

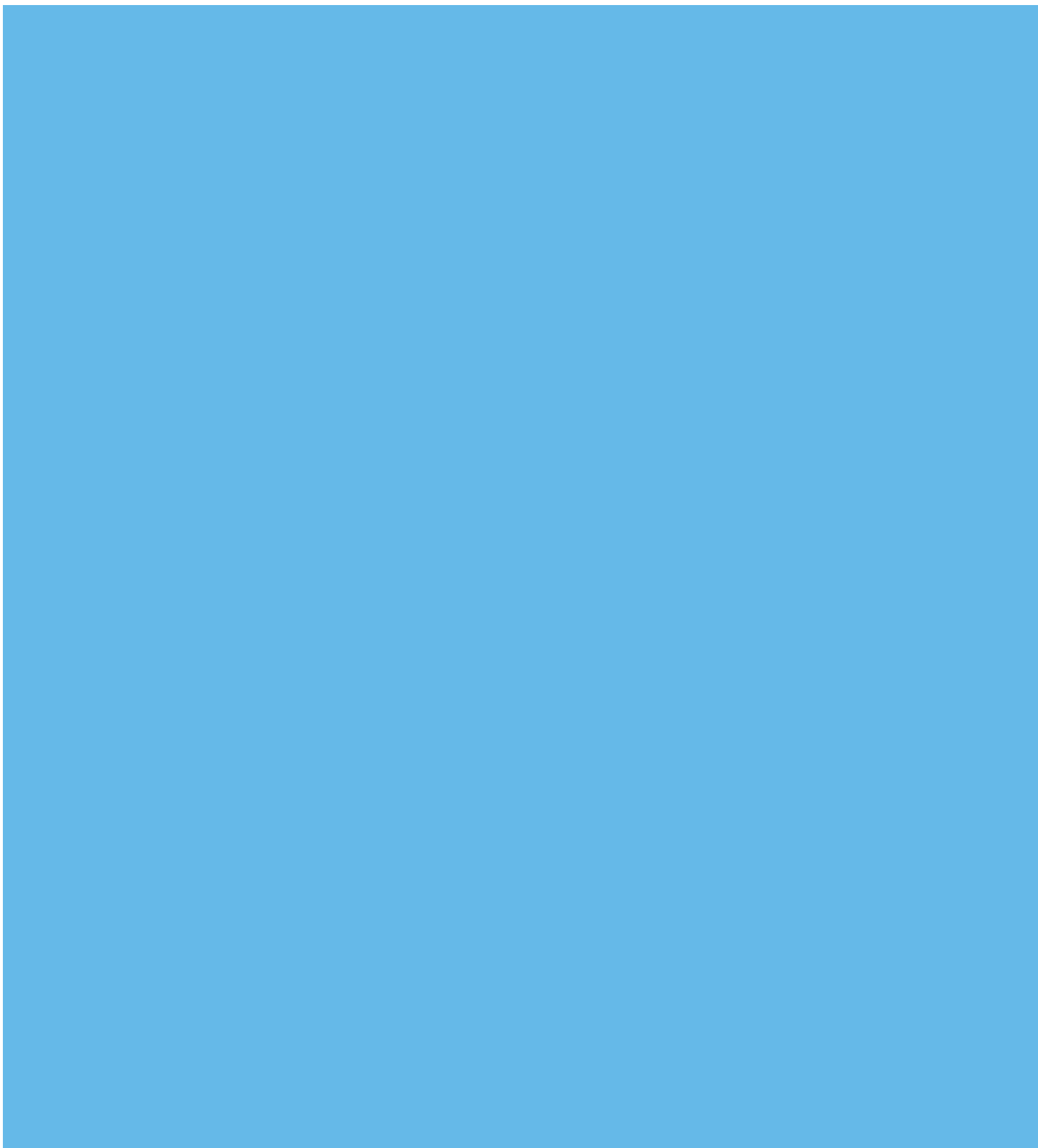
SUSTAINABILITY REPORT 2007

HISTORY OF THE FUTURE



REN 

Redes Energéticas Nacionais







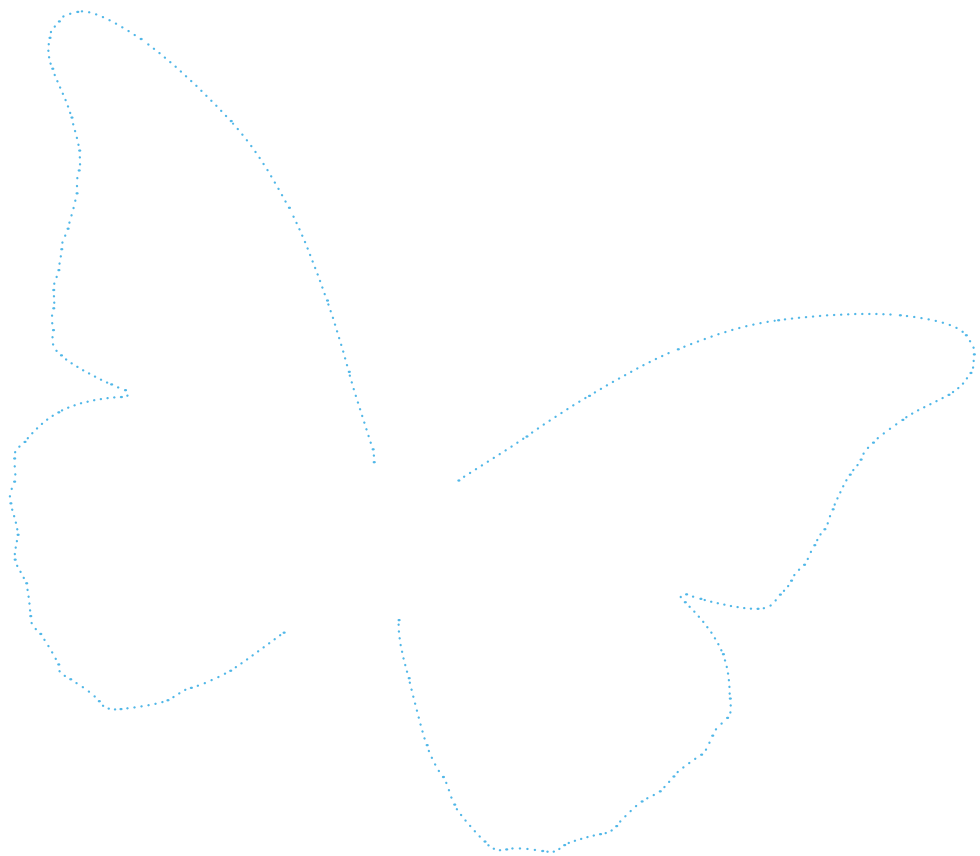
This is a CarbonoZero report.

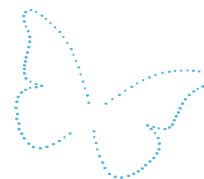
The greenhouse gas emissions related to its production and their effect on the climate were offset through the carbon sequestration capabilities of 4 trees at Herdade da Perna-da for one year. The emissions regarding the pulp and paper manufacturing as well as those related to print all issues of the report were taken into consideration, amounting to 0.15tonnes of CO_{2eq}.

Your opinion counts and may help us to improve future editions. Please send any questions, comments or suggestions to sustentabilidade@ren.pt and/or participate in the survey on this report by answering the questionnaire on www.ren.pt.

SUSTAINABILITY REPORT 2007

HISTORY OF THE FUTURE





HISTORY OF THE FUTURE

“The more futures run, the closer they come to us and we to them.”

António Vieira
(1608-1697)

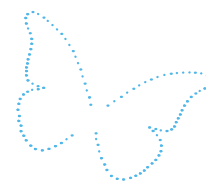
2008 marks the 400th anniversary of the birth of Father António Vieira. Vieira occupies an important place in Portuguese history and world literature. He worked tirelessly throughout his life as a missionary, politician, thinker and champion of causes. He left a vast oeuvre, especially letters and sermons showing his talent and originality as a speaker.

In honour of this anniversary, this sustainability report, History of the Future, has been named after one of António Vieira's last works, the foreword of which spoke of a vast, ambitious project that he never actually finished.

Most of the quotations in the report are from this work.



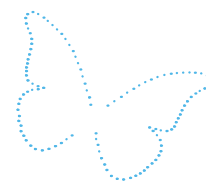
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CHAIRMAN'S STATEMENT



It is with great pleasure that we are publishing the third edition of REN's Sustainability Report. For the first time, the report covers a whole financial year with the natural gas companies and is an excellent vehicle for reporting to our stakeholders on REN's performance in the three sustainability pillars. Once again, it complies with Global Reporting Initiative (GRI) guidelines. This document also serves as a channel for reporting on REN's progress in applying the ten Global Compact principles, a dedicated commitment we made to the United Nations Secretary-General.

2007 was a great challenge for the Group's companies in terms of organisation and relationships with their stakeholders. REN changed its corporate structure and set up a holding company to manage the Group's activities in preparation for the initial public offering of part of the company's shares. This work mobilized a considerable number of employees in the first half of 2007. The operation, which took place at a special stock exchange session on July 9th, was a resounding success and demand for REN shares vastly exceeded offer (more than 107 times). It attracted a substantial number of shareholders (close to 200 000), especially small investors.

REN's investment plan has been quite ambitious in recent years, especially in the National Electricity Grid, where investment once again exceeded EUR 200 million. We are going to continue to invest an estimated EUR 290 million in the next three years. This amount includes a sum for developing natural gas infrastructures, such as the third LNG (liquefied natural gas) tank at the Sines terminal, construction of two other gas storage caverns at Carriço and pipelines to the new combined-cycle plants.

Our concern for preserving the environment is imbued in our daily activities and decision-making on new investments in expanding and remodelling power transmission and natural gas storage infrastructures. In this context, I would like to highlight the publication in 2007 of the Guide on Assessing the Environmental Impact of the National Transmission Grid for Overhead Lines. This guide, which was prepared in partnership with the Portuguese Environment Institute (APA - Agência Portuguesa do Ambiente), is a reference document for conducting environmental impact studies and assessments of this type of infrastructure.

In 2007, we also began the strategic environmental assessment of our investment plan for the transmission network (PDIRT) for 2009-2014 following the transposition into Portuguese law of the European Directive on Strategic Environmental Assessment of Plans and Programmes. I consider this to be an essential practice for systematically including environmental incidences and criteria in the comparative analysis of alternatives in expanding the electricity transmission grid in the pre-design phase. The PDIRT and its environmental assessment have been submitted and discussed publicly in 2008.

Regarding stakeholders' engagement, in 2007 we prepared a survey to assess REN customer's expectations and satisfaction using a method compatible with the European Customer Satisfaction Index (ECSI). Here at REN, our customers include not only consumers but also the other parties involved in the electricity market, i.e. generators, distributors, suppliers, market operators and similar. The first phase of the survey covered customers of Rede Nacional Eléctrica, though there are plans to extend it to other Group companies in 2008.

In spite of our ongoing efforts to find balanced solutions proportionate to the risks involved, in 2007 there was an increase in public protests against plans to invest in the electricity grid and several civic movements were set up in opposition to the installation of new very-high voltage lines. This situation highlighted the need for REN to improve its external communication and improve mechanisms for involving some stakeholders in decision-making processes.

As for the main bone of contention, electromagnetic fields, we continued to follow a regular, strict systematic monitoring plan, particularly in the most unfavourable situations. I would like to point out that the figures recorded are significantly lower than those recommended by the Committee on Epidemiology of the International Commission for Non-Ionizing Radiation Protection (ICNIRP), which are enshrined in current legislation and already comply with the precautionary principle.

Once again, 2007 was also marked by REN's operational excellence, reflected by an equivalent interruption time of less than one minute in the electricity grid and availability indices close to 100% for the natural gas network and facilities. The results achieved are considered highly positive at European level.



We know that 2008 will be very important for the consolidation of our presence in the capital market and our Group culture. In this regard, I would like to underline the start-up in April 2008 of REN Serviços, the Group's shared service company, with which we hope to achieve gains in efficiency. And while we are on the subject of efficiency, we are awaiting with high hopes the definition of the new regulatory model, the basic concepts of which have already been announced by the Energy Service Regulator and which include efficiency incentive mechanisms, to the benefit of all.

I would like to reiterate REN's wish to make the most of our relationship with our main stakeholders and to ensure that the relationship of trust that we enjoy with them will be continually improved and cemented. It is our ambition to guarantee that the networks of trust last and become part of the history of the future.

José Penedos





Profile

PROFILE

ORGANISATIONAL PROFILE

Name (2.1)

REN - Redes Energéticas Nacionais, SGPS, S.A.

Brand and services (2.2)

Brand and signature



Trustworthy networks

Brand attributes

- Impartiality
- Efficiency
- Excellence of service
- Dynamism
- Sustainability

Services

Management of shareholdings in the companies operating in the areas of electricity transmission, natural gas transport and storage and liquefied natural gas' reception, storage and regasification.

Its subsidiaries hold the concessions under Portuguese government contracts for the following public services:

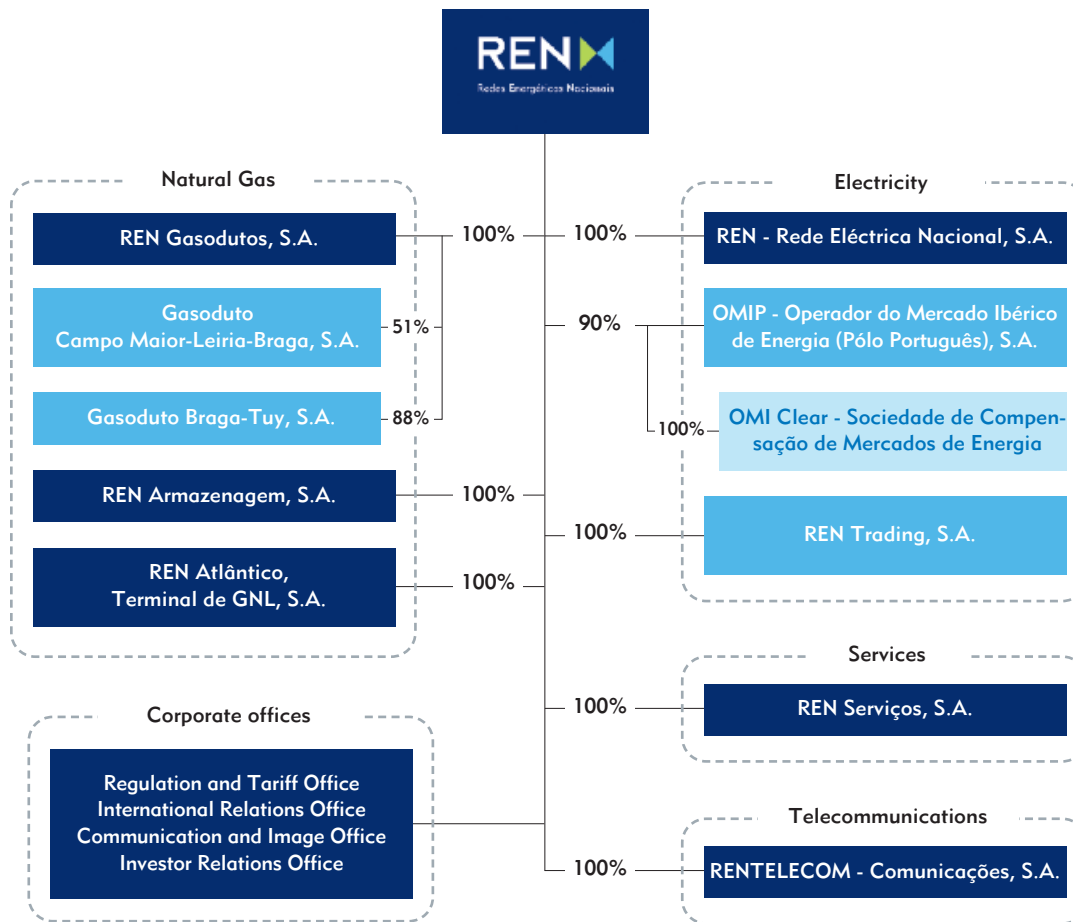
- Overall management of the public electricity service system, operation of the electricity transmission grid and construction of its infrastructures (REN - Rede Eléctrica Nacional, S.A.)
- Reception, transport and delivery of natural gas through a high-pressure network and construction and operation of its infrastructures (REN Gasodutos, S.A.)
- Reception, injection, underground storage, extraction, treatment and delivery of natural gas and the construction and operation of its infrastructures (REN Armazenagem, S.A.)
- Reception, storage and regasification of liquefied natural gas (LNG) at LNG terminal and construction and operation of its infrastructures (REN Atlântico - Terminal de GNL, S.A.)

Outsourcing

The construction and operation of electricity and natural gas infrastructures involve a considerable amount of outsourcing for the supply of materials, products and equipment and the provision of services. In the construction phase, we outsource studies (environmental impact, cartographic and geotechnical studies, among others), project engineering and construction and assembly contracts. In the operation phase, we often outsource inspection services, equipment maintenance and operating services – only in underground storage of natural gas – and supplies of consumables.

Operating structure (2.3)

Figure 1 - Corporate structure



Registered office (2.4)

Av. dos Estados Unidos da América, 55 – 1749-061 Lisboa, Portugal

Countries of operation (2.5)

Mainland Portugal

Ownership and legal form (2.6)

Public limited company with a share capital of EUR 534 million

Markets served (2.7)

Electricity and natural gas markets. Their infrastructures are shown in the electricity and natural gas networks' maps that can be seen at REN's website. The position of the companies holding the concessions for the national electricity and natural gas public service systems are shown in the diagrams of their respective systems.

Figure 2 - Position of the transmission grid operator in the national electricity system

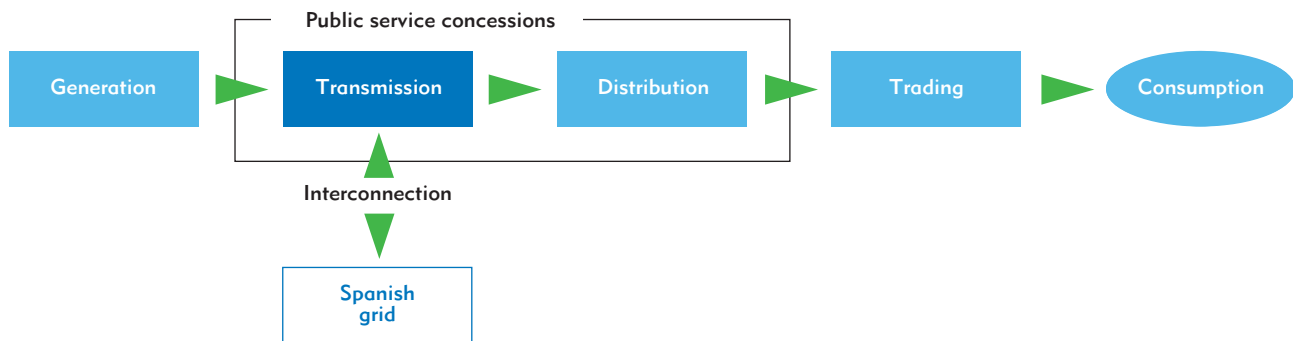
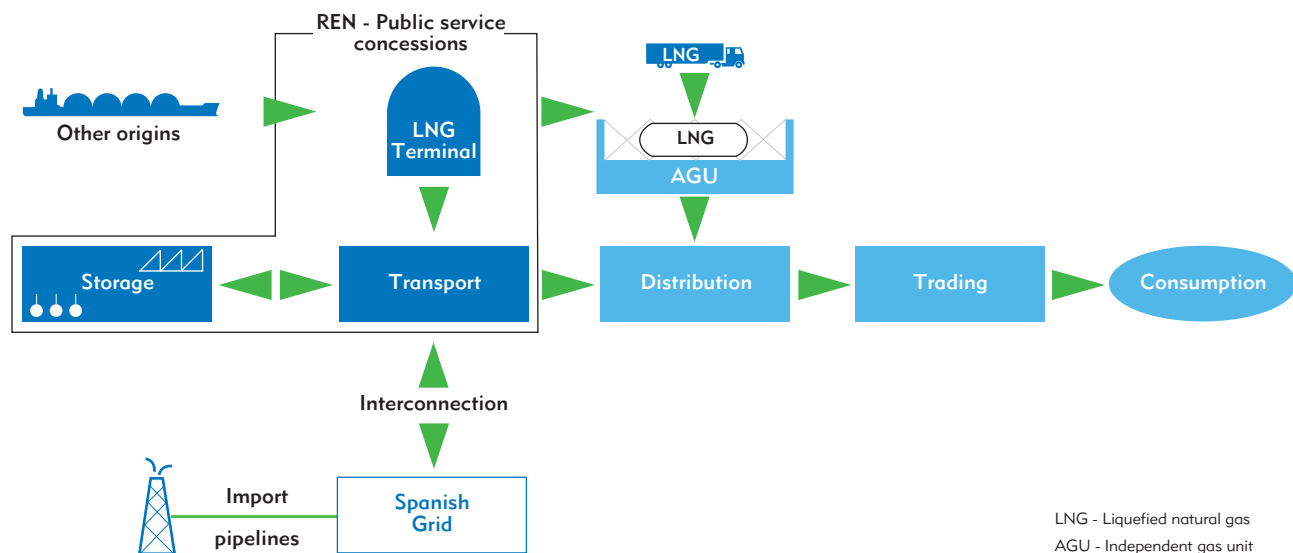


