Management Plans:

ScottishPower operates a range of Habitat Management Plans (HMPs), each of which covers a given area of priority action. The area comprising the priority actions of the relevant HMP is designated as a Habitat Management Area (HMA). In 2008, the combined HMA was enlarged by 25 square km through the HMPs for Whitelee and Green Knowes, which focus on managing the habitats of black grouse, wading birds and merlin. The aggregate designated HMAs for all HMPs scheduled for 2009 is 61.9 square km, of which 59.3 square km are already implemented and 2.6 square km are in process See table below).

PLANES DE GESTIÓN DEL HÁBITAT EN REINO UNIDO

Wind farm	Built	Source	Conservation focus	Habitat Management Area (km2)
Beinn an Tuirc	2001	Beinn an Tuirc HMP(2000)	Golden eagle	12.15
Cruach Mhor	2004	Cruach Mhor HMP(2004)	Hen harrier, short-eared owl, black grouse, and wetland cover	5.77
Black Law	2005	Black Law HMP(2004)	Wading bird species and wetland cover	14.4
Beinn Tharsuinn	2006	Beinn Tharsuinn LMP(Marzo 2006)	Hen harrier, black grouse	1.94
Wether Hill	2007	Wether Hill HMP(2006)	Black grouse	0.023
Whitelee	2008	Whitelee HMP, fourth draft (2007)	Wading birds, merlin, black grouse and wetland cover	24.8
Greenknowes	2008	Greenknowes BGMP, 13 October 2006	Black grouse, woodland regeneration with native species	0.25
Hagshaw Hill	In progress	Extension of Hagshaw Hill wind farm, BGMP. June 2006	Black grouse, woodland regeneration with native species	0.12
Dunlaw Ext	In progress	Dunlaw Ext HEP, 15 de Junio de2006	Black grouse	0.08
Beinn an Tuirc 2	In progress	Beinn an Tuirc 2, HMP(2006)	Hen harrier, black grouse	2.4
			Total area	62

For further details:

http://www.scottishpower.com/CorporateResponsability.asp

UNITED STATES OF AMERICA:

- In 2008, IBERDROLA RENOVABLES USA published its Bird and Bat Protection Plan, a pioneering initiative in the wind power industry. Modelled on the 2005 avian protection plan developed by USFWS, the United States Fish and Wildlife Service, the company's plan addresses the impact of wind farms.

- IBERDROLA RENOVABLES USA conducted birdlife research worth $1,216,627.46 as a preliminary step to developing new wind farms.

- Our wind project at Casselman, Pennsylvania, was used for an experiment to study the effects of halting wind turbines under gentle wind conditions as a way to avoid bat mortality, and to quantify the decrease in electricity output during outages.

- Merlin detection radar installed at the Peñascal wind farm, Texas. The radar detects merlins and bats under conditions of low visibility, enabling discretionary stoppage of turbines to reduce avian and bat mortality and injuries. IBERDROLA RENOVABLES USA invested $300,000 in the project in 2008.

Casselman Windfarm. EE.UU.

- A wide array of oil spill control plans worth $35,557 were implemented across the company's wind fleet to prevent adverse effects on the environment and wildlife habitats.

- The company works with the American Wind and Wildlife Institute (AWWI), Bat Conservation International (BCI), and the Bats and Wind Energy Cooperative (BWEC). IBERDROLA RENOVABLES USA is a founding member of AWWI, and in 2008 gave $100,000 to this foundation.

- BCI and BWEC conducted pre-construction studies at several IBERDROLA sites (South Chestnut, North Briary and Hoosac projects).

FRANCE

The company takes actions at wind farms in accordance with the specifically applicable EIS. A frequent practice is to refrain from building during the nesting seasons of certain protected species. In 2008, a birdlife monitoring study was undertaken at Fitou wind farm.

GREECE

In 2008, the company's actions included:

- Birdlife and reforestation studies relating to the project designs for two wind farms.

- Preliminary Environmental Impact Assessments (PEIAs) evaluating the effects on biodiversity of several wind projects in Greece.