Figure 3 - Position of REN's public service concession holders in the national natural gas system

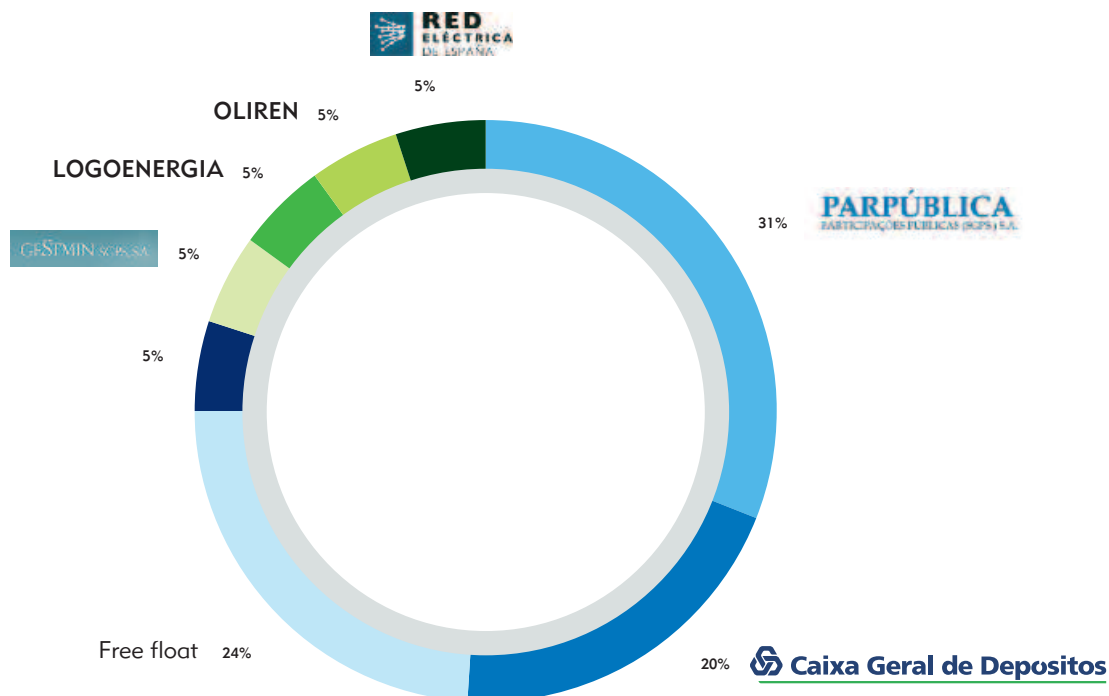


Size (2.8)

	2007	2006	
Number of employees	802	794	
Sales and services *	555	3 175	EUR millions
Total capitalisation			
Equity*	1 006	1 031	EUR millions
Liabilities*	2 959	2 930	EUR millions
Quantity of products provided			
Total national electricity demand	50 047	49 176	GWh
Total electricity supplied by REN	49 304	39 090	GWh
National natural gas demand	4.07	3.83	billion m ³ (n)
Energy equivalent to natural gas	48 453	45 567	GWh
Total net assets *	3 965	3 969	EUR millions

*Consolidated figures, IFRS format

Figure 4 - Shareholder structure (positions known as at December 31st, 2007)



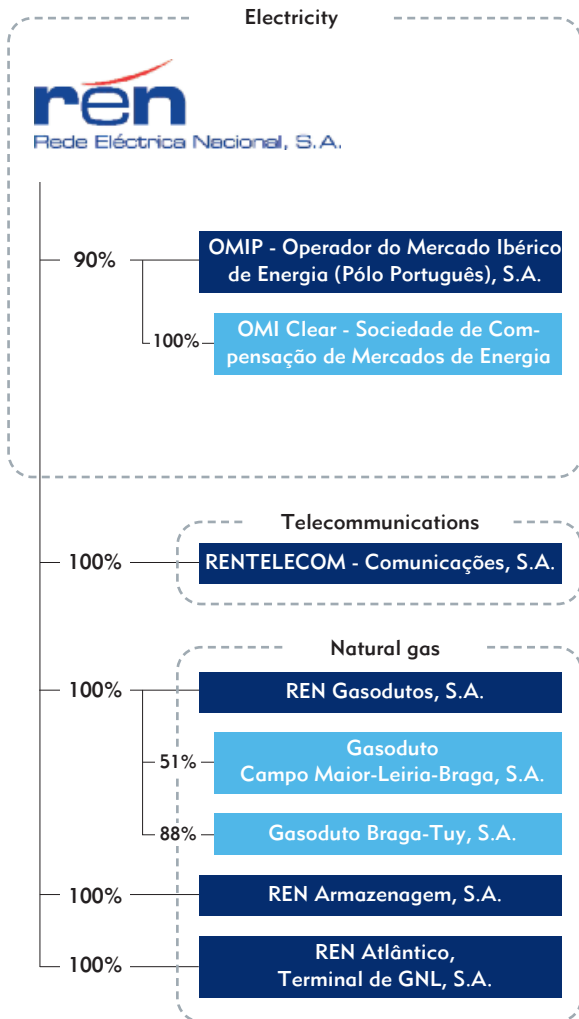
Significant changes (2.9)

In organisational structure:

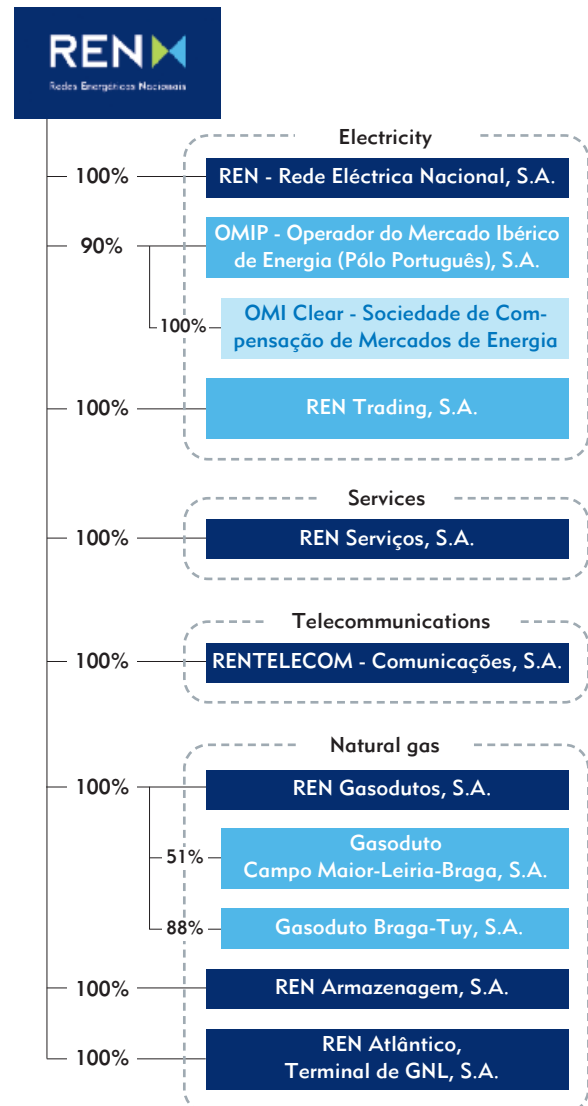
- Holding company set up with the name REN - Redes Energéticas Nacionais, SGPS, S.A. from REN - Rede Eléctrica Nacional, S.A.
- REN Trading, S.A. and REN Serviços, S.A. set up

Figure 5 - Changes in the company's organisational structure

November 5th, 2006



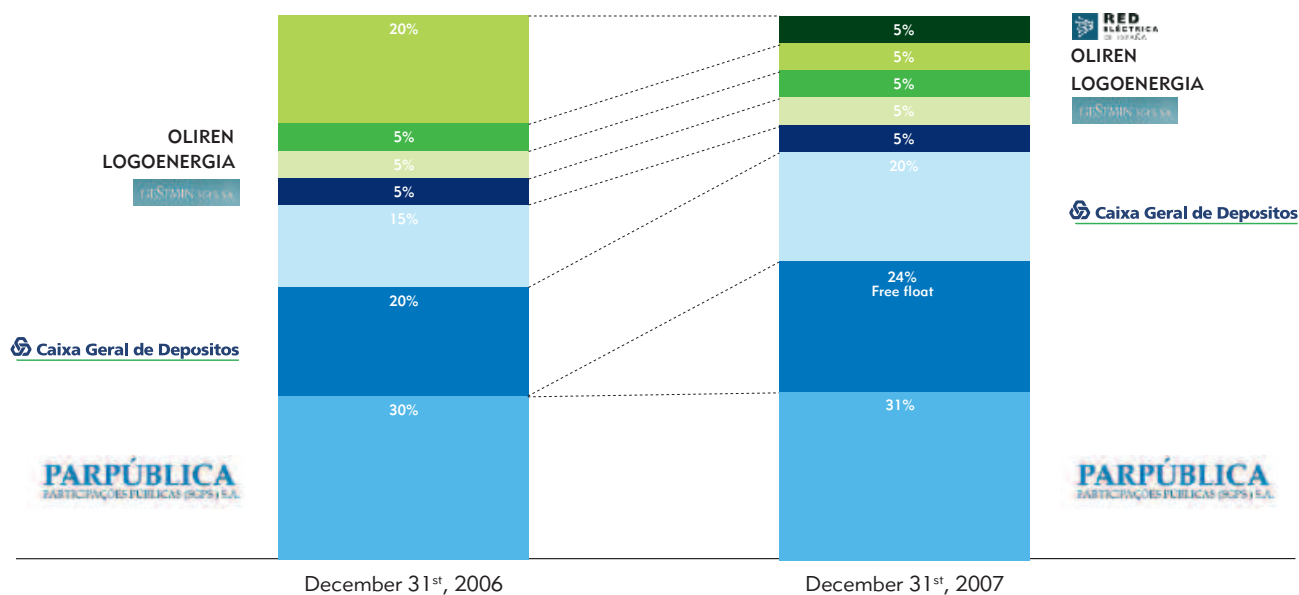
December 31st, 2007



In shareholder structure:

- Acquisition by Parpública of 20% of REN's share capital held by the state
- Sale by EDP of 5% of REN's share capital to REE
- Sale by Parpública and EDP of 24% and 5% of REN's share capital, respectively (public sale operation)

Figure 6 - Changes in company's shareholder structure



Awards (2.10)

None of the Group companies received any awards in 2007.

Infrastructures

Electricity	2007	2006		Natural gas	2007	2006	
Length of transmission lines (EU3)				Pipelines			
150 kV	2 661	2 431	km	High pressure (84 bar)	1 218	1 218	km
220 kV	3 177	3 080	km	Stations			
400 kV	1 588	1 507	km	Junction stations	46	46	
Facilities				Industrial connection junction stations	15	15	
Substations	51	49		Block valves	41	41	
Switching and sectioning stations	12	10		Custody transfer stations	1	1	
Transformation power				Gas regulating and metering stations	70	69	
Auto-transformation	8 346	7 871	MVA	LNG terminal			
Transformation	14 526	13 264	MVA	LNG tanks	2x120 000	2x120 000	m³
				Underground storage			
				Storage caverns **	65 500 000	76 600 000	m³ usable

**The volume for 2006 was the result of the first filling of the caverns. The volume for 2007 expresses the maximum available capacity for commercial purposes, which is conditioned by the specific thermodynamics of high-pressure natural gas storage in salt caverns.

PARAMETERS OF REPORT

PROFILE OF REPORT

Reporting period (3.1)

Calendar year of 2007

Date of previous report (3.2)

July 11st, 2007

Reporting cycle (3.3)

Annual

Contact details (3.4)

sustentabilidade@ren.pt – www.ren.pt

SCOPE AND BOUNDARY OF REPORT

Contents (3.5)

Among the potential users of our sustainability report are entities involved in the energy market, including similar companies, government bodies, environmental organisations, local authorities, universities and professors, the media, suppliers and entities of which REN is a member. More closely linked to the company, there are shareholders, corporate bodies and employees.

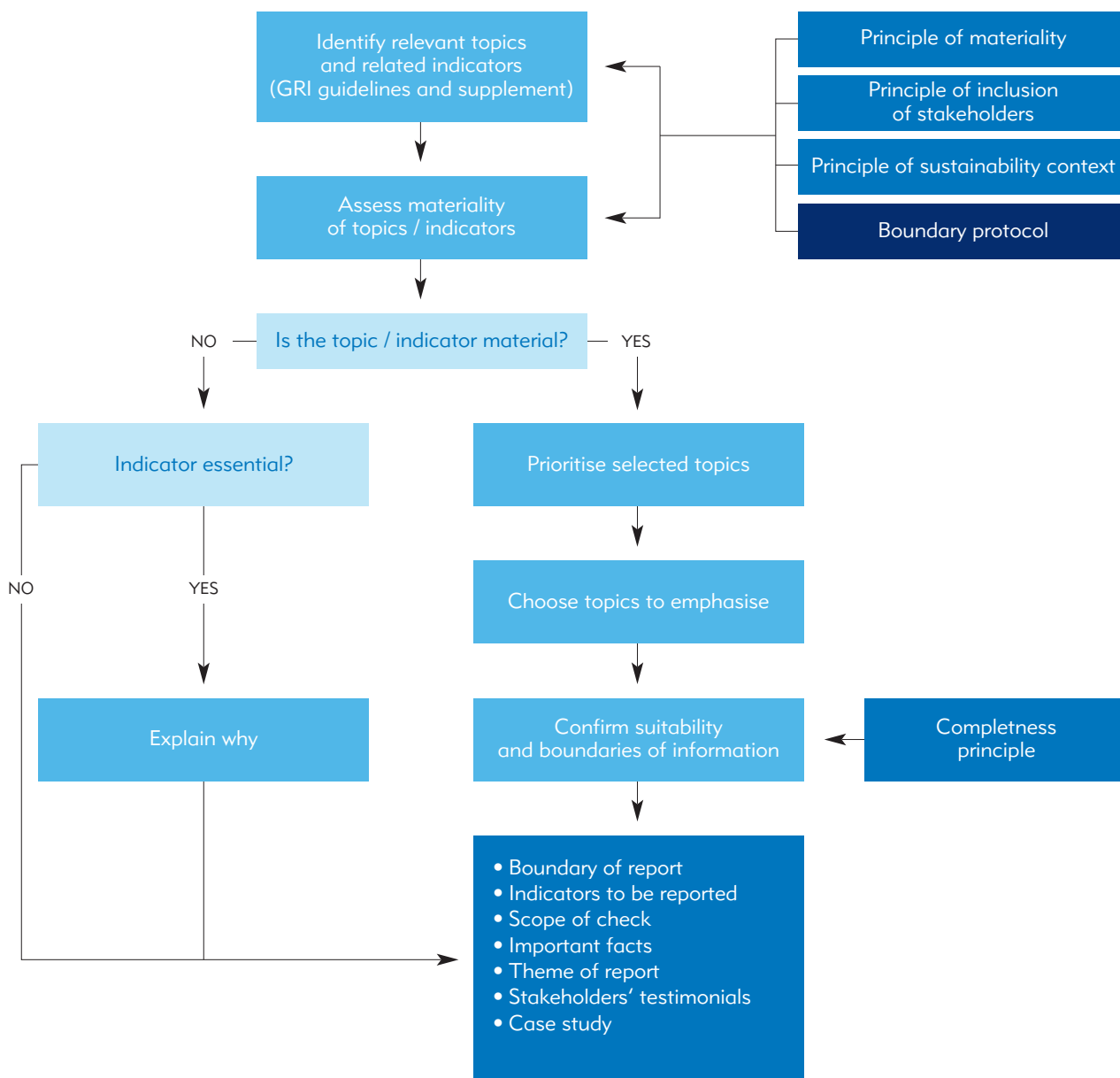
The definition of the contents of this report took into consideration:

- The 2006 GRI Guidelines on the preparation of sustainability reports;
- The 2007 pilot version of the GRI electric utility sector supplement;
- An assessment of entities to be included, weighting the significance of their impacts (Figure 9 - Boundary matrix);
- An evaluation of the materiality of the indicators of these references, weighting the relevance of aspects and importance of impacts of the company's activities from an economic, environmental and social point of view (Figure 7 - Materiality matrix);
- Stakeholders' opinions on previous reports obtained in surveys;
- Relevant events in 2007;
- Compliance with guidelines (Figure 8 - Definition of report contents).

Figure 7 - Materiality matrix – Indicator reporting criteria

		Indicators		
		Essential	Additional	Sectoral
Significance of impacts	High	Irrelevant Not reported		
	Medium			
	Low			
		Np		
		Yes		
		Relevance of indicators		

Figure 8 - Definition of report contents



Boundaries (3.6) and reporting basis (3.8)

Figure 9 shows the companies whose performance is included or excluded from this report.

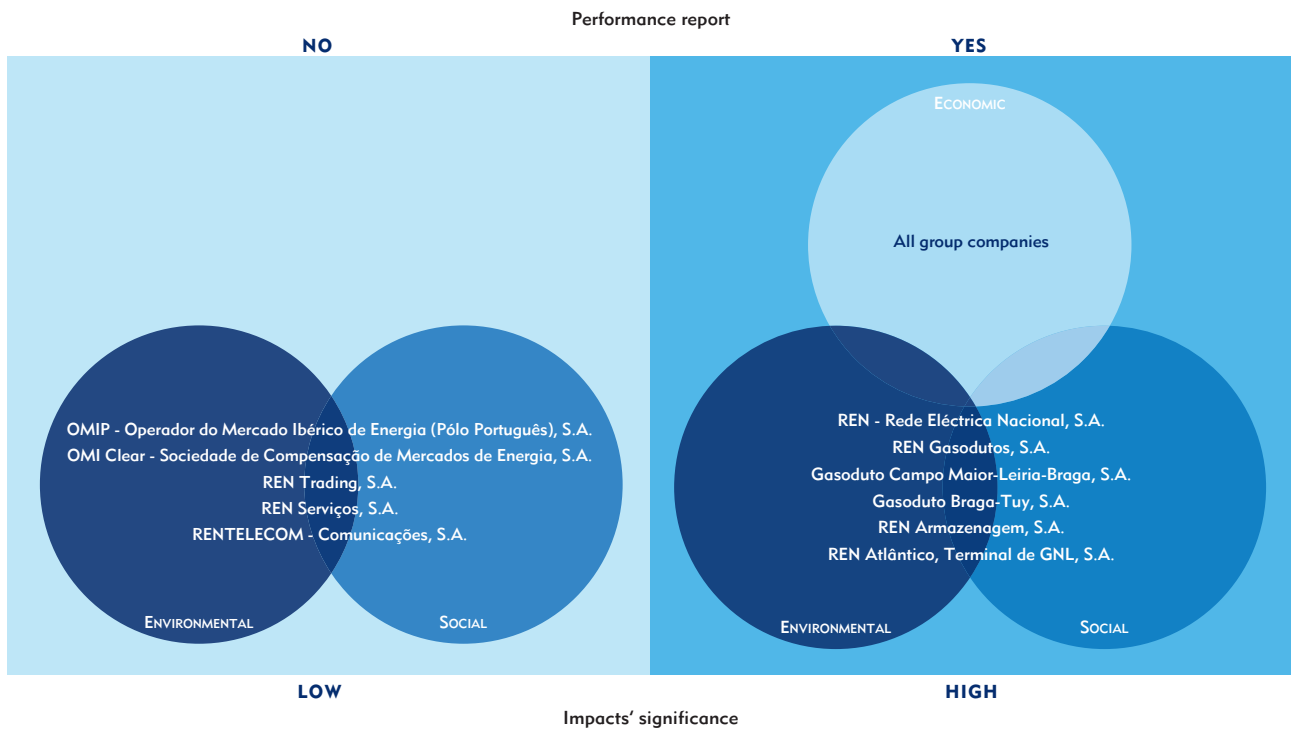
REN has control over the policies and financial and operating practices of all the companies in the Group.

In terms of business performance, the data resulting from the consolidation of all the Group companies' accounts are reported.

The environmental and social data are reported for REN's operational companies with the most significant impacts.

Data and indicators on suppliers are reported only occasionally, with due references.

Figure 9 - Boundary matrix



Specific limitations (3.7)

This report covers all relevant aspects and includes the most significant indicators, i.e. those whose level of materiality is considered medium/high in each dimension of sustainability.

For the companies controlled by REN, we do not report on the social and environmental performance of service companies that, due to their small size, have very little impact in these areas.

We have presented data for 2007 and 2006. However, any comparisons must take into account that the natural gas companies were only taken over in the last quarter of 2006.

REN performs a service of public utility associated with four concessions assigned by the Portuguese government. It has a natural monopoly, but has no control or significant influence over political decisions or the regulation of the markets or its agents.

Data measurement techniques and bases for calculations (3.9)

All quantitative and qualitative indicators are defined clearly and concisely and the protocols for GRI indicators have been applied with no substantial divergences.

Restatements (3.10)

The economic and financial data in the 2006 sustainability report are based on the Group's financial statements, which include only three months of the natural gas business, as it was only taken over in the last quarter of 2006. Therefore, 2007 marks the first whole year of the new REN, with electricity and gas.

The financial statements considered in this report have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted in the European Union, while the previous year they complied with the principles, criteria and methods set forth in the Official Portuguese Accounting Standards (POC).

The application of the IFRS means that the figures for 2006 presented in this report are different from those in the 2006 sustainability report.

In the information on environmental performance, the method for calculating indirect emissions of greenhouse gases from electricity use and losses in the electricity grid has been changed. The emission factor established in Ministerial Order 63/2008 of January 21st for the national electricity system was used.

In the 2006 sustainability report, we used an emission factor calculated as the quotient between greenhouse gas emissions set for the Public Electricity and Heat Production sector in a communication from Portugal to the United Nations Framework Convention on Climate Change and statistics published by the Department of Geology and Energy (DGEG) on electricity demand in Portugal.

Significant changes (3.11)

This report:

- Has been drafted in compliance with the 2006 GRI guidelines;
- Has taken into account the 2007 pilot version of the GRI electric utility sector supplement, while the previous report abided by the draft version of the supplement of January 2007, which has resulted in some changes in specific indicators;
- Is corporate, while the previous report only included information on the natural gas companies for the last quarter of the year;
- Includes the environmental performance of the natural gas companies REN Gasodutos, REN Armazenagem and REN Atlântico, while the figures in the previous report were only for REN - Rede Eléctrica Nacional.

GRI content index GRI (3.12)




The cross-references show information and indicators from the GRI guidelines and the electric utility sector supplement by code, description, type, place of reporting and reason for omitting information on indicators.

They also mention the Global Compact principle associated with the GRI guideline indicators, as per Annex A of MAKING THE CONNECTION - The GRI Guidelines and the UNGC Communication on Progress.

This table provides access to information on the indicators reported – in the descriptive part and data tables of the report – and on the assessment of materiality, statements of the Global Compact principles as well as on the degrees of application of the GRI guidelines.

This report satisfies the requirements of application B of the GRI guidelines for sustainability reports. Compliance with the GRI guidelines was checked by a third party, PricewaterhouseCoopers & Associados, SROC L.da and by the GRI.

Figure 10 - Compliance

Degree of applicability			C	C+	B	B+	A	A+
Mandatory	Self-declaration							
	Third-party-checked							
Optional	GRI checked							

External assurance (3.13)

The economic, environmental and social performance indicators in the GRI and electric utility sector supplement with a high degree of materiality were independently checked by PricewaterhouseCoopers & Associados, SROC, L.da. Their assurance report is attached.

CORPORATE GOVERNANCE

Corporate governance (4.1 – 4.10)

“ We are what we do.
What we don’t do doesn’t exist.
So if we only exist on the days when we do something,
We merely last on the days that we don’t ”

António Vieira

REN’s first corporate governance report was published together with the annual report and accounts for 2007. The document complies with the Portuguese Securities Market Commission governance code for listed companies and also includes GRI guideline topics on this matter. We therefore chose not to repeat the information in this report. The GRI content index provides direct access to the corresponding chapters of the governance report.



COMMITMENTS TO OUTSIDE INITIATIVES

Approach to the precautionary principle (4.11)

“It is better to have more solutions in hand, than to be found lacking in foresight”

António Vieira
História do Futuro

The precautionary principle corresponds to Principle 15 of the Rio's Declaration in the Report of the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992.

Precautionary principle

In order to protect the environment, the precautionary principle shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

REN's activities can generate impacts, which we systematically endeavour to identify, prevent, control or mitigate. The precautionary principle is present in the different phases of the life cycle of the Group's facilities and infrastructures and in their activities, especially in medium- and long-term planning, projects, construction, operation, maintenance and deactivation at the end of their useful lives.

For more information on the precautionary principle: See the chapters Environmental Performance and Social Performance.

Participation in initiatives (4.12)

REN is a member of BCSD - Business Council for Sustainable Development - Portugal and as such has disseminated, supported and participated in its initiatives.

In February 2008, REN sponsored the translation of the WBCSD publication Energy for a Sustainable Future and its launch was held at the company's offices.

Also as part of its participation in BCSD Portugal activities, in 2005 REN joined the first edition of Young Managers Team Portugal, a project designed to develop sustainability competences. Every year since then, young REN managers have participated, to a total of six so far.

REN is also a member of the Portuguese Business Ethics Association (APEE), which runs the Portuguese Global Compact Network. It was formally set up in 2007 and its mission is to help disseminate, implement and promote in Portugal the principles of the United Nations Global Compact, which REN joined in 2005.

The APEE has been promoting a well-known annual event – social responsibility week. At its second edition in 2007, REN gave a presentation on “The value added of joining the Global Compact”, which focused on the three principles of environmental protection.

On February 6th, 2007, REN's Board of Directors published its social responsibility policy, in which one of the commitments was “to respect the principles of the Universal Declaration of Human Rights, the main International Labour Organization conventions on labour rules and the United Nations Global Compact”.





Implementing this policy is one of the goals set for 2007-2009 and some action has already been taken, as described below. It is, however, being implemented progressively in harmony with the development and introduction of a social responsibility management system, which is to be integrated with REN operations and the other management systems.

Membership of associations (4.13)

REN belongs to a number of associations and other national and international organisations in the energy sector and is usually involved in their projects and committees.

- Associations in which REN belongs to governing bodies:



Instituto Português de Corporate Governance since 2005, where REN's Chairperson is a member of its General Council.



Associação Portuguesa de Energia, in which it presides over the board.



Union for the Co-ordination of Transmission of Electricity, an association of transmission system operators in mainland Europe. In November 2007, REN's Chairperson was re-elected Chairperson of the Bureau for 2008-2009, after completing a first two-year mandate.

- Other associations in the electricity sector:



Conseil International des Grandes Réseaux Électriques



European Transmission System Operators



Union of the Electricity Industry



Interconnexion de l'Électricité du Sud-Oest de l'Europe

- Other associations in the natural gas sector:



Gas Infrastructure Europe



European Gas Pipeline Incident Data Group

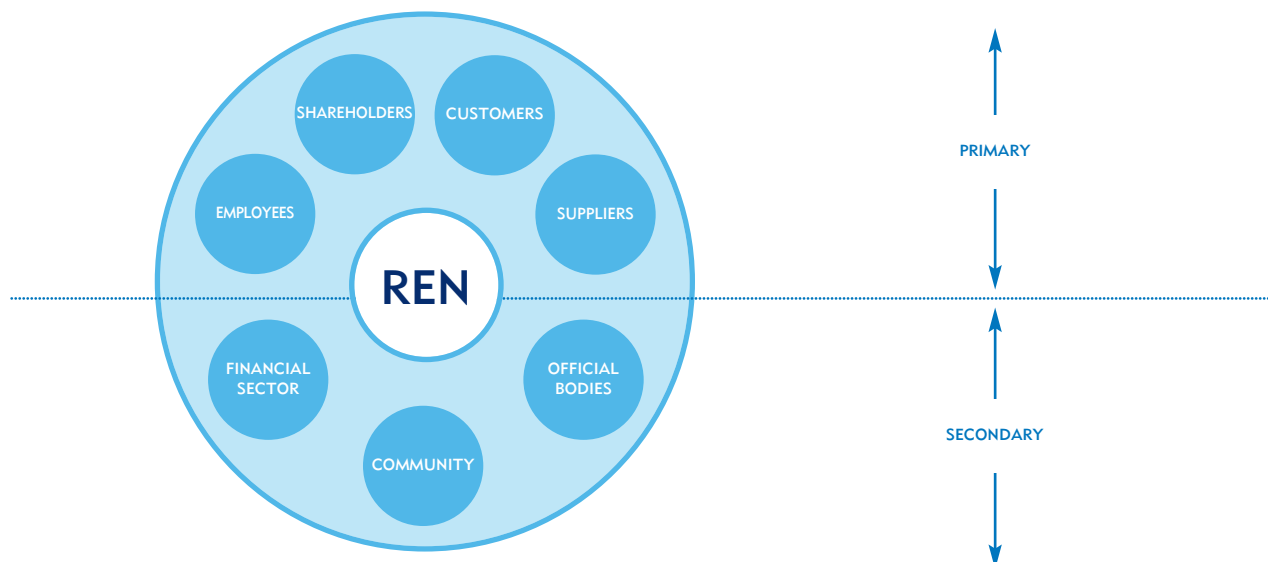
STAKEHOLDER ENGAGEMENT

Stakeholder engagement (4.14 - 4.15 - 4.16 - 4.17)

“It is much easier to join distances and wills, than to marry opinions and understandings.”

António Vieira
Sermão histórico e panegírico nos anos
da rainha D. Maria Francisca de Sabóia

Figure 11 - REN's stakeholders



Stakeholders are groups or individuals who can affect or are affected by an organisation, i.e. by its products, services, activities or performance. This definition, adapted from the AA 1000 Stakeholder Engagement Standard, which serves as a reference for REN in improving relations with stakeholders, does not include all those who may have knowledge of or opinions about an organisation.

At REN, stakeholders are grouped into two categories: **primary** – those who can affect our survival and **secondary** – those who can affect our goals.

Figure 12 - Six-dimension test



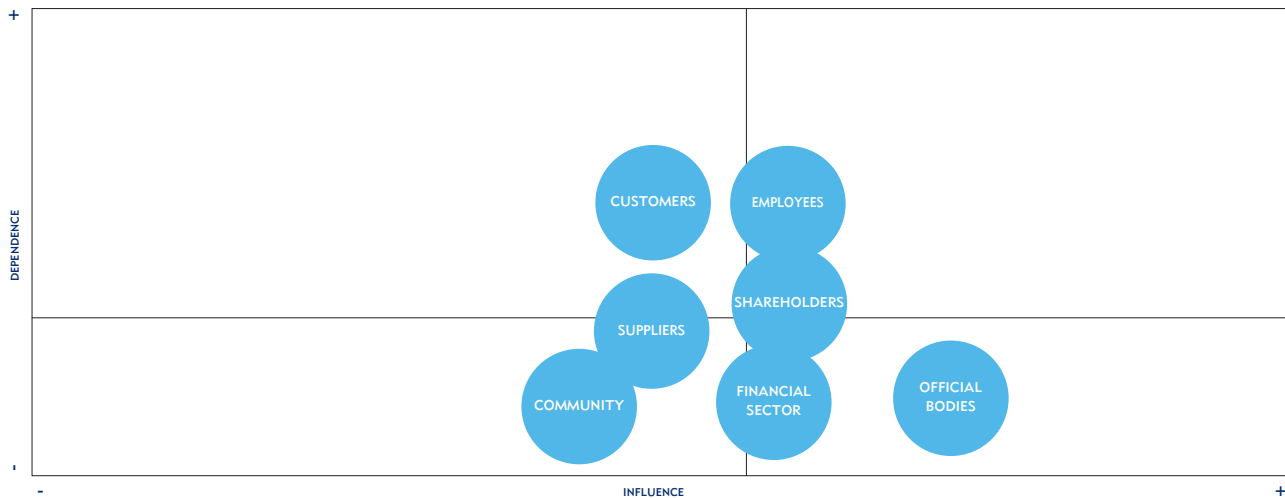
The first category includes **customers, suppliers, shareholders** and **employees** and the second includes the **community, financial sector** and **official bodies**.

These stakeholder groups were identified on the basis of AA 1000 SES criteria established in the six-dimension test (Figure 12).

A person or an organisation can play several roles, being for example both a shareholder and a customer and, as a customer, occupying different positions in the electricity sector – generator, distributor and supplier.

By assessing the main subgroups according to their influence and dependence, we were able to draw charts to identify those most important to the company (Figure 13).

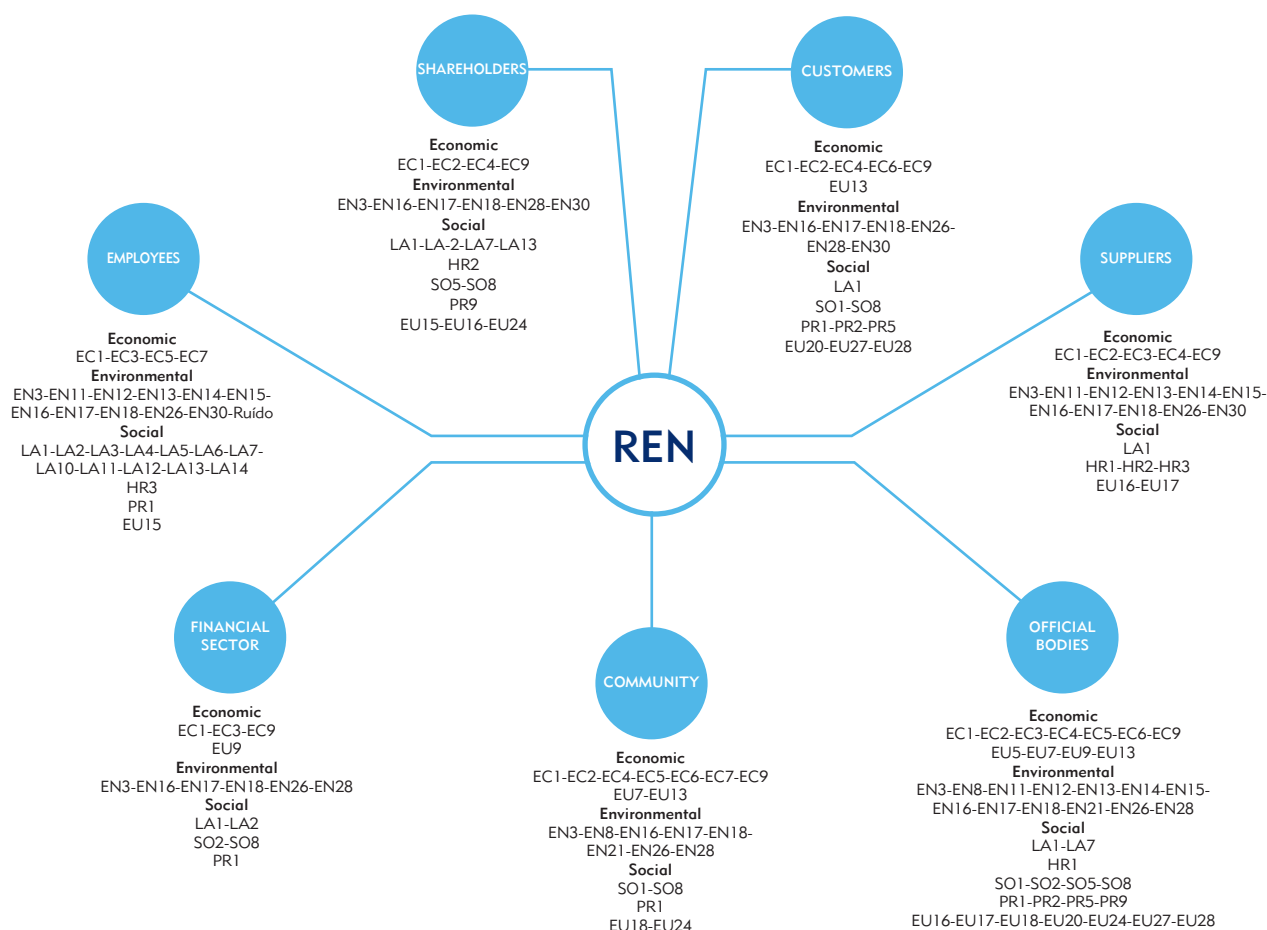
Figure 13 - Influence and dependence of main stakeholder subgroups



In 2007 we conducted two surveys on the 2006 sustainability report in order to i) identify expectations as to the type of information and importance of each issue (preliminary survey) and ii) to collect opinions on the published report.

The combination of the information obtained from these surveys with the in-house assessment of the materiality of indicators and information from guidelines and the GRI electric utility sector supplement enable us to associate each interest group with the most relevant indicators, as shown in Figure 14.

Figure 14 - Relevant indicators for each interest group



In the second half of 2007, we began an evaluation of perceived quality and customer satisfaction. The project entailed three annual studies and uses methods in line with best practices in this field, such as ECSI Portugal (national customer satisfaction index). The first study included a survey (for which 55 interviews were conducted) of the entities involved in the electricity market: generators, distributors, suppliers, consumers, market operations and similar. The customers or users of natural gas infrastructures were not included, as the restructuring of the sector had not yet been completed.

The results obtained in the different customer segments are generally positive. The aspect with the best score was the ethical values shown by REN, and its contribution to society and respect for confidentiality were particularly appreciated. Technical and contractual relationships also achieved a good score, and there was considerable satisfaction with initial contacts with REN and ongoing relationships.



Energy and sustainability: strategic context



ENERGY AND SUSTAINABILITY: STRATEGIC CONTEXT

TESTIMONIAL

The National Strategy
for Sustainable Development

The National Strategy for Sustainable Development, or ENDS, and its implementation plan were approved by Council of Ministers Resolution 109/2007 of August 20th, six years after the adoption of the European Sustainable Development Strategy and one year after its revision.

The ENDS as an instrument guiding sectoral policies, i.e. a strategy of strategies, set the overall targets of "Placing Portugal at a level of economic development closer to the European average in 2015 (...) and among the 25 most competitive countries in the world". Although these ambitious targets are necessary in view of the national situation, they will only be achieved with strong political commitment and an effective dialogue between government, citizens and the private sector.

The ENDS could go further in terms of energy policy by promoting effective articulation with the PEN^{a)} and PNAC^{b)}. References to the energy problem, e.g. greenhouse gas emissions, renewable energies, efficient use and conservation, only mirror the proposals in the 2004 PNAC, and offer no quantified targets with timelines for goals of energy efficiency for the Portuguese economy, diversification of primary energy sources or reduction of dependence on imported fossil fuels.

Last March, the first interim report on the execution of the ENDS focused mainly on renewable energies and climate change. Documents like this can, however, only reflect changes in the situation if objective information is provided and effective public engagement is promoted using participative monitoring of execution and peer reviews by foreign counterparts.

a) National energy policy

b) National Climate Change Programme

Prof. Mário Ruivo, Chairman of the National Council for the Environment and Sustainable Development

REN AND THE NATIONAL ENERGY STRATEGY

REN's initial public offering, which took place as scheduled on July 9th, 2007, resulted in the dispersal of its share capital among tens of thousands of shareholders. The operation's success can be measured by the huge demand for REN's shares. The deverticalisation of the electricity and natural gas sectors in Portugal has thus been achieved.

It was a process to which REN committed once again in a valuable contribution to the transparency of the MIBEL, which started up on July 1st, 2007. It also gave considerable impetus to the Iberian Natural Gas Market (MIBGAS), currently being prepared.

At the same time, the legal deadlines for some innovations introduced by the recent structural legislation on the new energy sector framework created by the National Energy Strategy published on October 24th, 2005 have been met. (Council of Ministers Resolution 169/2005). Here are some examples.

The preparation of the document Security of Supply in Electricity Generation - 2008-2030 (SANPE 2008-2030) was one of REN's contributions in the scope of the National Electricity System (SEN) in mainland Portugal. The document was developed after intense talks with the Department of Geology and Energy (DGEG) with a view to assure REN's cooperation in the preparation of the Security of Supply Monitoring Report, for which the department is responsible.

More recently, it was REN's turn to comply for the first time with the legal timeline for submitting to public consultation its Development and Investment Plan for the Electricity Transmission Grid (PDIRT) 2009-2014 (2019). This version may still be amended, if there are any alterations resulting from the current public consultation.

This plan includes measures to reinforce the transmission grid in order to guarantee:

- The satisfaction of electricity demand
- Our capacity to receive electricity generated from renewable sources;
- The installation of new generation capacity (thermal and hydroelectric);
- Interconnection capacity of the grids needed by the MIBEL;
- The supply of high-speed railways;
- Maintenance of high quality of service.



CORPORATE STRATEGY

MISSION

REN's mission is to guarantee an uninterrupted supply of electricity and natural gas at the lowest possible cost, while meeting criteria of quality and safety, maintaining a balance between supply and demand in real time, safeguarding the legitimate interests of all involved in the market and reconciling its missions as a system operator and grid operator.

VISION

To be one of the most efficient electricity transmission and natural gas transport system operators in Europe and build value for our shareholders within a framework of sustainable development.

VALUES



POLICY STATEMENTS

In fulfilling its mission as a public service provider in the national energy sector, REN - Redes Energéticas Nacionais is committed to the defence and promotion of the principles of sustainable development, permanently endeavouring to create value for its shareholders and other stakeholders. Its commitment to undertake all its activities in compliance with an ethical, socially responsible management model is enshrined in its quality, environment and safety policy and social responsibility policy statements, which apply to all group companies. These statements are available on REN's website.