- Two wholly new PEIAs were carried out during the year in connection with the development of two small scale hydroelectric stations.

HIGHLIGHT INITIATIVES

BIRD OF PREY HABITAT IMPROVED BY RECOVERY AND CONSERVATION OF WILD RABBIT STOCKS IN MONFRAGÜE NATIONAL PARK

The goal of the project is to improve the habitat of endangered birds of prey in Monfragüe National Park (PNM) by fostering the recovery of wild rabbit stocks. The enhanced availability of food resources removes one of the main threats to avian predators.

The work focused on increasing the population of wild rabbits as a way to improve the potential habitat of vulnerable and endangered species, such as Spanish imperial eagle (Aquila adalberti), golden eagle (Aquila chrysaetos), eagle owl (Bubo bubo), and Bonelli's eagle (Hieraaetus fasciatus). All these species are well-represented at PNM and are listed in the Annexes to the Birdlife and Habitat Directives as requiring conservation measures to improve their habitats.

One such measure is to bolster the recovery of one of their key food sources, wild European rabbit (Oryctolagus cuniculus). The state of wild rabbit stocks at PNM and its environs is critical, in line with the severe decline of the species across the Iberian Peninsula. Myxomatosis has decimated rabbit populations for over 20 years. In addition, in the late 1980s the appearance of viral haemorrhagic disease dealt a new blow to the rabbit populations then weakly recovering in the National Park. Studies by the Fundacion Global Nature show that at present wild European rabbit is scarce in 57% of the Park's area and very scarce in 43% of its area.

This project was carried out by Fundacion Global Nature (FGN) (environment actions, coordination, communications, etc), Monfragüe National Park staff, and the technical section of the University of Extremadura's department of agricultural and forest engineering.

ACTIONS

Population management

A large number of artificial warrens were built to serve as shelter and breeding grounds. Natural food sources were provided by sowing, supplemented by artificial food dispensed by chute devices. The enhanced habitat within the Park enclosure will make for higher capacity to support rabbits.

In line with the project specifications, 40 artificial warren sites were set up. Sites were strategically selected on gentle slopes to keep the warrens safe from surface runoff and flooding by rain. Dampness was minimised by cladding each warren with special plastic, earth, stones and plant residue.

The Park management's own undergrowth clearing and tree-stump removal work near the boundary enclosure was utilised as an opportunity to build a further range of simpler shelter structures. Eucalyptus tree stumps, which make for hardy, durable shelters, were piled up at strategic points between warrens. The move was suggested by the University of Extremadura researchers working on the project.

After the erection of shelters made from eucalyptus stumps, the ground will be replanted with shrubs to provide the rabbit population with favourable plant cover.


Artificial warren

Pre-existing natural pastures were enhanced with natural fertiliser and sown with seed, with feeding grounds interspersed between shelter sites. Twenty artificial feeding troughs were installed. Feeding began ahead of the original schedule to give the doe rabbits higher food availability and thus improve their physical condition while in heat, which in turn boosts their fertility and breeding potential.

Water availability was increased to offset the summer drought. This was achieved by improving two pre-existing ponds and installing 20 artificial drinking tubs spread out evenly over the area. The drinking tubs were also used as anti-parasite distribution points.

Monitoring

Every captured rabbit was sexed, wormed, vaccinated and tagged with a numbered earmark.

From first release, the extent to which the rabbits occupied the artificial warrens has been monitored. Direct tallying of animals sighted over time provided a further datum on relative abundance, interpreted as "rabbits per hour".

The monitoring data shows that the population displays high warren-occupation and survival rates. The rabbit population has settled in well and the outlook for the heat season is positive.

In line with the planned schedule, the short period during which the project has been active means that only early results are visible. These will serve as the basis for this line of research and conservation at Monfragüe, and will foster the continuity and necessary persistence in the conservation of wild rabbit and its habitat.

The newly introduced rabbit population now faces its first breeding season, one of the most critical stages of the rabbit life cycle, in a new environment and with a need for extensive further support from the bodies implementing the repopulation drive. IBERDROLA is committed to continuing the efforts planned at the start of the project and to use the FGN's support to expand the population further after its first breeding season.