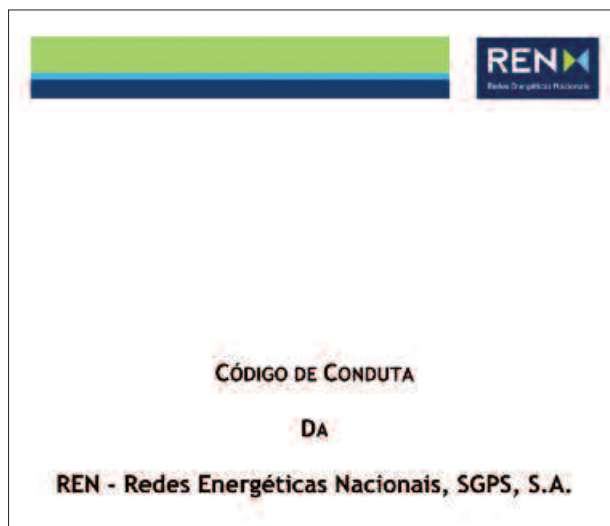
CODE OF CONDUCT

REN is bound to abide by the principles of impartiality, non-discrimination and guaranteed access to the grids. These principles have been set forth in a code of ethics and three codes of conduct applicable to specific functions – system manager, commercial agent and account adjustment.

Our functional codes of conduct are documents foreseen in the energy sector regulations, which were first published in February 2000. They were last revised in 2006 and a new revision is currently under way in order to adjust them to recent changes made to the sector's legal framework.

The first version of REN's Code of Ethics was published in 2003. It was recently revised to extend its scope to all the Group's companies and transformed into a code of conduct applicable to all employees working for REN.

This code is available on REN's website.





IMPACTS, RISKS AND OPPORTUNITIES

REN seeks to ensure the continuity and safety of the services it provides, in accordance with best practices in the industry, in order to minimise risks and their consequences. However, it is not immune to fortuitous circumstances to which it makes no direct contribution and that can change or prejudice the way in which REN carries out its activities or result in technical or economic consequences for others.

In the prospectus of the initial public offering in 2007, REN included an exhaustive list of the risks to which it is exposed and the mechanisms that it uses to manage them. Once the prospectus is a public document (available on REN's website), we will make a very brief reference to it below.

From an economic and financial point of view and given the highly regulated environment in the energy sector, REN's profits can be positively or negatively affected by current regulations. The regulation model and its rules and particularly tariff regulations are therefore risk factors.

REN SGPS has a Regulation and Tariff Office that assists the Board of Directors in coordinating and dealing with regulatory issues and in the dialogue with the Energy Service Regulator (ERSE).

On the other hand, delays in plans to expand networks can have a negative effect on REN's business activity, financial situation and operating results. This results in the need to perfect investment project management models and mechanisms for interacting with the different groups of stakeholders liable to influence deadlines of infrastructures' design/ construction.

Operating risk management for the group companies and their obligations in terms of preservation of the environment, safety and security, reliability and quality of service is carried out within the complete cycle of activities at several levels: planning, design, construction, management, operation and decommissioning of energy transmission and storage infrastructures.

Planning takes into account the results of demand surveys and available data on the possible location of new power plants. Contingency studies are carried out with a view to eliminating or mitigating the effects of temporary loss of an element of the grid. Regarding the environment, for the first time a strategic environmental assessment was conducted of the transmission grid development plan. A comparative analysis of different scenarios and solutions based on the assessment was submitted for public scrutiny. The most balanced ones were then selected.

When planning and designing facilities, we adopt modular solutions with automation and supervision systems for immediate detection and isolation of any malfunctioning components so that the remaining modules can operate

safely. In the planning stage, health and safety plans are drawn up and environmental impact or framework assessments are conducted, as described in more detail below.

The construction of facilities is closely monitored in terms of quality, environment and safety by our own inspection teams or experts hired for the purpose.

In the operating phase, both networks and all technical facilities covered by concession contracts are supervised in real time from control centres using sophisticated technologies and state-of-the-art systems. Environmental and occupational safety, health and hygiene monitoring is also carried out.

When facilities are decommissioned at the end of their useful lives, we apply the principles of preservation of the environment and recovery of waste, which is sent for recycling or re-use whenever possible.

REN believes that the processes implemented in its quality, environment and safety management systems are appropriate to prudent, reasonable operation of its networks. Prevention of operating risks is based on meticulous planning and solid theoretic and on-the-job personnel training.

Emergencies deserve special attention, however. REN has its own emergency plans for all facilities, including office buildings. In recent years, we have developed an ambitious programme of drills to test these emergency plans at our facilities. In addition to our own resources, the local fire brigades, municipal civil defence services and police forces have also participated.

From an organisational point of view, these matters were monitored and managed in the National Electricity Grid by an executive committee for quality, environment and safety management. The committee was assisted by a multidisciplinary team of people from the most operational areas. At the natural gas companies, a specialised office was responsible for supervising and coordinating the implementation of management systems.





Economic performance indicators

ECONOMIC PERFORMANCE INDICATORS

ECONOMIC PERFORMANCE

“Because a lamp illuminates better when it is close. To be able to see, it is not enough for the lamp to be lit. The distance must be right. With a lamp in your hand, you can see what is in a house, but you cannot see what is in a city.”

António Vieira
História do Futuro

After the takeover of the natural gas business, which began in the last quarter of 2006, REN's activities had an even greater impact on the Portuguese economy. Its effects were more visible in 2007, the first full year for the new REN, with electricity and gas.

2007 also witnessed other equally important events and restructurings, mainly in electricity. Pursuant to the new framework law on the sector published in 2006, changes were made to the organisational framework of the National Electricity System (SEN) and had repercussions on REN's regulated activities. The power purchasing activity, in which REN acquired all the electricity from power purchase agreements (PPAs) to supply customers of the now defunct public service electricity system (SEP), was transformed into a new market trading activity and took over the two PPAs still in effect.

These events, along with REN's stock-exchange debut and the adoption of the International Financial Accounting Standards (IFRSs), mentioned before, significantly condition the comparison of economic and financial data not only between the years covered in this report (2006 and 2007), but also the data for 2006 given in the sustainability report of the previous year. As a result, data, especially economic one, must be carefully analysed.

CREATION AND DISTRIBUTION OF VALUE (EC1)

REN's activities provide direct and indirect employment and generate wealth for suppliers of materials and equipment and service providers. The investment plan has been ambitious, responding to the needs of the energy market and offering business opportunities to economic agents who have business relations or cooperate with REN.

The investments made by the Group in 2007 totalled around EUR 250 million. The electricity business contributed 97% (EUR 243.4 million) to this amount and the gas business, whose first basic investment was made before its transport assets were transferred to REN, contributed only 2% (EUR 6.1 million).

Table 1 - REN Group's total investment (EUR millions)

	2007	2006
Rede Eléctrica Nacional	243.4	242.0
REN Gasodutos	2.6	0.7
REN Armazenagem	2.6	0.5
REN Atlântico	0.9	0.9
Other companies	0.4	-
Total	249.9	244.0

The table below shows in detail the value created and distributed by the Group in 2006 and 2007. As earlier mentioned, changes from one year to the next must be interpreted with caution as they are conditioned above all by the change in the Group's perimeter in late September 2006 resulting from the acquisition of natural gas assets and the sale of the shareholding in Galp Energia SGPS, S.A., which produced a capital gain of EUR 524 million.

The value created in society by REN was EUR 315 million of a total of the EUR 409 million gross value added (GVA) created by the Group. In 2006, the items "operating earnings" and "net earnings not inherent in GVA" under the heading Other Income include the effect of the capital gain from the sale of the shareholding in Galp to a value of EUR 524 million. Under operating costs, "External Supplies and Services" is the item with the greatest weight with EUR 146 million, 72% of which came from the electricity business and 23% from the gas business. The Group's depreciation and provisions totalled EUR 109 million, 79 million of which belonged to the National Electricity grid. This figure was 4.4% higher than in 2006, as a result of the effect of the investment made.

**Table 2 - Creation and distribution of value**

[consolidated figures for REN Group (IFRS) in EUR millions]

	2007	2006
Creation of value		
+ operating income	601.8	930.4
- external supplies and services	(145.5)	(130.9)
- net income not inherent in gva	47.1	501.5
Gross value added (gva)	409.3	298.0
- Amortization and provisions	(109.0)	(138.9)
Net value added (nva)	300.3	159.1
+ net income not inherent in gva	47.1	501.5
+ financial earnings	5.3	1.0
+ gains (losses) on joint ventures	8.9	2.6
- other costs and losses	(46.5)	(15.5)
Total created	315.0	648.8
Distribution of value		
Workers and managing bodies	44.4	35.7
Personnel costs	42.6	34.0
Profit sharing	1.7	1.7
Shareholders	143.5	494.9
Dividends	97.0	184.0
Retained earnings ⁽¹⁾	46.5	310.9
Financial institutions	82.8	42.6
State	43.4	74.8
Taxes	1.2	1.5
Corporate income tax	42.3	73.3
Community	0.9	0.8
Total distributed	315.0	648.8

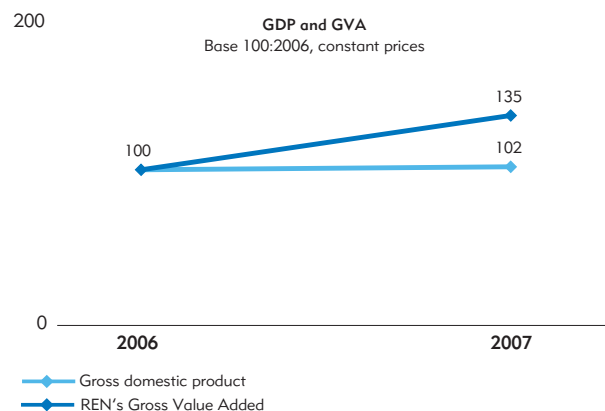
⁽¹⁾ Corresponds to the variation in equity

The value created by REN was partially retained to finance its activities (EUR 46.5 million), while the rest was distributed to the following stakeholders – employees and senior management in the form of salaries; profit sharing and sundry benefits to employees (EUR 44.4 million); shareholders in the form of dividends (EUR 97 million); financial institutions in the form of interest and financial costs (EUR 82.8 million); the State through payment of taxes (EUR 43.4 million); the community by means of patronage of the arts and sponsorship of cultural, scientific, technological and social activities of importance to society (EUR 0.9 million).

Shareholders received 45.6% of value created, corresponding to dividends and retained earnings. The community absorbed 0.3% of the value created in 2007, i.e. EUR 100 000 more than in the previous year. The remaining 54.1% of value created was distributed to employees and senior management (14.1%), financial institutions (26.3%) and the State (13.8%).

A total of EUR 83 million was distributed to financial institutions and was strongly influenced not only by the general increase in market interest rates but also by the Group's higher annual average financial debt borrowing, especially as a result of the acquisition of gas assets.

REN recently received the international credit risk ratings of A+ and A2 from Standard & Poors and Moody's, respectively, which may allow us to obtain better conditions of access to the financial market and higher efficiency in restructuring our debt.

Figure 15 - Gross domestic product and gross value added

The above graph indicates the gross domestic product in Portugal and REN's gross value added in 2006 and 2007 at 2006 prices. It shows that REN's GVA grew around 35%, while the GDP rose less than 2%.

SECURE RETIREMENT (EC3)

REN - Rede Eléctrica Nacional grants retirement and survival pension supplements (hereinafter referred to as the pension plan), offers its retirees a health plan and provides other benefits such as bonuses for years of service, a retirement bonus and death subsidy.

Employees who meet certain age and years-of-service requirements and choose early retirement and those who agree to pre-retirement with the company are also included in these plans.





Pension plan

Employees' retirement and survival supplements are based on a defined-benefit plan. An independent pension fund has been set up and all liabilities and the amounts necessary to cover costs falling due in each period have been transferred to it. Liabilities for these payments are estimated annually by an independent body.

As at December 31st, 2007, the assets in the pension fund totalled EUR 42.57 million and exceeded liabilities by EUR 7 000.

The company's contributions to the fund in 2007 totalled EUR 2.12 million.

Health plan and other benefits

Liabilities for health care and other benefits, which totalled 27.96 million as at December 31st, 2007, are covered by a special provision.

REN Gasodutos and REN Atlântico offer their employees life insurance. The costs are covered for their working lives. These liabilities, which totalled EUR 60 000 as at December 31st, 2007, are covered by a special provision.

There is further information on secure retirement in the chapter on social performance.

REN IN THE ENERGY SECTOR

“To speak to the wind, all you need is words;
to speak to the heart you need works”

António Vieira
Sermão da Sexagésima

ENERGY AVAILABILITY AND RELIABILITY (EU5)

REN develops econometric models for forecasts of long-term electricity demand, which it conducts every two years and updates in the interim year. In these models, electricity demand depends on the growth of the economy, which is reflected by a rise in the most important variables, such as GDP, the components of national expenditure, gross disposable household income and sector GVA.

In order to manage peak demand, the electricity system has interruptibility contracts with major consumers. Under the terms of these contracts, REN is allowed to cut off the supply in certain situations.

In 2007, as in previous years, no interruptibility contracts were activated, as there were no power shortage situations. This is basically due to the intrinsic characteristics of the national electricity generation system, particularly the importance of the hydroelectric component in the system's total installed capacity and the power installed at recent hydroelectric groups, which make it possible to deal with short-term shortages of power generation capability as there are always sufficient reserves from hydroelectric plants.

COVERAGE OF DEMAND OVER THE LONG TERM (INCLUDING RESERVES) (EU9)

The methodology for medium- and long-term forecasts of growth in the Portuguese electricity generation system is based on an assessment of the adequacy of generation capacity to meet expected demand in a wide variety of different situations of availability of resources such as water and wind. This assessment results in a certain degree of guarantee of supply which is compared with pre-defined safety standards.

Expected growth in the reserve margin depends on the relative importance of the supply components, availability of which varies on the basis of uncontrollable factors that are hard to forecast. Growth in the wind component expected for the Portuguese system in the next few years will be reflected by a progressive increase in the reserve margin. After the entry into service of the new reversible hydroelectric plants, which can store power during periods of low demand for supply during peak demand, the randomness of availability of supply resources will be reduced and, as a result, so will the necessary reserve margin.

These studies are conducted every two years, with a horizon of at least 20 years. They are updated for the medium term in the interim years.

TRANSMISSION AND DISTRIBUTION EFFICIENCY (EU13)

Framework

In an electricity system, energy losses depend on power flow in grid circuits and their degree of use. Generically, losses are lower: i) the shorter the distance between generation and use, ii) the higher the transmission voltage and iii) the lower the circuits' resistance (the more circuits there are the lower their resistance will be). However, the volatile nature of power flows makes it impossible to guarantee in advance that there will be certain amount of losses.

In fact, there is always a high level of uncertainty resulting from factors such as:

- Dynamics associated with demand patterns resulting in higher losses during peak times than in off-peak times;
- The national generation facility profile - for example, hydroelectric and wind generation centres located far from demand centres means that, in wet or windy climates, flows cause more losses than in dry climates;
- Physical interconnection and circulation flow of power through the national transmission grid – an increase in exchanges in the interconnections can cause patterns of greater circulation between the Portuguese and Spanish grids and consequently increase losses in transmission.

The current situation

Recent changes in electricity losses in the national transmission grid (RNT) are shown in Figure 16. Losses of energy entering the RNT, which are in the [1.33% - 1.79%] range are similar to the averages of our world counterparts, as shown in an international benchmarking analysis of transmission grid operators in 2000, in which Rede Eléctrica Nacional participated. In 2007, losses cost around EUR 37 million.

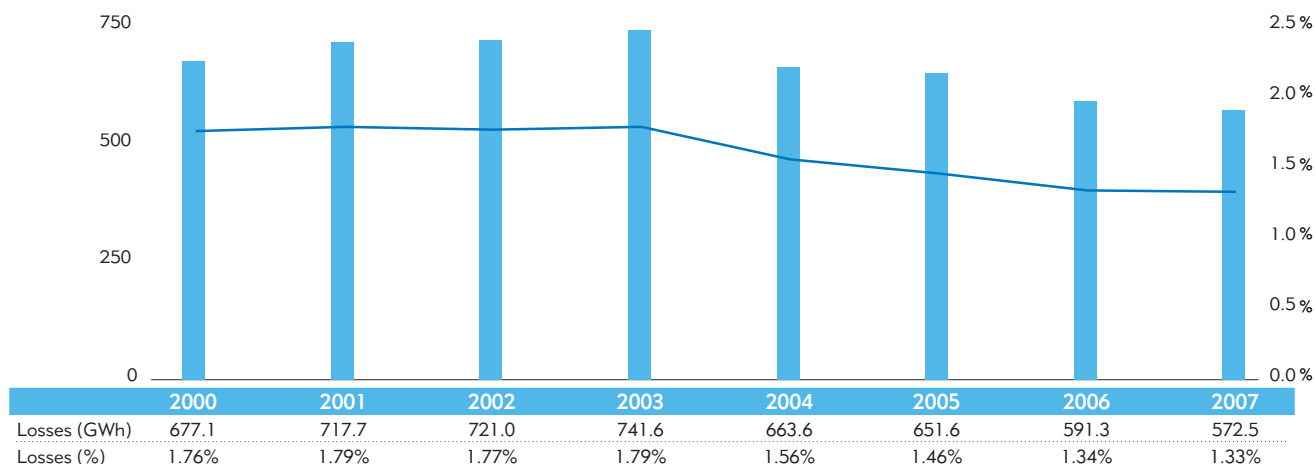
In recent years there has been a reduction in losses in the RNT, thanks to the following factors:

- Strengthening and development of the grid's structure with the construction of new corridors of higher voltage lines;
- Decongestion of some axes by building new, more powerful alternatives and development of demand centres supported directly by the 400/60 kV level of transformation;
- Installation of efficient generation centres close to major demand centres, like the Ribatejo combined-cycle natural gas plant (the first group went into service in 2003 and the third in 2005);
- REN's investment in reinforcing interconnection lines with Spain, thanks to which the second circuit of the 400 kV Alto Lindoso-Cartelle line and the new 400 kV Alqueva-Balboa interconnection have been built since 2004.

Future growth and control measures

Losses from the transmission grid are not a direct or even the main reason for taking the decision to reinforce or extend the RNT as, from an economic point of view, the amounts involved are not large enough to warrant the construction of new lines or substations. Nonetheless, they are considered in

Figure 16 - Losses from 2000 to 2007





decisions on developing the RNT, as their value is one of the factors in the comparative technical and economic assessment of projects and alternatives in the future development of the transmission grid.

In addition to constant monitoring and estimates of expected future value, which depends largely on major projects for expanding the generation system and transmission grid, we also analyse some measures with an impact on reducing losses from the RNT. These measures have to do with the implementation of stricter reactive energy compensation plans and the programme for installing a second circuit in lines decided as double.

In an electricity system whose structure changes over time, future growth in the expected value of power losses is difficult to quantify, given the uncertainty associated with the above factors. However, by using probabilistic simulation of the grid involving thousands of possible scenarios, we can make an estimate of the most probable range of this development and quantify future losses on the basis of known operating assumptions.

Current figures on the future development of losses indicate that they never exceed 1.6 % (for power entering the grid) for time frames up to 2014. We also find that investment projects provided for in the PDIRT (Transmission Grid Investment Plan) will lead to a stabilisation of relative losses from the RNT up to 2014 and a longer-term reduction (2019).

Rede Eléctrica Nacional systematically assesses its losses in order to identify and correct any deviations.

INDIRECT ECONOMIC IMPACTS (EC9)

FORECAST INVESTMENT FOR 2008-2010

The amounts for investment at current prices for 2008 to 2010 are summarised in the table below. The amounts are shown in terms of CAPEX (capital expenditure), which corresponds to direct external costs plus management and financial costs.

Table 3 - Summary of investments in the energy network [2008-2010]

	2008	2009	2010
Rede Eléctrica Nacional	256	270	238
Gas Companies	57	127	55
Total (CAPEX)	313	397	293

The Transmission Grid Investment Plan (PDIRT) shows all regulated investments to be made by Rede Eléctrica Nacional for the duration of the plan, i.e. the six years following its entry into force and an indicative period of another four years.



Where planning the grid is concerned, the indirect economic impacts in the PDIRT are investment projects, which help create the right conditions for:

- **The operation of the Iberian Electricity Market (MIBEL)**

The increase in the capacity to exchange energy with the Spanish grid is reflected in the PDIRT in efforts to complete new interconnections with it, contributing to the implementation of a more favourable scenario for the MIBEL to operate and enabling consumers to choose their suppliers on the basis of best market opportunities.

A project to reinforce the interconnection in the Douro Internacional area is in its final stages and a substantial number of internal reinforcements have been completed in some 220 kV lines already equipped for 400 kV, so that it will be possible to make additional increases in trading capacity between the two grids in the future.

- **Reception of new power from renewable energy sources**

The PDIRT also includes grid reinforcements aimed on one hand at meeting new national targets for renewable energies and, on the other, at increasing the RNT reception capacity for new generation for possible connection to the VHV grid.

These investments help increase local activity in the plants' construction and operation phases, naturally depending on their size.

- **Effective solutions for supplying customers or loads directly connected at Very-high voltage (VHV)**

The creation of the right conditions, as indicated in the PDIRT for expanding the VHV grid to the Sines Industrial and Logistics Complex and the infrastructure supplying high-speed railway lines, such as Lisbon-Madrid, Lisbon-OPorto and OPorto-Vigo, will make it possible to improve transports and enable companies and people to settle, thereby resulting in direct and indirect development.

- **Improving reliability and guarantee of supply**

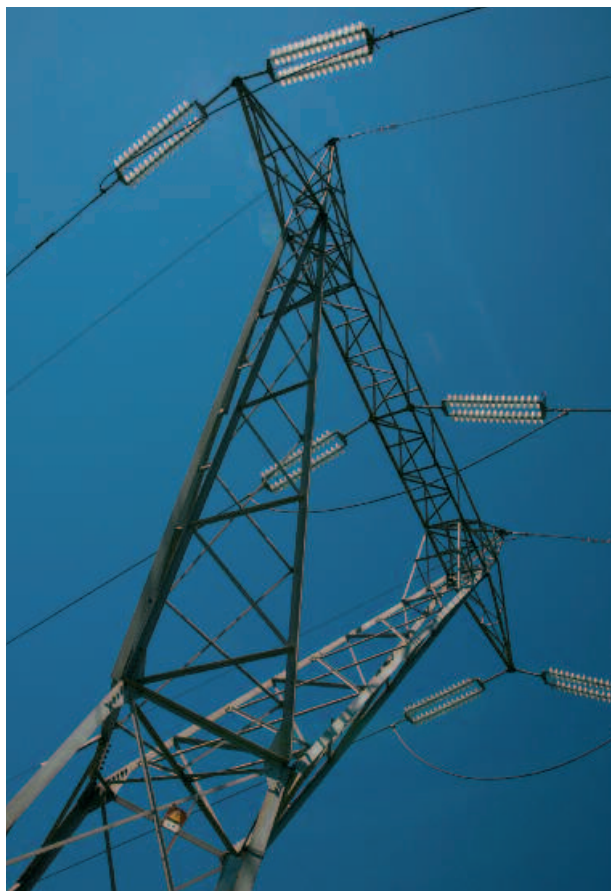
The quality and continuity of service resulting from reinforcement projects not only had immediate repercussions on existing customers but also contributed to revitalising social and economic activity.

The PDIRT therefore foresees until 2014 six new connection points between the RNT and the EDPD, S.A. grid (Montijo, Feira, Estremoz, Vizela/Felgueiras and Zambujal) and substantial reinforcement or remodelling of substations.

- **Connecting new, large generating centres**

The possibility of including new generation centres also creates more appealing conditions for attracting new private or corporate residents. Investment intended for this purpose was much higher than in the previous plan and included projects for the connection of new combined-cycle gas turbines plants (CCGT) to plants in the National Programme for Dams with High Hydroelectric Potential (PNBEPH).

The RNTIAT (National natural gas transport network, underground storage and LNG terminal) Investment Plan describes all the regulated investments to be made in the national gas transport network and LNG terminals and storage facilities for the duration of the plan (2008 to the first half of 2011).





At REN Atlântico, the most important investments are in the construction of a new LNG storage tank, the third. At REN Armazenagem there are plans for a gas cushion for TGC 4¹ in the first half of 2009 and drilling for a new cavern. REN Gasodutos will be reinforcing the RNTIAT and increasing connections to customers.

The main goals of the investments planned for the gas companies in 2008-2011 are:

- To guarantee appropriate transport capacity taking into account an increase in security of supply by reinforcing interconnections with Spain in the MIBGAS;
- To adapt the RNTGN (National Natural Gas Transmission Network) to new demand and the need to guarantee operating conditions for the SNGN (National Natural Gas System) by building a compression station;
- To guarantee the supplies provided for by the RNDGN (National Natural Gas Distribution Network) concession holders by connecting new delivery points to distribution networks to the RNTGN or increasing the emission capacity at existing delivery points;
- To create safe operating conditions or improve different processes, thereby contributing to network operation that encourages economic efficiency in the use of available resources;
- To adapt the operating conditions of several systems and facilities to technical requirements resulting from the recent regulation for the Natural Gas (NG) sector;
- To respond to the need to remodel or maintain systems and facilities that are technologically obsolete or at the end of their useful life;
- To create IT platforms for managing network and system operation processes, to interconnect monitoring systems for transport, underground storage and LNG terminal with a view to overall technical management of the system by the RNTGN operator and to renew the technology of the fibre optic communication systems;
- To guarantee supplies to major industrial projects and the new combined-cycle plants through the connection of the projects requested by their sponsors to the RNTGN;
- To develop and expand underground storage at Carriço;
- To improve the safety and reliability of the underground storage surface facilities by creating the right conditions for safe operation or better operation of extraction and injection processes, to install fire-fighting and risk-control systems and to purchase spare parts and other material required for preventive maintenance, justified by the end of equipment's warranties;
- To adapt quantity-measuring and quality-monitoring operations for natural gas injected and extracted according to regulatory requirements for the sector with regard to quality of service and implementation of devices for inspecting safety conditions required by law;
- To install computer hardware and networks to support the systems for managing, forwarding and processing information required in the new regulatory environment for the sector, especially communication with the RNTGN operator for the overall technical management of the system;
- To develop and expand the Sines LNG Terminal to meet expected growing market needs for natural gas and associated services based on studies conducted in the first gas year (2007/2008);
- To maintain and improve the safety and reliability of the Sines LNG Terminal by implementing a simulation system for the facility in order to train operators and simulate responses to emergencies and to install automatic fire-fighting and risk-control systems;
- To adapt operating conditions to technical requirements resulting from the recent regulations on the NG sector;
- To implement information systems that guarantee transparency in access by third parties to the network by providing information to the ERSE, overall technical manager, suppliers and the general public (balance sheets, quality, capacity, etc).

¹ Gas cushion for TGC 4: a layer of gas introduced at the cavern's operating start-up and it remains in there for the cavern's consolidation. TGC 4 is the name given to one of Carriço's underground storage caverns.

An aerial photograph of an industrial facility, likely a water treatment plant, situated in a green, hilly area. A large, white, cylindrical storage tank is prominent on the right side. To its left is a paved area with a small building and a covered structure. In the foreground, there are more industrial buildings and a road. The background shows a mix of green fields and trees. A white rectangular box with a black border is overlaid on the upper left portion of the image, containing the text "Environmental performance indicators".

Environmental performance indicators



ENVIRONMENTAL PERFORMANCE INDICATORS

ENVIRONMENTAL POLICY AND MANAGEMENT

“The year has a time for blossom and a time for fruit. Why doesn't life have its Autumn too? Some blossoms fall, some dry up, some wilt, others are taken by the wind. The few that cling to the tree and become fruit, only those are the fortunate, only those are discreet, only those last. Only those are the ones to be of use and are the ones that sustain the world”

António Vieira
Sermão da Sexagésima

TESTIMONIAL

Incentives granted by PPDA towards environmental promotion of concession holders

In modern societies, respect for the environment is a central aspect of socially responsible companies' activities. Energy infrastructures are essential to the country's development and the running of modern societies, and are the base for the efficient and competitive operation of the market.

ERSE has, albeit indirect, responsibilities for environmental issues and must help to improve the environmental performance of the companies operating in the regulated sectors and ensure efficient use of resources. There are provisions for this in the ERSE's statutes. The goal of sustainable development, in which we seek a harmonious combination between economic, social and environmental development for today's and tomorrow's generations, and our policy of including environmental issues in all other policies make it essential for ERSE to take environmental questions into consideration in its mission as regulator.

In fulfilling these obligations, ERSE has set up an incentive for regulated companies in the electricity sector to improve their environmental performance. It is called the Environmental Performance Promotion Plan (PPDA) and has been in effect in mainland Portugal since 2002 and in the Azores and Madeira since 2006. The plan applies to the transmission and distribution of electricity and has basically sponsored voluntary measures.

Prof. Vítor Santos, Chairman of the Board of ERSE

In early 2007, the Board of Directors approved a new quality, environment and safety policy statement covering all REN's activities. This corporate policy enshrines, among others, the principle that environmental protection must be considered in all decision-making processes.

In order to guarantee compliance with the commitments established by the company's policy statement and the ongoing improvement of the environmental aspects of the integrated quality, environment and safety management system (SIGQAS), environmental goals are set every year and actions are defined for them in REN's plan of activities. For 2007-2009, in addition to systematic measures to ensure that the development of infrastructures

and execution of operations are in harmony with the environment, specific actions have been defined in the following areas:

- Reducing atmospheric emissions;
- Reducing water, energy and paper consumption;
- Reducing spillage risks;
- Defining principles of ecological contracting.

Rede Eléctrica Nacional's environmental performance during the year assured NP EN ISO 14001:2004 environmental certification maintenance that had been recognised by APCER – the Portuguese Certification Association. In 2008, this certification is expected to be extended to other



group companies, such as those in the gas sector, REN Serviços and REN Trading.

Performance and achievement of environmental goals and targets are monitored. It stands out the control of sulphur hexafluoride (SF₆) emissions from some equipment, effluent (wastewater discharge) and gaseous emissions (from boilers), noise, electromagnetic fields, birdlife and the quality of water withdrawal.

Our main environmental achievements in 2007 were as follows:

- The completion of all activities for the second year of the Rede Eléctrica Nacional Environmental Performance Promotion Plan (PPDA) for 2006-2008;
- The drafting of the first version of the environmental performance promotion plans for the 2008-2010 regulatory period for the three natural gas companies;
- The publication of the Guide on Assessing Environmental Impact of REN's infrastructures concerning overhead power lines;
- The signing of an agreement with Instituto Superior Técnico for assistance in strategic environmental assessment of the Transmission Grid Development and Investment Plan (PDIRT) for 2009-2014;
- Completion of the first two phases of the agreement between Rede Eléctrica Nacional and Instituto do Ambiente e Desenvolvimento at Aveiro University (IDAD), set up to carry out a study on the acoustic conditioning of substations.

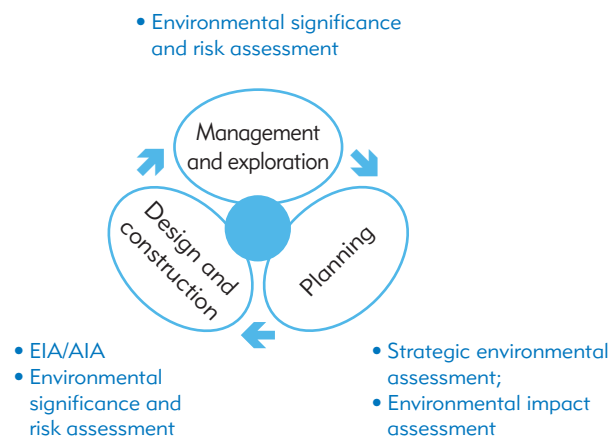
ASSESSING AND MITIGATING INITIATIVES ON ENVIRONMENTAL IMPACTS

“And it is truly so: How many things are today examples that began without an example? All written opinions or truths had a beginning, and the one who began them without an author was the first to give them authority.”

António Vieira
História do Futuro

The main environmental impacts are assessed for different activities and phases in the life cycle of the company's infrastructures. In practice, a strategic environmental assessment (in the planning stage), an appreciation of these aspects in environmental impact assessments (during design, construction and operation stages) and regular and systematic assessments of the environmental significance and risks arising from the main activities (in construction, operation, maintenance and decommissioning of facilities' stages) are carried out.

Figure 17 - Environmental impact assessment at REN



STRATEGIC ENVIRONMENTAL ASSESSMENT

The law on strategic environmental assessment was published in 2007. The main aim of this environmental policy instrument is an evaluation of the environmental effects of certain plans and programmes prior to their adoption.

Every three years, Rede Eléctrica Nacional publishes its grid development and investment plan (PDIRT). In 2008 PDIRT underwent a strategic environmental assessment, during which three critical factors were identified (energy, fauna and land use planning) and five different strategies for the expansion of the national transmission grid were assessed. The resulting environmental report of this assessment and PDIRT's draft were then submitted for public consultation in 2008.

ENVIRONMENTAL IMPACT STUDIES AND ASSESSMENTS

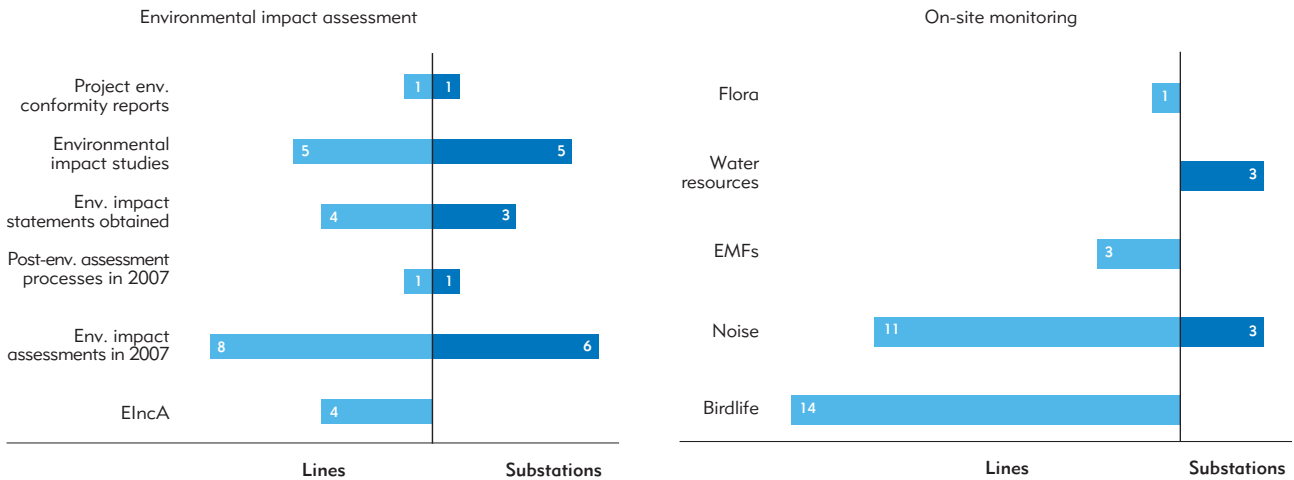
Environmental impact assessment is a preventive instrument widely used at REN to identify, evaluate, prevent or mitigate negative environmental effects potentially caused by its projects. The national natural gas transportation infrastructures and facilities have been expanding at a much more moderate pace than the national electricity grid in recent years. This explains the lower use of these kind of assessments in the natural gas network.

In 2007, Rede Eléctrica Nacional kept up intense acti-

vity in this matter and the processes carried out are shown in Figure 18. They include environmental incidence studies for projects with parameters below the thresholds defined in legislation for formal environmental impact assessment.

During the projects' post-assessment phase, when they undergo environmental impact assessment or when required by environmental incidence studies, relevant environmental aspects, i.e. noise, electric and magnetic fields, birdlife, flora and water resources are monitored. In 2007 the processes and monitoring activities shown in the figure below were completed **(EN26)**:

Figure 18 - Environmental impact assessment (left) and work subject to post-assessment monitoring (right) in 2007



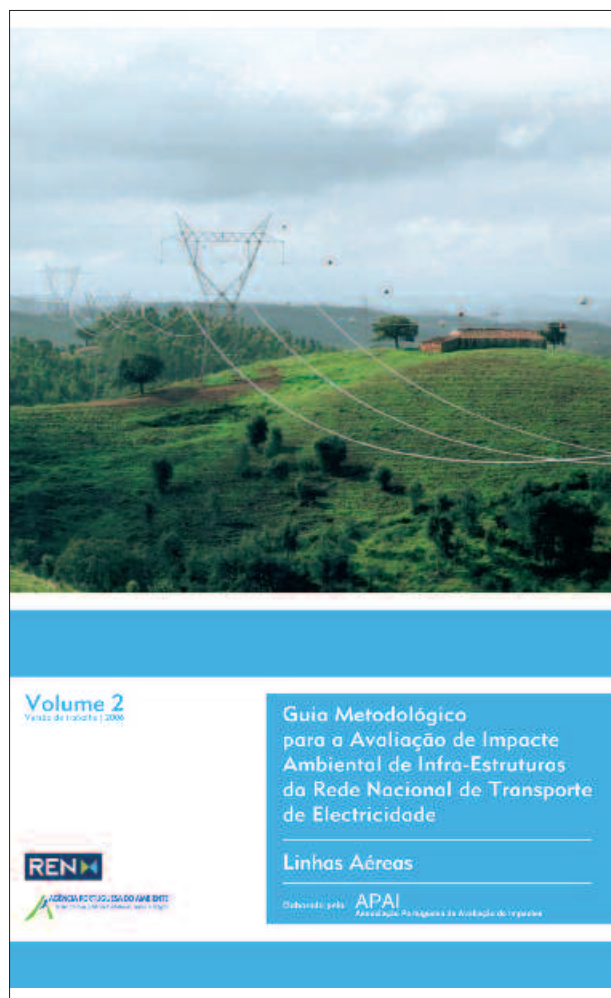


The construction of new infrastructures is subject to environmental supervision and monitoring to ensure compliance with the environmental impact statement and measures proposed in their environmental monitoring plans. In 2007, 31 construction operations at Rede Eléctrica Nacional underwent environmental supervision and monitoring (19 in lines and 12 at substations).

The “Methodological Guide on Assessing the Environmental Impact of Infrastructures in the Electricity Transmission Grid – Overhead power Lines” was published. This publication follows the policy of continuous improvement in environmental practices and is the result of an agreement with the Portuguese Environment Agency (APA - Agência Portuguesa do Ambiente). It was prepared by the Portuguese Impact Assessment Association (APAI - Associação Portuguesa de Avaliação de Impactes) in collaboration with other bodies involved in environmental impact assessment, such as the Portuguese Archaeology Institute (IPA - Instituto Português de Arqueologia), Institute for the Conservation of Nature and Biodiversity (ICNB - Instituto de Conservação da Natureza e Biodiversidade) and regional coordination and development committees.

The guide is available on REN, APA and APAI websites.

Figure 19 - Presentation of the guide in the APA auditorium



One environmental impact study was conducted in the natural gas business in 2007. It was carried out by REN Gasodutos and focused on the construction of the Carriço-Leirosa-Lares high-pressure gas pipeline – a project aimed at supplying natural gas to the future Lares and Leirosa/Lavos combined-cycle power plants in the municipality of Figueira da Foz.

As there was no construction work requiring environmental impact assessment neither at REN Gasodutos nor at REN Armazenagem, there was no environmental monitoring under environmental assessment during the year (EN26).

ENVIRONMENTAL IMPACTS OF NATURAL GAS ACTIVITIES (EN12, EN13 AND EN14)

Given that the main environmental aspects of REN's activity concerning the natural gas sector were not sufficiently explained in previous sustainability reports, unlike those for the electricity sector due to historical reasons mentioned before, there follows a brief description.

A gas pipeline is a type of infrastructure that has no particularly significant negative impacts provided that we ensure that all installations, equipments and systems operate properly and required safety standards are maintained. The construction and operation of a gas pipeline can mainly affect the following environmental aspects:

- **Air quality** – mainly in the construction phase due to the movement and transport of sand and the transport of construction machinery;
- **Water resources** – for crossing rivers in river basin plan areas, pipelines are built by HDD (Horizontal Directional Drilling) about 15m below the riverbed and so no impacts are expected in these areas;
- **Flora and land use** – the installation of natural gas pipelines requires opening a trench (normally, 0,8-1,0m deep) and a ROW (right of way) of several metres wide, which has inevitable impacts on wooded areas. The negative impacts result from the impossibility of forestry using fast-growing species. The ROW, on the other hand, offers positive impacts as it delays the spread of fires and provides access ways for fire-fighting. This is also the case during the operation phase;
- **Fauna** – the fact that the vegetation is kept low over the pipeline may favour the development of clearings of herbaceous species that may be beneficial to some animal communities, which may be considered a positive environmental impact.

The pressurised underground natural gas storage in salt caverns is considered the safest and best process for long-term storage of large volumes of gas under pressure. It has economic advantages over LNG (liquefied natural gas) storage at low temperatures. Carriço was chosen as the location for the underground storage caverns thanks not only to its geological and geographical characteristics but also to its lower environmental impacts when compared to other sites.

The main negative impacts of this activity are related to the allocation of environmental biophysical features such as geological and water resources, land use, noise, fauna and flora, the landscape and legacy. Positive impacts are mainly those on the national economy, while negative impacts are temporary and are of local incidence.

Given the nature of the project, we consider that the most important environmental and safety risks are related to the possibility (albeit remote) of eruption or gas leaks. The underground storage of natural gas in salt caverns is considered safe. In fact, the absence of air in storage prevents all risks of gas inflammation, and explosions in tanks or gas pipelines are also impossible. The safety measures adopted are state-of-the-art and therefore minimise the risk of accident.

The reception of LNG tankers at the sea terminal has highly significant positive socioeconomic and air quality impacts, as it enables the Portuguese government to make strategic options for the energy sector and increases the importance of the Sines' harbour. Impacts are minimal during the operating phase and have to do mainly with water quality, noise and the landscape.



ASSESSMENT OF ENVIRONMENTAL RISK AND SIGNIFICANCE

Environmental impact assessment is not limited to new projects and the construction of infrastructures. It is also conducted for other activities. Specific procedures are adopted for assessment of significance. In 2008, we plan to harmonise the different methods that emerged from the recent constitution of REN as a business group.

Some of the main environmental aspects and impacts of REN's activity are summarised below.