Date	% warren occupation	Relative abundance (Rabbit /hour)
21/11/2008	100	30
2/12/2008	75	4
6/12/2008	30	2
19/12/2008	20	2
27/12/2008	100	33
7/1/2009	96	22
17/1/2009	94	23
24/1/2009	93	15
2/2/2009	91	5
12/2/2009	85	4

BREEDING SITE CONSTRUCTION PROJECT ON ROCK FACES FOR EYRIE-NESTING BIRDS IN MONFRAGÜE NATIONAL PARK

The Torrejon hydroelectric power station exerts a considerable influence on the habitat of Monfragüe National Park. The critical point is the rock faces and crags surrounding the reservoirs, which are ideal for certain bird species to build their nests or eyries: these species may be threatened by annual fluctuations in the level of the Alcantara reservoir.

Nesting platform

IBERDROLA has funded a species conservation project to be implemented by Fundacion Global Nature, under the oversight and coordination of the management and trustees of Monfragüe National Park. The project, with a budget of €50,000, involves the corrective measure of installing suitable nesting sites that are protected from becoming engulfed by a rise in the level of the reservoir.

The project targets 23 species, of which the main ones are black stork, Egyptian vulture, Bonelli's eagle and griffon vulture. Except for white and black stork, the preliminary census found that all species had made clear progress. Stocks of lesser kestrel, specifically, have recovered spectacularly in the past few years, reaching a population of 23 in 2008, whereas since 2002 numbers had never previously exceeded nine. Heron, little owl and peregrine falcon were absent from the census, having disappeared from the Park years ago.

The steps of the project are:

- Analysis of the breeding population of target species in the National Park over the past few years so as to determine population trend.
  - Breeding population behaviour of the past few years (nest location, breeding couples, breeding success).
  - Data on episodes of obstacles to breeding over the past few years, whether man-made or due to inter-species competition or other factors (e.g., changes in water levels).
- Compilation of information on the limiting factors of breeding in the National Park.
- Characterisation and identification of nesting sites in the National Park.
  - Sampling for identification and characterisation of nesting sites during the season in which the birds are away from the breeding grounds.
- Installation of nesting platforms after completion of the previous step, and prior to the birds returning to the nesting sectors, followed by monitoring of their use.
- Awareness-raising and knowledge-building about species by drafting informational materials.

Raising stocks of the target species at Monfragüe National Park requires both long- and short-term programmes. The outcome of this project will help foster the continuity and necessary persistence in conservation of these species going forward.

CAPERCAILLIE CONSERVATION PROGRAMME IN SPAIN AND SCOTLAND

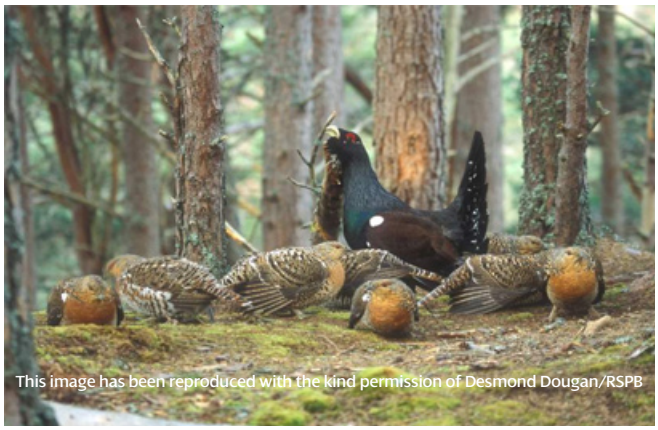
In line with its Biodiversity policy and working areas defined in this field, such as conservation actions in key spaces and where protected species may be affected by the Company's business, **IBERDROLA** participates in the Spanish Cantabria Grouse Conservation Programme in the Picos de Europa National Park called *"El sonido del Bosque" http://www.seo.org.* Also participating in this programme are the Ministry of the Environment, represented by the Biodiversity Foundation, and SEO/Bird Life. The main objective is to raise awareness of the population, conservation and recovery of the Cantabria wood grouse.