VISUAL AND LANDSCAPE IMPACT

The Group's different concession holders have facilities with a higher visual impact, which in some cases turn out to be an environmental liability as they were built a long time ago, when less attention was paid to some environmental aspects. In order to progressively reduce this liability, landscaping has been carried out in situations where this is justifiable and technically and economically feasible.

In 2007, in the national electricity grid, we completed landscaping at the Fernão Ferro, Custóias and Palmela substations, as part of the Environmental Performance Promotion Plan (PPDA) measures approved by the regulator for 2006-2008.

The main landscaping activities were:

- Removal of rubble;
- Selective clearing of brushwood accumulated over the years;
- Elimination of areas without meadow and creation of homogeneous cover in all green areas;
- Reinforcement or planting of bushes and trees for the aesthetic and ecological improvement of the whole area;
- Creation of a network of permanent paths.

The idea was to improve the scenic value of the surroundings of the facilities near the main sensitive receptors.

Figure 20 - Before and after the landscaping of the Custóias substation



We have been dismantling extra-high voltage lines at the end of their useful lives and removing access roads considering that there is no expectation of or need for reusing their corridors. In 2007 we dismantled around 55 km of the Palmela-Ferreira do Alentejo line. This measure was also provided for in the PPDA.

Figure 21 - Before and after dismantling of the Palmela-Ferreira do Alentejo line



The visual impact of the natural gas transport network's infrastructures is minimised by landscaping the affected areas:

- **Underground infrastructure** (gas pipeline) – after the infrastructure is built, the countryside involved is restored to its original condition, thereby eliminating any impact on the landscape;
- **Outcrops and associated structures** (stations) – they are covered with appropriate vegetation, possibly done by hydroseeding of low plants followed, when appropriate and after stabilisation of the barrier, by small trees. This method can be considered to be of environmental merit to the landscape;
- **Buildings** – afforestation and gardening of the surrounding area at Bucelas where, due to land and other conditions, there has been a trend towards desertification.

NOISE

The environmental sound is considered at all infrastructures of the national transmission grid when assessing the impact of projects. Acoustic conditioning studies are carried out for new substations and cover all the construction phases from initial installation to final configuration. Decisions are made as to the need to implement conditioning measures and which measures to take, on the basis of the results of these studies. In the operating phase, we conduct environmental sound monitoring campaigns to validate forecasts made in the planning phase.

The main source of noise from these facilities, power transformers, cannot under any circumstances be disconnected at the same time without interrupting the electricity supply. This means that legal compliance cannot be checked under the conditions in the applicable regulations, which justifies the development of specific, complex modelling and simulation methods.

The first two phases of the REN-IDAD agreement were completed in this area. The work involved monitoring six facilities that were considered representative of existing substations. In the third phase, soon to be complete, the methodological requirements for the characterisation of residual noise will be specified.



ENERGY

“Just as the sun or a lamp (which was our comparison) does not illuminate just with the light on the fire or the flame that lives in it, much more so with the light that comes from it, multiplying and diffusing near and far, so the natural flame of speech is spread, diffused and extended to many things, times, successes and circumstances that were hidden in them and by the veracity and consequence of that same discourse they are understood and discovered anew”

António Vieira
História do Futuro

REN's energy consumption can be classified as direct and indirect. Direct consumption means energy that comes from primary energy sources (e.g. natural gas), while indirect consumption refers to forms of energy produced from primary sources (e.g. electricity). Direct energy consumption is only relevant at the Group's gas companies, while indirect consumption is relevant for all.

DIRECT ENERGY CONSUMPTION

Direct energy consumption by gas companies is related to high-pressure transportation. The use of natural gas in boilers (to ensure that it is delivered to distributors at a predefined temperature) and losses in the network are examples of this type of consumption. REN Gasodutos also has a cogeneration unit that not only uses natural gas but also supplies energy to its head office building and delivers the remaining electricity to the grid.

Direct energy consumption by REN's gas companies totalled 257 502 GJ (**EN3**) in 2007. This figure is the result of the difference between direct energy consumption – incoming, and energy sold by REN Gasodutos – outgoing (Figure 22).

Figure 22 - Direct energy consumption by type at gas companies

INCOMING

Natural gas consumption
243 149 GJ

Fuel - fleet
9 825 GJ

Losses - network
1 730 GJ

REN GAS

Electricity produced
(Cogeneration)
8 960 GJ

OUTGOING

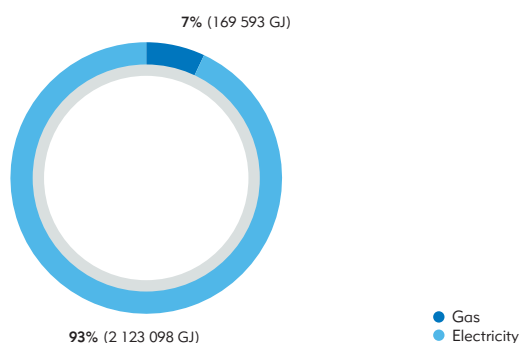
Electricity sold
(Cogeneration)
6 162 GJ

INDIRECT ENERGY CONSUMPTION

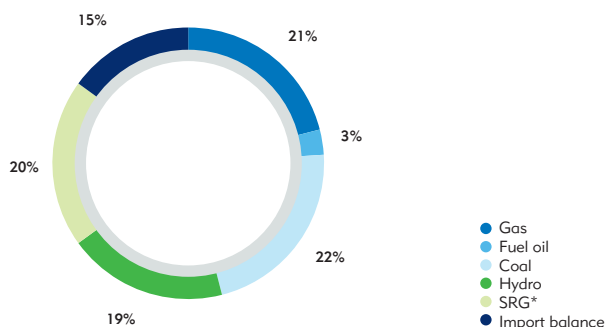
Indirect energy consumption refers to the use of electricity at REN buildings and infrastructures and losses from the electricity transmission grid. These losses represented around 90% of indirect energy consumption by REN Group companies (2 292 691 GJ) in 2007 (**EN4**). Figure 23 shows energy consumed by primary source used to produce it, according to data from Rede Eléctrica Nacional.

Figure 23 - Indirect energy consumption by business area (left) and total energy consumed by primary source (right)

Indirect energy consumption



Generation



* SRG – Special status generation



WATER

“When we wish to emphasise the clarity of something, we say that it is as clear as water, because there is nothing clearer. Yet, this same water, when faced with a cloud, is dark. If there is a cloud in between, even water is dark.”

António Vieira
História do Futuro

CIRCULATION OF WATER USED IN PROCESSES

The use of large volumes of water by the Group's companies is associated with processes at REN Atlântico and REN Armazenagem. Water use does not constitute actual consumption, as the volume of water withdrawal is almost totally returned to its source, although it undergoes slight quality changes, which are closely monitored.

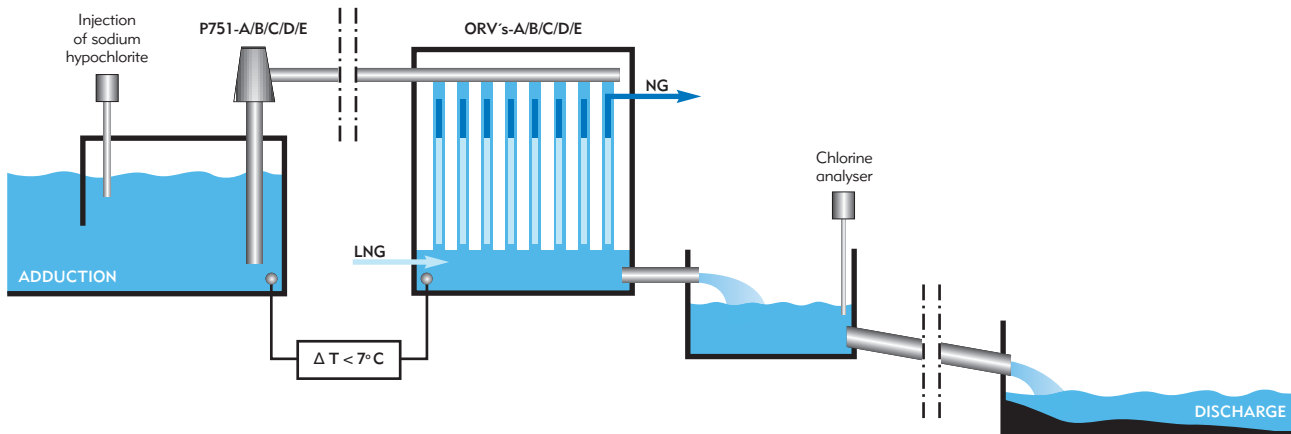
At REN Atlântico, liquefied natural gas (LNG) received at the terminal is the result of natural gas cooling to less than the condensation temperature of methane (-162°C). The liquefaction of natural gas reduces its volume about 600 times, making it possible to transport gas over long distances. Liquefied natural gas has to be heated and sea water is used as a heating source for the purpose to return it to a gaseous state so that it can go into the national natural gas transport network.

The seawater withdrawal and discharge circuit is shown in Figure 24. There is no contact between the liquefied natural gas and the seawater. In order to protect the seawater withdrawal and discharge system from the accumulation of microorganisms or biological waste, the LNG terminal has a sodium hypochlorite production unit. This ensures that water quality remains within legal limits and avoids negative impacts and changes in ecological and biological marine factors.

In 2007, 73.8 million m³ of seawater (EN8, 21) were collected and injected into this circuit and then returned to the sea. REN Atlântico collected and used 24 000 m³ of potable and industrial water (EN8).



Figure 24 - Withdrawal and discharge circuit of sea water used as heat source for LNG regasification



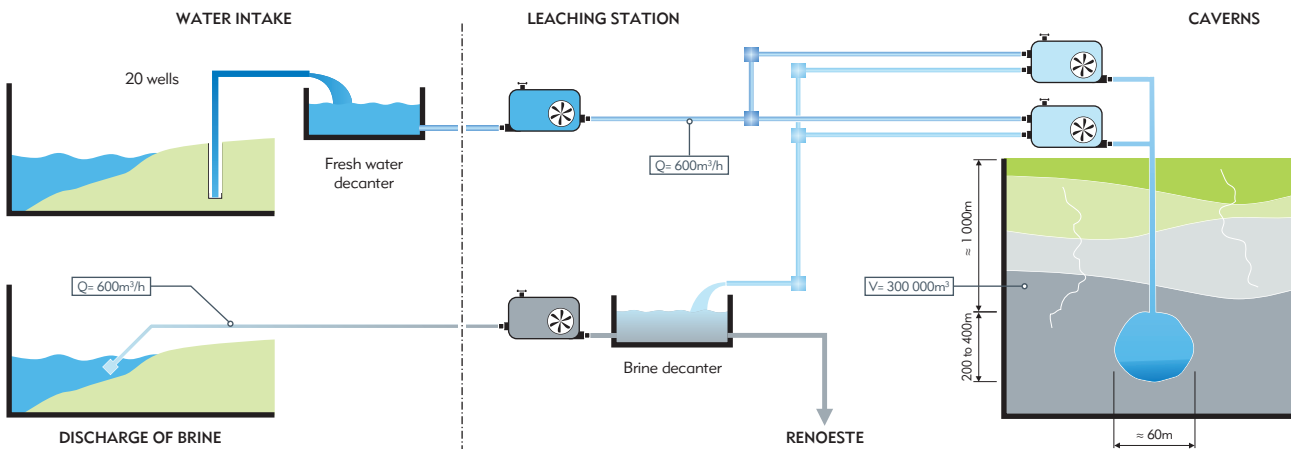
At REN Armazénagem, the construction of salt caverns for natural gas storage consists of drilling an oil-well-type hole down to the rock salt layer, into which two concentric tubes are inserted. Water enters through one of the tubes and dissolves the salt and the brine is extracted through the other. There is a leaching station and a gas station on the surface for the construction of the caverns.

The water-collection system consists of 20 shallow wells (maximum 25m), which provide water to the leaching facility at a maximum flow of 600 m³/hr. The leaching station has three pumps that inject the water into the caverns to be leached.

After the brine leaves the leached caverns, it passes through two decanters and is sent to two large tanks. Part of the brine is sent to RENOESTE, which uses the salt, while the remainder goes to the discharge site (the ocean). The brine is discharged on the coastline and washed away by the tides.

In 2007 1.8 million m³ of brackish water was collected (EN8). Around 380 thousand m³ of the brine was sent to RENOESTE for use in its processing and 1.4 million m³ was discharged into the sea (EN21).

Figure 25 - Circuit of water withdrawal and brine discharge



ATMOSPHERIC EMISSIONS

“Some things renew oblivion, because no-one remembers; others darkness, because no-one sees them; others ignorance, because no-one knows them; others distance, because no-one can reach them; others neglect, because no-one seeks them.”

António Vieira
História do Futuro

CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

Since the Kyoto Protocol came into effect, there has been increasing worldwide concern for climate change in recent years. REN is aware of its commitments and its role in the national energy sector and keeps up with developments in this area. Within the Group, we monitor greenhouse gas (GHG) emissions resulting from our activity. The

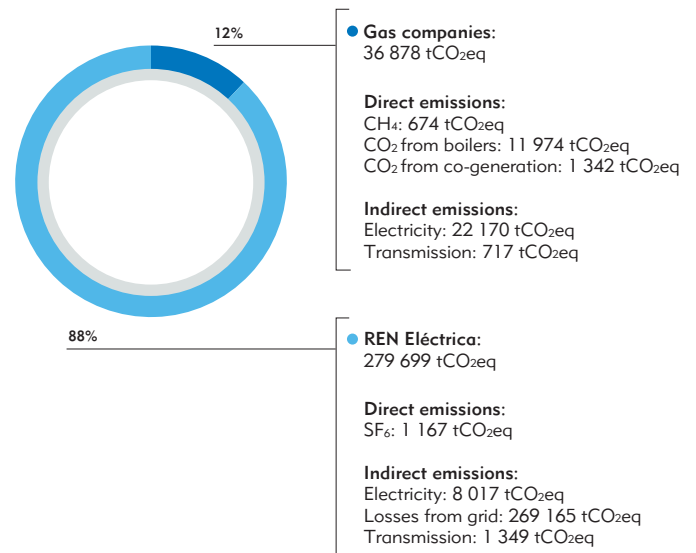


origins of REN's GHG emissions can be separated into:

- Direct:
 - Sulphur hexafluoride (SF₆) from circuit breakers and insulate substations in the electricity grid;
 - Methane (CH₄) from natural gas flushing associated with the transmission process;
 - Carbon dioxide (CO₂) associated with the burning of natural gas in boilers and operation of the co-generation unit.
- Indirect:
 - Electricity consumption at facilities and losses from the transmission of electricity (both associated with the burning of fossil fuels to generate electricity at thermoelectric plants);
 - Use of transports for on-duty travel.

Figure 26 shows quantities emitted in 2007 (EN16 and EN17).

Figure 26 - Direct and indirect GHG emissions



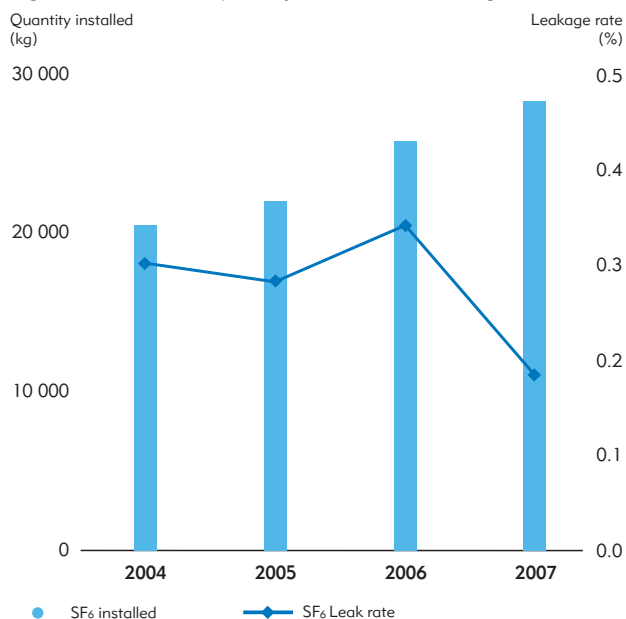


Examples of the Group's initiatives to reduce GHG emissions are the prevention of leakages of SF₆, a greenhouse gas covered by the Kyoto Protocol with the highest global warming potential. In 2007, the following concrete activities were undertaken in this area:

- Reconditioning of a specific type of circuit breaker responsible for a substantial part of SF₆ leakages in previous years, as a result of which 14 circuit breakers of this type were reconditioned and put back into service;
- Installation of sulphur hexafluoride filling and sampling valves in 15 circuit breakers of another type as a preventive measure to eliminate SF₆ leakage during maintenance operations, 90% of which had been completed at the end of the year;
- Replacement of a group of circuit breakers due to obsolescence, excessive maintenance costs and SF₆ leakage, in which four circuit breakers were replaced.

Thanks to these measures and in spite of an increase in the quantity of SF₆ installed in electricity grid facilities, there was a 58% reduction in leakages in 2007 compared to 2006. A total of 1 167 tCO₂eq was emitted in 2007 (EN18). (Figure 27)

Figure 27 - SF₆: total quantity installed and leakage rate



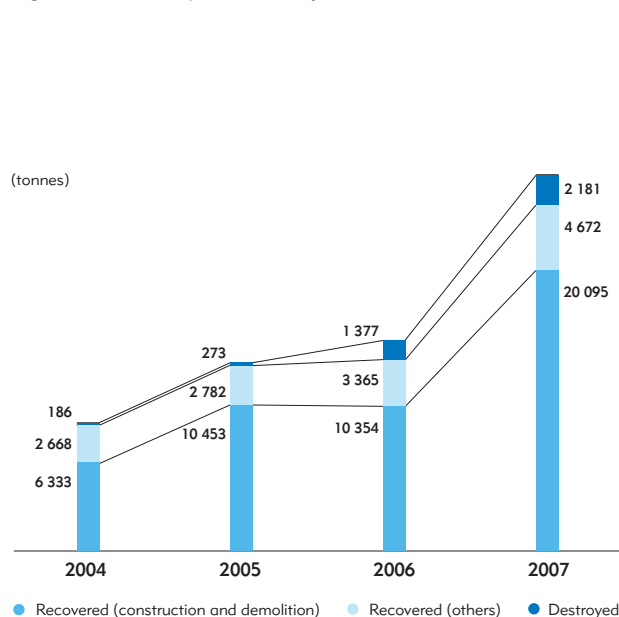
WASTE MANAGEMENT

“Old things belong to time, new things belong to merit; because the old things belong to others, while the new things are ours.”

António Vieira
História do Futuro

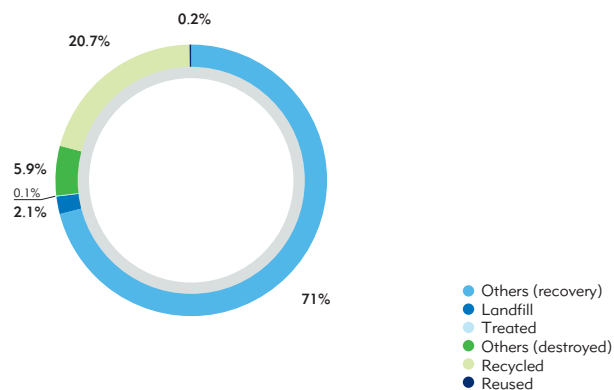
The amounts of waste produced at Rede Eléctrica Nacional are much greater than at the Group's other companies. The growing energy diffusion from renewable sources and the need to reinforce interconnections with Spain in the MIBEL have, as mentioned above, resulted in substantial investment in reinforcing and expanding the transmission grid, with the construction of new substations and transmission lines. In addition, REN has been required to dismantle some line corridors. This intensive activity has resulted in a substantial increase in total waste production. Around 27 000 tonnes were produced in 2007 (EN22), almost twice that in 2006.

Figure 28 - Waste production by final destination



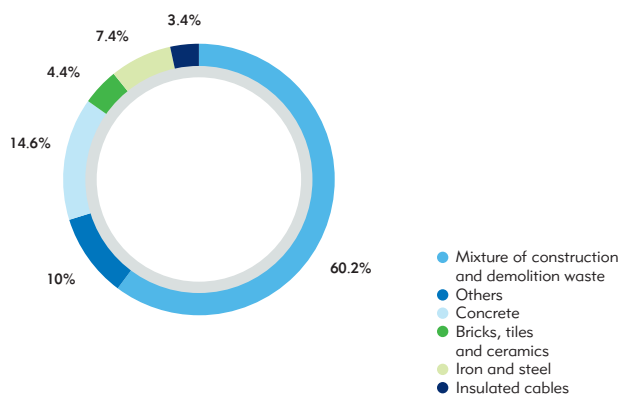
In 2007, 92% of the waste produced by Rede Eléctrica Nacional was recovered and 81% of this waste was the product of construction and demolition operations.

Figure 29 - Waste by final destination (Rede Eléctrica Nacional)



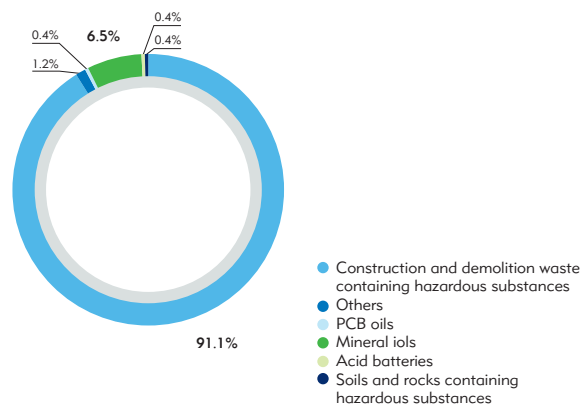
Following previous years' tendency, around 94% of the waste produced by Rede Eléctrica Nacional was classified as non-hazardous and included mainly construction and demolition waste, concrete, iron and steel and ceramic insulators and a smaller percentage of other types of waste, such as those from offices (paper and packaging).

Figure 30 - Non-hazardous waste by type



Only 6% of the waste produced at Rede Eléctrica Nacional is classified as hazardous. In 2007, around six tonnes of used oil contaminated with polychlorobiphenyls (PCB) were eliminated (EN24). This oil was the result of decontamination operations at four power transformers. Thanks to these decontamination operations, Rede Eléctrica Nacional managed to bring forward by two years its goal to eliminate all PCB-contaminated oil and equipment defined in Portuguese legislation.

Figure 31 - Hazardous waste by type



BIODIVERSITY

“All the creatures in the world can be reduced to four kinds: rational creatures like man, sensitive creatures like animals, vegetative creatures like plants and insensitive creatures like stones. There are no others.”

António Vieira
Sermão da Sexagésima

PROTECTION OF FAUNA

As a way of minimising the environmental impact on biodiversity, we try to avoid crossing sensitive protected areas in the environmental impact assessment phase. In spite of this concern, a percentage of all extra high vol-



tage lines and of all land occupied by substations is totally or partially located in sensitive areas - Natura 2000 Network, special protection areas and protected areas, which include national parks, reserves, parks and natural monuments. Their location is usually for historical reasons, as they were already there when the areas were defined or due to the need to permit or reinforce the flow of electricity from the plants there. Some stations and part of the gas network pipelines are located in sensitive areas. Neither REN Atlântico nor REN Armazenagem have facilities in sensitive areas (EN11).

Table 4 - Sensitive areas occupied

	2007		2006	
Substations in electricity grid (area)	0.3 km ²	5%	0.3 km ²	5%
Electricity grid lines (length)	886 km	12%	865 km	12%
REN Gasodutos stations (area)	0.075 km ²	9%	Not reported	
Gas pipelines (length)	127 km	10%	Not reported	

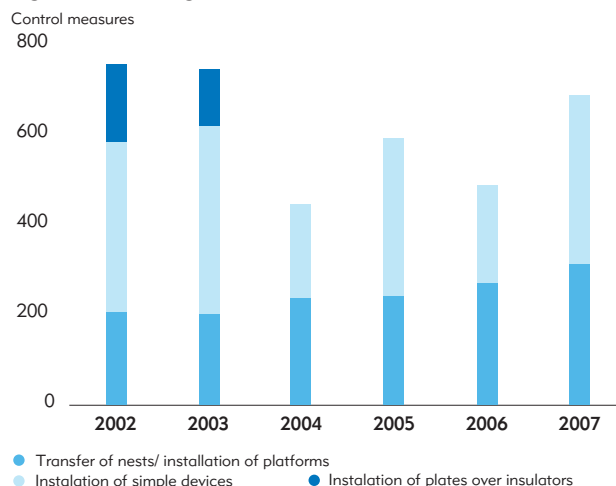
One of the main impacts on biodiversity at Rede Elétrica Nacional arising from the construction and operation of lines is the possibility of birds colliding with the cables and, very rarely, being electrocuted.

Under a cooperation agreement with the ICNB, we continued the multi-annual programme of identifying stretches of line with an actual or potential impact on certain bird populations and marking them to prevent collisions.

Also in order to protect birdlife, the following measures have been taken to ensure compatibility of the electricity grid with the growing population of white storks in Portugal:

- Installation of nesting platforms, sometimes followed by the transfer of nests;
- Installation of simple and effective devices to prevent storks from perching on the insulator chains.

Figure 33 - Nesting control measures



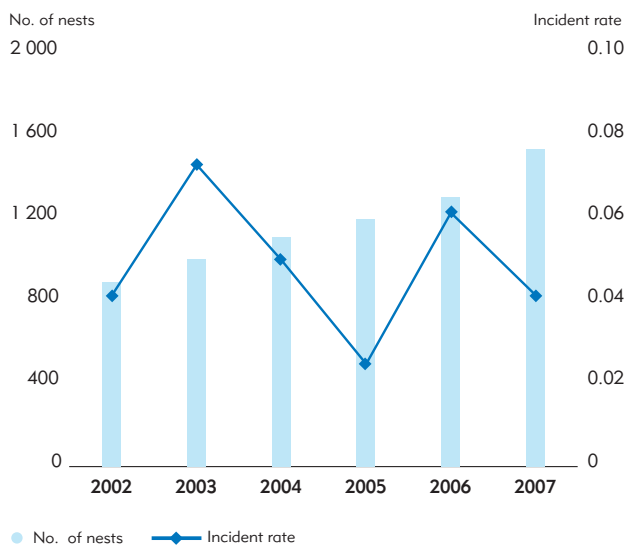
It has therefore been possible to substantially increase the number of nests on grid pylons (more than 1 500 nests were counted in 2007) without affecting quality of service.

Figure 32 - Marking of the Ermidas-Ferreira do Alentejo line (detail on the right)



The incident rate calculated as the quotient between the number of short circuits caused by birds and the total number of nests on RNT pylons has been stable at less than 0.1 since 1999 (EN12, EN13, EN14).

Figure 34 - Number of stork's nests and incident rate in grid lines



The following compensatory measures were also taken in 2007 as a result of environmental assessment of line construction:

- **Tunes-Estói and Sines-Portimão 3 lines:** the compensatory measure for protecting Bonelli's eagle includes providing more food, improving the nesting habitat and studying interaction between eagles and lines. The measures were taken into account due to the possibility of birds of colliding with lines when hunting or when young birds are learning to fly.
- **Alqueva-Spanish border line:** we are currently managing around 500 hectares of little bustard habitat and 190 hectares of crane habitat. New crane roosting places will also be established in order to minimise the risk of their colliding with the line.
- **Branch between the Mogadouro-Valeira line and the 220 kV Macedo de Cavaleiros substation (near the River Sabor):** Impacts have been identified on couples of Bonelli's eagles and golden eagles, due to the line's proximity to their nests. Since September 2007, we have been implementing compensatory measures that consist of increasing food supplies and improving the habi-

tat of their prey (recovery and repopulation of doves and installation of watering holes and seedbeds). The eagles are also monitored and tracked via satellite using a PTT – platform transmitter terminal.

The seagull population has been monitored at the REN Atlântico LNG terminal in Sines for safety reasons as part of an agreement between REN Atlântico and the ICNB. In 2007, the nature wardens at the Lagoas de Santo André and Sancha nature reserves took action at the terminal on two occasions to remove nests from critical areas. During the operation, they also captured several young yellow-legged gulls, which were sent to the Santo André Rescue Centre (EN26).

PROTECTION AND COMPENSATION OF FLORA

The impact on flora is related to the construction of new infrastructures and the opening and maintenance of the ROW for the gas network and electricity grid.

In 2007 around 113 500 trees were felled for the construction of new lines and substations or the uprating of existing lines. This represented a significant reduction in the number of trees felled compared to 2006 (some 443 500 fewer), though it is merely a reflection of the characteristics of the areas in which the work took place in each year.

In 2007, it was also necessary to fell 21 mature and 126 young holm oaks over an area of around 3.5 hectares for the construction of the Castelo Branco substation, which was essential to the expansion of the national transmission grid. In order to compensate for this and comply with legal requirements, we chose to plant trees in the areas adjacent to the substation. As a result, we voluntarily planted 4 587 holm oaks, 4 587 umbrella pines and 640 ashes, representing far more holm oaks than would be necessary to plant as a compensatory measure (1.25 times the number of trees felled).



Figure 35 - View of the wood at the Castelo Branco substation



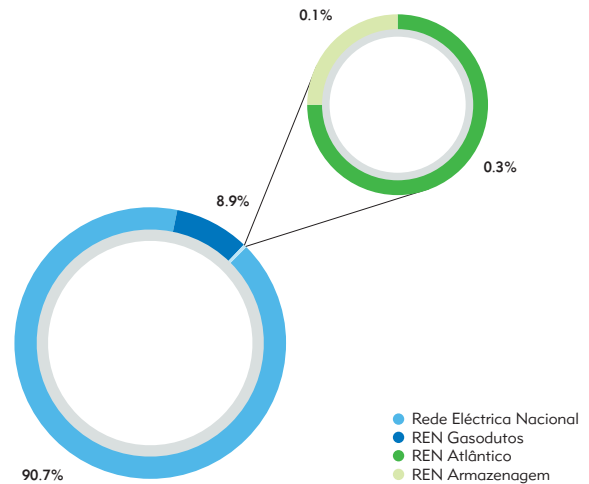
ENVIRONMENTAL EXPENDITURES AND INVESTMENTS

“The last step in the staircase is no bigger than the others; it may even be smaller. But since it is the last and above the others is enough for us to be able to reach from it what we cannot reach from the others.”

António Vieira
História do Futuro

All environmental costs at REN are recorded and monitored. In 2007, these costs were higher at Rede Eléctrica Nacional, representing around 91% of the total (EN30) (Figure 36).

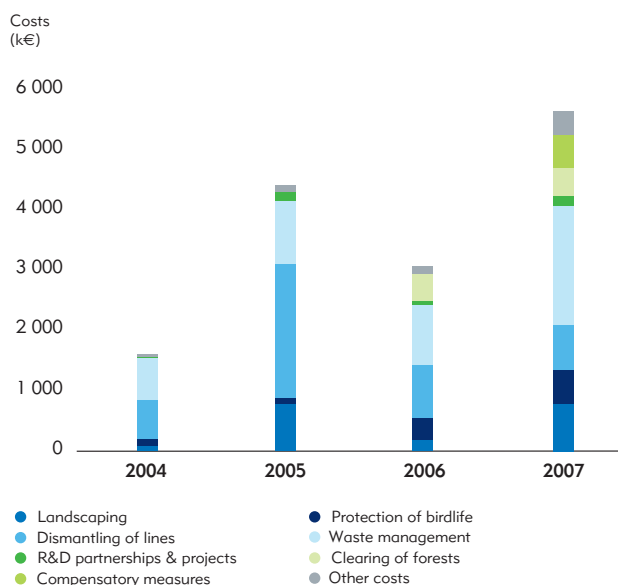
Figure 36 - Environmental costs by company



Environmental protection costs at Rede Eléctrica Nacional totalled EUR 5.7 million. They included waste management (35% of the total), landscaping (14%) and restoration of line corridors (13%). Other costs include monitoring of electric and magnetic fields and birds (Figure 37). There were, however, direct earnings from waste management of around EUR 980 000, mainly resulting from the sale of waste metal.

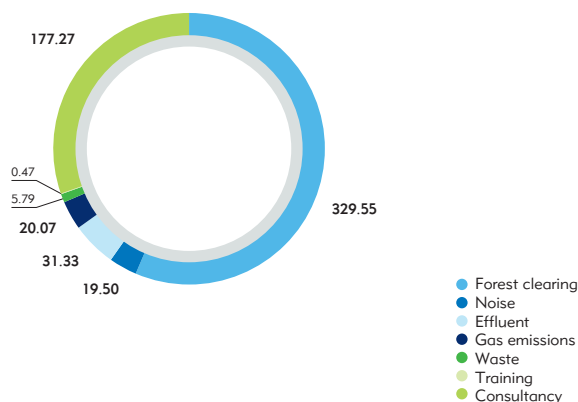


Figure 37 - Environmental costs of Rede Eléctrica Nacional



Environmental protection costs for the three gas companies in 2007 totalled EUR 584 000, with large amounts spent on cleaning the strip over the pipeline and on consultancy on quality, environment and safety management systems (Figure 38).

Figure 38 - Environmental costs of REN's gas companies in 2007 (EUR thousands)



ENVIRONMENTAL CONTROL AND SUPERVISION

“In these words, four things must be given serious consideration. What has been discovered, who has discovered it, from whom it has been discovered and when it was discovered.”

António Vieira
História do Futuro

Environmental supervision involves in-house and external audits of the company's activities and facilities by specialised teams in compliance with on-site environmental requirements, the analysis of records of main environmental incidents and the calculation of local and consolidated indicators for the Group.

In 2007 there were only three spillages of hazardous substances during Rede Eléctrica Nacional activities. None of them had a significant environmental impact (EN23).

REN was charged with eight administrative offences for failure to clear its protection row and one for the possible illegal felling of Mediterranean pines during electricity grid work. All these cases are still ongoing (EN28).



Social performance indicators



SOCIAL PERFORMANCE INDICATORS

HUMAN CAPITAL MANAGEMENT

“Today we discover more because we are higher up and we distinguish things better because we are closer and we work less because we think the obstacles have been removed. We are looking from higher up because we are looking over the past and we look from closer because we are nearer to the future and we think that the obstacles have been removed because all those who dug this treasure and swept this house have taken obstacles from their sight and all this thanks to time.”

António Vieira
História do Futuro



STATEMENT

Setting-up of REN Serviços

REN decided to make the most of internal synergies by setting up a new Group company, REN Serviços, which comprises all the areas affecting the whole Group.

The arrival of this new company changed some procedures in certain activities that were already carried out by employees in the areas covered by the internal movement of people.

The involvement of employee structures in the start-up of the new company was a sign of responsibility and cooperation with top management and revealed the need for these structures to have more dynamic, constructive participation in managerial acts of this nature. Representative structures must be part of the solution, not of the problem.

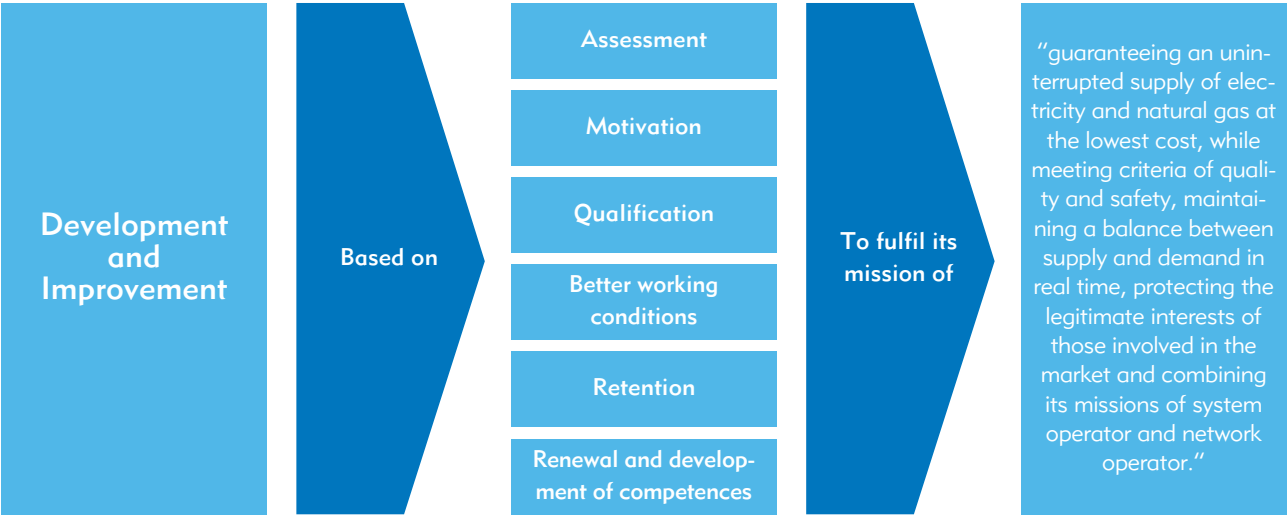
We believe that the implementation of any company's sustainability policy must include a commitment on the part of all its employees, as we feel that a company's social responsibility should develop from within.

An appropriate employee motivation policy and great cohesion will make it possible to strengthen the pillar of social responsibility. The right training policy and responsible interaction in matters of the environment, safety and quality will enable REN to convey the image of a company with a strong commitment to sustainable development based on its most solid structure – its workforce.

Rede Eléctrica Nacional
Employees' Committee

REN’s human capital management aims above all to guarantee the competences necessary to fulfil its mission and develop and improve its people.

Figure 39 - Human capital management



REN is also committed to maintaining a climate of great stability and harmony in labour relations based on dialogue with employees regarding managerial acts at regular meetings with their representatives. The clarification sessions and meetings with employees’ representatives on the setting up of REN Serviços, which resulted in the transfer of around 25% of all employees by early April 2008, illustrate this atmosphere of openness and dialogue.

EMPLOYEES

There were no significant changes in the number of employees in 2007 (+1%) and only a few people were hired to meet an increase in activity. At year end REN had a total of 802 full-time employees, mostly belonging to permanent staff and located as shown in Figure 40 (LA1).

Rede Eléctrica Nacional employees are covered by a collective labour agreement, while those at the gas companies have individual employment agreements (LA4).

Figure 40 - Number of employees by geographical location

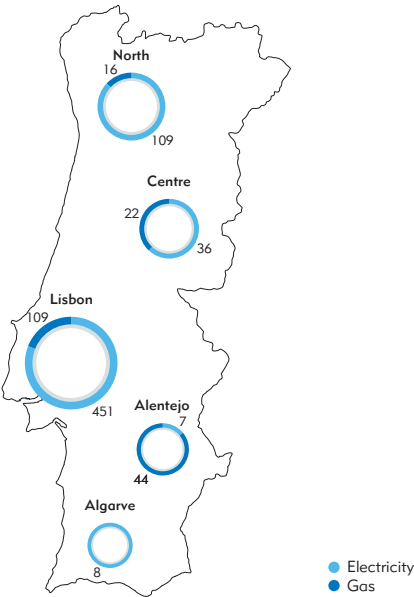


Table 5 - REN's human capital (LA1, LA4, LA7, LA10, LA13)

	2007	2006
Employees		
Total	802	794
Type of contract		
Permanent	775	770
Fixed-Term	27	24
Type of employment (%)		
Full time	100	100
Part time	0	0
Gender		
Men	644	640
Women	158	154
Geographical location		
North and centre	183	182
Lisbon	560	558
South (Alentejo and Algarve)	59	54
Age		
< 30	80	96
30 to 50	390	404
> 50	332	294
Category (%)		
Directors	7.7	7.3
Senior managers	32.4	32.6
Middle managers	9.7	9.8
Qualified and highly qualified personnel	44.7	44.8
Semi-qualified personnel	5.4	5.4
Unqualified personnel	0	0
Employment indicators		
Average age	45.2	44.7
Years of service (average)	17.8	17.5
Turnover (%)	2	1
Collective labour agreements (%)	100*	100*
Company /worker relationship (%)		
Union members	51.3	51.1
Diversity and opportunities (%)		
Women with the company	19.7	19.4
Women in management positions	1.2	1
Training and education		
Hours of training	18 386	8 248
Hours per employee	22.92	10.39
Health and safety (%)		
Absentee rate	2.7	2.6
Accident rate	12.9**	9**
Severity rate	369.3**	316.2**

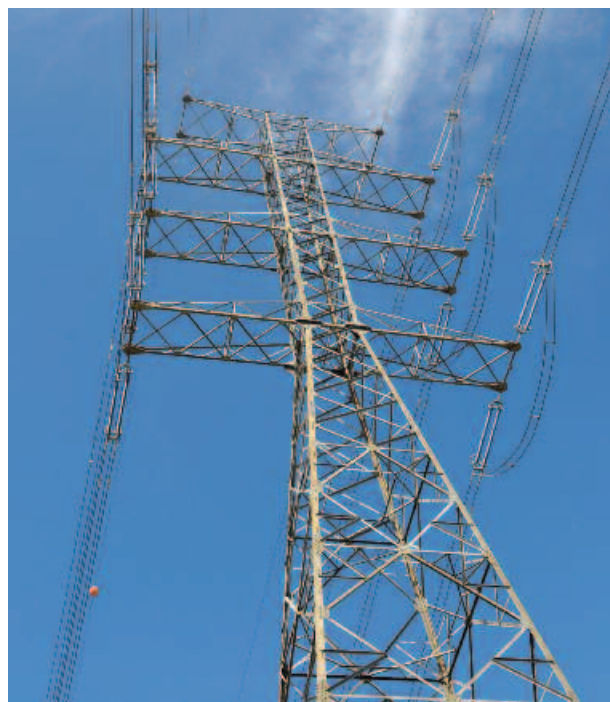
* Only for Rede Eléctrica Nacional, as gas company workers have individual employment agreements

** Figure not calculated for the whole REN Group but for Rede Eléctrica Nacional, as only the final quarter of 2006 can be counted for the gas sector.