The three-year programme was begun in 2007. In 2008, a major information and awareness campaign was undertaken, involving the publication and circulation of educational materials, a touring exhibition, an environment lecture room, school activities, field work and a media presentation of the programme. Several of the actions taken to improve the black grouse habitat centred on optimal forest management, by fostering an improved structure of the vegetation mosaic, opening clearings in beech and oak woods, and planting bilberry enclosures for monitoring purposes.

As in Spain, wood grouse - or western capercaillie - is one of the United Kingdom's most endangered species: barely more than 2,000 individuals remain in the pine woodlands of northern Scotland.

An endangered species in Europe, the IUCN Red List classes capercaillie as being in critical danger of extinction. Its retreat is a consequence of its loss of habitat; the sub-species native to the Scottish woods appears to be facing the same challenges as the Spanish Cantabrian and Pyrenean sub-species.

In the UK, the capercaillie population declined sharply from about 20,000 individuals in 1970 to a nadir of barely a thousand by 1999. Capercaillie then became a priority species in critical danger of extinction under the UK Biodiversity Action Plans.



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Working in partnership with colleagues in Spain, ScottishPower agreed to support initiatives to preserve the species, and is a member of the Royal Society for the Protection of Birds' (RSPB's) "Friends of the Capercaillie" conservation group.

After a considerable research effort, scientists agree that one of the main causes of the disappearance of wood grouse from Scotland is the loss, fragmentation and deterioration of its preferred habitat, the Caledonian pine forest.

In response to these research findings, the RSPB is seeking to expand a major Caledonian pine forest covering 130 square km in the Abernethy reserve, where wood grouse has a significant presence.

The RSPB's goal is to create an extensive area, comprising the Abernethy and Glenmore woodlands, in which to encourage this habitat. ScottishPower has confirmed that in 2009 and 2010 it will help fund the programme to reforest the Abernethy woodland with native species, such as bilberry, holly, poplar and birch. In the short term, the programme involves planting 50 hectares (0.5 sq km) of a larger repopulation scheme embracing 500 hectares (5 sq km). The initiative will thus build up a mosaic of habitats to help enrich local biodiversity and assure the survival of wood grouse.

ADAPTATION OF AN OVERHEAD LINE IN PICOS DE EUROPA NATIONAL PARK

In many areas of the natural environment, overhead power lines pose a birdlife accident threat, in the form of electrocutions and collisions with cables. Electrocution comes about by contact between two conductors, or between a conductor and a grounded element of the pylon. In addition, birds may collide with conductors, the least visible part of the power line system. The adverse visual impact on the landscape is a further reason to seek alternatives to overhead lines.

Today, however, overhead lines are the only viable means of large-scale electricity transmission and distribution. Nevertheless, there are specific technical solutions to prevent electrocution, avoid collisions and ameliorate the landscape, such as the routing of several lines through the same paths, cable marking and signage, replacement of hazardous cross-pieces, insulation of pylons and conductors, and occasional, responsible burying of lines in some cases.

Overhead lines are essential to the social and economic development of a district. Modern life is inconceivable without the energy that reaches us from power production sites by means of overhead lines. The Picos de Europa Regional and National Parks, which enclose a number of human settlements, are no exception.

IBERDROLA, in line with its support for biodiversity and with the overriding goal of optimizing local supply quality while enabling co-existence with birdlife, especially the Cantabrian wood grouse, has partnered with the regional government of Castilla y Leon and the National Park management to undertake a number of actions. In 2008, the company completed the reform and adaptation of a 10km section of the 13kV power line running from STR Boca de Huergano to Posada de Valdeon, Leon province. The line runs through wood grouse mating and breeding grounds in the Picos de Europa Regional and National Parks in Castilla y Leon and in the Picos de Europa SCI and SPA (birds) in that same region, and the area covered by the Brown Bear Recovery plan. Implemented by the West region of Networks Business Spain, the work was listed in the Castilla y Leon regional government's quality plans.

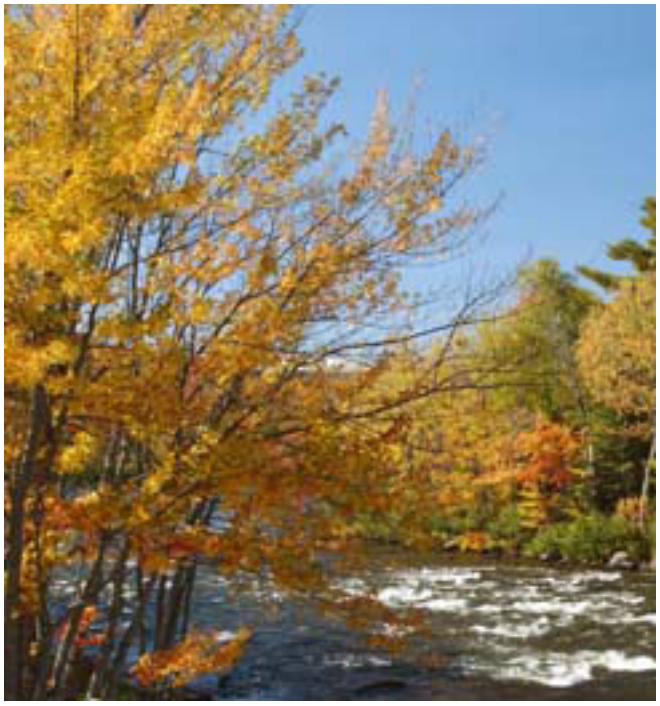
The work was done with an especially acute awareness of the environment and scrupulously following the instructions and requirements of the environment departments of the affected government authorities. The company took care not to interfere with the local habitats and species and abided by time restrictions, particularly as regards the routing of the line through a critical feeding ground of the brown bear, a priority protected species. The construction tasks called for the use of horse-drawn and air transport to move and store materials while minimising environmental and landscape impacts.

Works in power line. Picos de Europa

Works in power line. Picos de Europa

Despite the difficult logistics involved, power supply to the affected localities was sustained throughout with the use of small-scale generators.

With the final renovation work - insulating bridge pieces and clamps and installing anti-collision devices on conductors at 15 m intervals - the overhaul scheduled for 2008 of the 10km of line was completed, and the new line was brought on stream.



ENVIRONMENTAL IMPACT STUDIES

Extensive environmental impact studies (EISs) were conducted over a period of two years in respect of a proposed new 132kV transmission line in Ayrshire that will provide a grid connection point for the 180MW Arecleoch wind farm, near Barrhill, in Ayrshire.

The new line consists of two overhead line sections of 4.5km and 3.3km between the wind farm site and Mark Hill substation, with shorter sections of underground cable at each end and a 1.2km section of undergrounded cable crossing a valley that will pass under the railway, the A714 road and the River Duisk. This area of Ayrshire is rich in wildlife and has some scenic areas. Following extensive environmental impact studies, a preferred route was developed that would avoid the most environmentally sensitive areas.

Energy Networks undertakes mitigation for our projects at three levels:

- Avoidance of potential effects (through careful routing and site selection).
- Reduction of potential effects (through careful management) and
- Offset (where direct mitigation is not practicable).

A number of measures will be taken to preserve habitats and avoid disturbance to mammals, such as red squirrel, otters, water voles, bats, roe deer and red fox and birds, including hen harrier, whooper swans, common buzzard, wildfowl and grey heron.

82 species of bird were recorded in the area during surveys, including seven breeding Red Data List species: song thrush, grasshopper warbler, bullfinch, reed bunting, spotted flycatcher, linnet and skylark and 10 Amber list species.

Mitigation measures will include fencing off sensitive areas close to work sites, re-using vegetated turves, sensitive micrositing of individual poles to avoid blanket bog and areas of deep peat.

Bird flight diverters will be installed along sections of the line to avoid the risk of collision and electrocution for hen harriers. These will also benefit whooper swans, wildfowl, grey heron and common buzzard.

IBERDROLA

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