DIVERSITY AND OPPORTUNITIES (LA13)

Table 6 - Age and gender

	2007	2006
Top management		
Men	100%	100%
Women	0%	0%
Under 30	0%	0%
30 to 50	22%	20%
Over 50	78%	80%
Management		
Men	84%	86%
Women	16%	14%
Under 30	0%	0%
30 to 50	42%	45%
Over 50	58%	53%
Other employees		
Men	80%	80%
Women	20%	20%
Under 30	11%	13%
30 to 50	49%	51%
Over 50	40%	36%

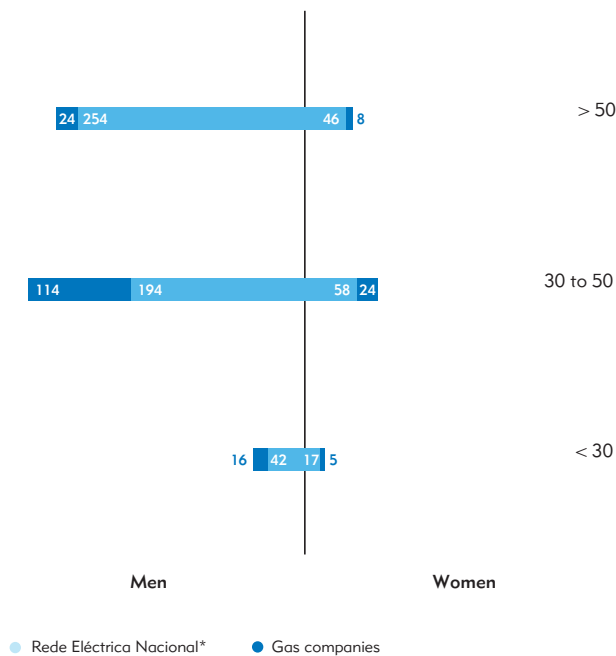




There are no differences between men's and women's salaries on hiring. Their basic pay is established in accordance with their professional category with no gender discrimination (LA14).

There is high job stability at REN, which is clearly shown by years of service and low turnover. We continue committed to the gradual renewal of staff.

Figure 41 - Employees by gender and age



* Includes employees of REN SGPS

The progressive renewal of our personnel is an opportunity to reduce age and gender imbalances. Of the people hired in 2007, 62% were aged under 30 and 29% were women.

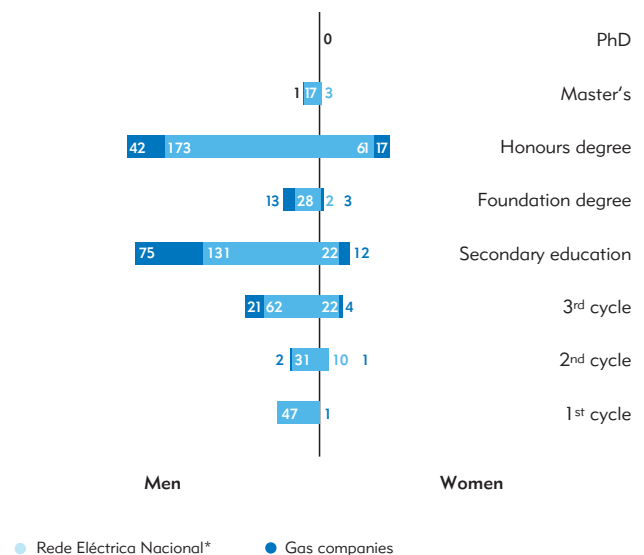
The average age went from 44.5 years at the end of 2006 to 45.2.

Qualifications and categories

Due to low external recruitment, in 2007 there were no significant changes in the number of employees with university degrees, which continue to account for around 45% of the total.

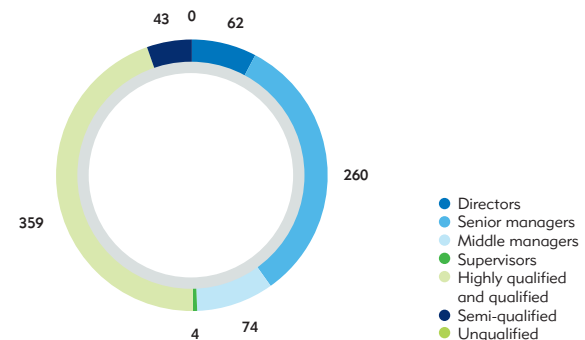
The qualifications of our employees are also reflected in their professional categories, where we can see that 50% of the total are directors or senior or middle managers.

Figure 42 - Employees by academic qualifications



* Includes employees of REN SGPS

Figure 43 - Number of employees by professional category



ATTRACTING, KEEPING AND DEVELOPING PERSONNEL

Due to its vital role in the Portuguese energy sector and the prestige resulting from the competence it demonstrates in fulfilling its mission and the quality of the public service it provides, REN continues to be a highly attractive company to work for.

Our policy has been to recruit employees preferably at the start of their careers. We have managed to keep the best personnel thanks to a combination of several factors (EU15):

- Attractive technical challenges that are important to a strategic sector of the economy;
- Competitive pay and benefits;
- Incentives or sponsorship for improving peoples' competences (e.g. co-payment of post-grad courses, master's degrees and PhDs).

The following aspects of training and development were particularly important in 2007 (LA10):

- There were 41% more days of training than in 2006;
- Mechanisms for checking the effectiveness of training were also improved.

Table 7 - Training hours by professional category

	2007		2006	
	Rede Eléctrica Nacional*	Gas companies	Rede Eléctrica Nacional	Gas companies
Training hours/year:	12 475.40	5 910.50	6 707.00	1 541.00
Hours per category (per year):				
Directors	372.40	418.50	223.44	104.00
Senior managers	6 372.60	193.50	5 180.16	111.00
Middle managers	516.80	1 665.46	111.72	266.00
Supervisors	0.00	180.00	0.00	28.00
Qual. & highly qual. personnel	4 902.00	3 453.00	1 184.08	1 032.00
Semi-qualified personnel	311.60	0.00	7.60	0.00
Unqualified personnel	0.00	0.00	0.00	0.00

* Includes REN SGPS employees

Table 8 - Participants and hours of training by area

	2007				2006			
	Rede Eléctrica Nacional*		Gas companies		Rede Eléctrica Nacional		Gas companies	
	Participants	Hours	Participants	Hours	Participants	Hours	Participants	Hours
Administrative	54	1 429	3	86	2	46	0	0
Environment	11	84	12	108	26	540	0	0
Management	15	540	5	35	37	1 011	2	40
IT	145	4 119	5	147	125	2 941	2	28
Languages	16	1 452	1	104	0	0	0	0
Quality	0	0	14	236	0	0	0	0
SAP	0	0	0	0	137	612	0	0
Safety	137	1 167	88	1 433.5	60	445	38	525
Technology	150	2 371	135	3 761	27	247	39	780
Behaviour	60	1 315	0	0	39	866	12	168
Total	588	12 476	263	5 911	453	6 707	93	1 541
No. hours per employee		20.4		30.9		11		8.2

* Includes REN SGPS employees

REN has implemented the government's NEW OPPORTUNITIES programme called "Learning is worthwhile" promoted by the FDTI - Foundation for the Dissemination of Information Technologies. It is yet another facet of our commitment to employee training and education (LA11).

ACCIDENT PREVENTION AND SAFETY

Occupational health and safety management system (PR1)

REN has been developing an occupational health and safety management system to cover the different group companies. Under this system, risks to the health and safety of activities carried out by employees and suppliers at the company's different locations and facilities are identified, assessed and controlled.

In 2007 the Rede Eléctrica Nacional Occupational Health and Safety Committee was reactivated. Its members include representatives of all employees, as is the case of the committees set up at the gas companies (LA6).

Accidents and absenteeism (LA7)

“And if the reason for human errors is the natural effect of their being men, it follows that no man is free of this burden of humanity, however learned and wise he may be.”

António Vieira

In 2007 there were no fatal accidents among REN's employees, though there were 13 accidents with and without sick leave at Rede Eléctrica Nacional and one at the gas companies.

Table 9 - Accident rate

	Rede Eléctrica Nacional		Gas companies
	2007*	2006	2007
No. accidents	13	9	1
No. days lost**	372	307	6
No. average worked«	607	597	-
No. hours worked	1 007 249	998 340	-

** Calendar days

* Includes REN SGPS employees

The figures for 2007 include ten accidents with sick leave at Rede Eléctrica Nacional (five with sick leave up to 30 days and five over 30 days) and one accident with sick leave up to 30 days at the gas companies.

The increase in the number of occupational accidents and in the number of days' sick leave at Rede Eléctrica Nacional in 2007 resulted in a rise in the frequency and severity rates.

Figure 44 - Accident frequency rate (Rede Eléctrica Nacional)

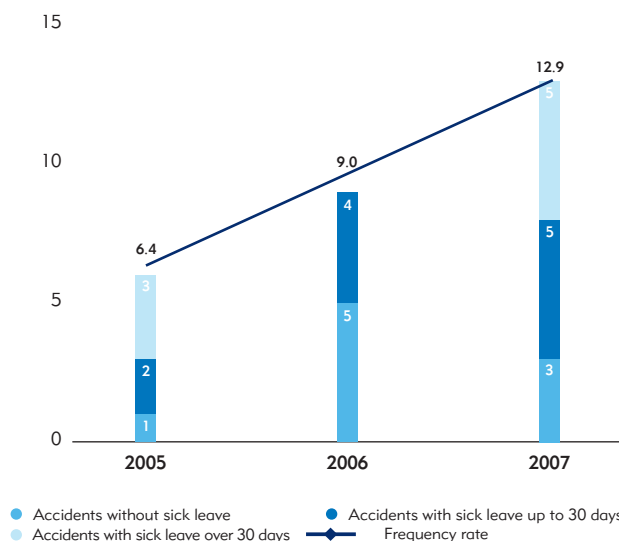
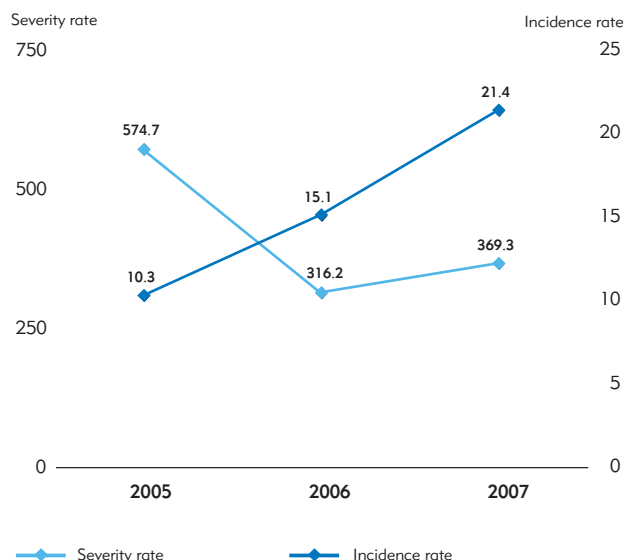


Figure 45 - Severity rate and incidence rate (Rede Eléctrica Nacional)



As has been the case for the last three years, the general absentee rate remained stable at just over 2.5%.

Table 10 - Absentee rates

Absenteeism (%)	Rede Eléctrica Nacional*		Gas companies	
	2007	2006	2007	2006 ³
General rate ¹	2.8	2.8	2.6	2.4
Reduced rate ²	1.7	1.4	1.8	-

¹ General rate = [(illness, accident and maternity)+(other paid absences)+(unpaid absences)]/theoretic hours

² Reduced rate = general rate – illness and occupational accidents over 30 days

³ September 26th to December 31st

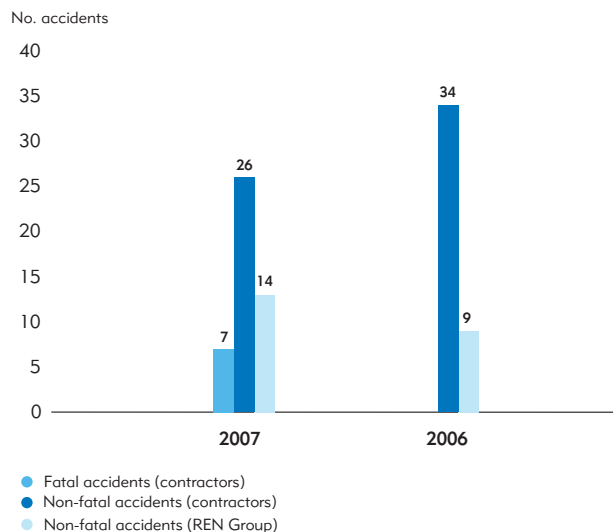
* Includes REN SGPS employees

In general, illness, accidents and maternity continue to represent the largest proportion (71%) of hours relevant to the calculation of this rate. On the other hand, unpaid absences represent only 1% of total hours. As for the reduced rate, there was an increase in 2007 due to the incidence of sick leave periods of over 30 days.

2007 was sadly marked by four serious accidents involving contractors' workers resulting in seven fatalities during construction and remodelling of lines (six fatalities) and substations (one fatality). Independently from the legal procedures required in these situations, the accidents were the subject of in-house investigations to ascertain their causes and the circumstances in which they occurred, with a view to preventing similar situations in the future. Following the accidents and investigations, a reflection and debate process resulted in a series of measures:

- A seminar on "Safety in the construction of lines and substations", attended by safety experts and other representatives from many of the companies qualified by REN to carry out construction work or supervise and coordinate on-site safety, along with many experts and managers from REN. This seminar will be repeated regularly;
- The award of two annual prizes to reward companies for good occupational health and safety performance in the construction of lines and substations. The first Annual Safety Performance Prize (for merit in safety management in construction of VHV lines and substations) was awarded in 2008;
- Immediate implementation of preventive measures, which include more on-site safety officers on REN's behalf and the introduction of an accreditation process for safety officers.

Figure 46 - Fatal and non-fatal accidents (REN Group /contractors)



CONTRACTING AND SUBCONTRACTING (EU16)

Contracting and subcontracting are used at Rede Eléctrica Nacional mainly for planning, ROW (right-of-way) management, construction of lines and substations and maintenance of grid infrastructures. Rede Eléctrica Nacional also outsource service providers for other support activities for the company (e.g. security, cleaning, couriers, etc). The table below shows overall data on the most important contracts and services with added risk factors at Rede Eléctrica Nacional.

Table 11 - Contracting and subcontracting at Rede Eléctrica Nacional

2007	Average no. of workers	Hours of work
Rede Eléctrica Nacional	607	1 007 248
Contractors	1 336	2 384 225
Total	1 943	3 391 473



Training of subcontracted workers (EU17)

The construction of lines and substations poses potential risks to workers. Safety training for subcontracted workers is therefore a contract requirement. Twelve of the 43 contractors who do work posing special risks (e.g. electrocution, cave-ins, falls from height, crushing) have occupational health and safety management systems with OHSAS18001/NP4397:2001 certification.

Table 12 - Occupational health and safety

Service providers	Total
Contractors with Safety training	100%
Contractors with OHSAS 18001 / NP 4397 certification	28%

All contractors’ workers that work on electricity grid maintenance are involved in prior safety training and awareness activities.

**HUMAN RIGHTS
(HR1, HR2 E HR3)**

“ And he who says everything according to the rules leaves nothing out. ”

António Vieira

Human rights are abundantly enshrined in Portuguese law. For this reason, and as we feel that human rights issues have not been raised within the company or in relations with third parties, REN has not trained its employees in the matter and does not currently include human rights criteria in systematic assessment of suppliers and contractors.

However, the clauses of infrastructure construction and maintenance contracts more or less explicitly address the issue, requiring for example that there be no illegal or child labour. These requirements are checked directly by REN during on-site inspections or by hired supervision teams.

These practices are reinforced with the application of the principles of our social responsibility policy, which was drawn up in 2007 and the implementation of which is a commitment that involves actions such as:

- Cooperation as part of the Portuguese Global Compact Network in the dissemination and implementation of the 10 principles and incorporation in specifications of new clauses on compliance with these principles;
- The creation and implementation of employee support mechanisms so that human rights and equal opportunities issues can be systematically dealt with;
- Progressive implementation of a social responsibility management system integrated with the other management systems, comprising the above actions.

SOCIETY

“ The primary quality of history (other than its essence) is the truth. ”

António Vieira
História do Futuro

CORPORATE CITIZENSHIP

In its Social Responsibility Policy Statement, REN publicly makes a commitment to “defend and promote the principles of sustainable development and seek to continuously create value for its shareholders and other stakeholders”.

Fulfilment of this commitment is based on a “model of ethically and socially responsible management that takes into equal consideration economic and social aspects and preservation of the environment when making its decisions”.

Reporting on action plans for the practical application or expansion of these principles is another of REN’s social responsibility commitments.

In early 2008, a Corporate Responsibility Committee was set up at REN SGPS and quality, environment and safety committees were formed at the most operational companies.

The Corporate Responsibility Committee is an advisory and support body for the Executive Committee of REN SGPS regarding strategic quality, environment, safety and social responsibility matters.

The quality, environment and safety committees advise the Boards of their respective companies.

Public Policies (SO5)

REN has a close relationship with different institutional and regulatory bodies in the energy sector for drafting and revising regulations and legislation on the sector and for achieving national and European targets. In 2007, this cooperation involved the following activities:

- Participation in the working group that coordinated the preparation of a draft national programme for dams with high hydroelectric potential, in which the Water Institute (INAG – Instituto da Água) and the Department of Energy and Geology (DGE – Direcção Geral de Energia e Geologia) also took part;
- Membership of the National Water Council (CNA – Conselho Nacional da Água) and the Reservoir Management Committee in representation of the electricity sector and of working groups of the Portuguese delegation of the CAD – Committee for the Application and Development of the Albufeira Convention – Convention on Cooperation for the Protection and Sustainable Use of Water from Portuguese and Spanish River Basins;
- Preparation of a report on security of supply in electricity generation for 2008-2030;
- Participation in work of the Gas Regional Initiative (GRI) formed by the European Regulators' Group for Electricity and Gas (ERG);
- Studies on gas supply and demand in Portugal and Spain in collaboration with Enagas;
- Participation in public consultations on new legislation applicable to the sector.

Impacts on the community (SO1)

“What was doubtful in past is known in the future.”

António Vieira

REN's work in the development of transmission grids and their infrastructures inevitably causes impacts, as mentioned before.

Positive impacts, such as national and regional socioeconomic development are accompanied by some negative impacts. The most significant are perceived to be effects on biodiversity and the landscape, noise emissions and electromagnetic fields. These impacts are sometimes associated with a socioeconomic effect, the real or potential depreciation in property values (land and housing).

Fulfilling its mission as a public utility requires REN to cooperate closely with the different bodies with responsibilities for spatial planning and management. This cooperation also extends to non-governmental environmental organisations, landowners and associations in the search for the best solutions for setting up and operating infrastructures, taking environmental, cultural and all other factors into consideration (EU18). More detailed information on REN's action in environmental impact assessments of its infrastructures is available in the Environmental Performance chapter.

In spite of continued efforts to find balanced solutions proportional to the risks involved, in 2007 there was an increase in public protests against some electricity grid development projects and several civic movements were set up in opposition to the installation of new transmission lines.

This phenomenon, which is strongly encouraged by the media and increases the risk perceived by the public, is considered at international level as being essentially a communication problem. This conclusion was confirmed by the European Commission Eurobarometer study, published in June 2007, on the electromagnetic fields (EMFs) responsible for most of the public protests against electricity grid infrastructures. Its findings were:

- 80% of the people did not feel that there were laws protecting them from radiation from EMFs;
- 33% said they had no information;
- 60% had a negative perception of the efforts by the authorities to inform them on the matter.

The difficulties found, which are possibly accentuated by spatial planning problems that are particularly acute in the coastal area of the country where a substantial number of infrastructures are located, have further encouraged REN to maintain, reinforce and improve its policy of total openness to dialogue and cooperation with all stakeholders, within the limits of reason and the law.



Today, it is impossible to imagine modern societies functioning and developing without electricity. Nonetheless, there can be no electricity without electromagnetic fields. They are indissociable with the operation of overhead and underground lines for the transmission and distribution of electricity or commonly used equipment such as electric motors or the domestic appliances we use at home.

REN is aware of the growing need to keep the public informed. Going beyond its role as mere electricity grid concession holder, it endeavours to be proactive in announcing and explaining issues related to power transmission and is fully open to dialogue and cooperation with all stakeholders.

In an effort to respond to the general public's need for information and clarification on electromagnetic fields, on January 10th, 2008 REN signed a memorandum of understanding with the Pharmacy Faculty of Lisbon University setting up the CITEC – Centre for Scientific Investment and Technological Innovation. It is the first research centre in Portugal devoted exclusively to research into and monitoring of possible effects of EMFs on biological systems, such as those of high-voltage lines on human health.

At international level, countless studies have been conducted of the possible effects of electromagnetic fields on biological systems and human health and there is plenty of scientifically validated literature on the subject.

The World Health Organisation considers that, according to current scientific information, there is no evidence of any physical or chemical mechanism relating magnetic fields with any effect on human health when they comply with reference values.

Electromagnetic field values

Ministerial Order 1421/2004 of November 23rd adopted maximum reference levels for public exposure to electromagnetic fields as set forth in European Council Recommendation 1999/519/EC of July 12th. The levels have been corroborated by the WHO.

The maximum reference value for an electrical field set in the order is 5 kV/m. The maximum reference value regularly defined for magnetic induction is 100 μ T (micro Tesla).

The recommended reference values abide by the principle of caution, as they considered safety factors of 50, thereby constituting an appropriate guideline for decision makers in national safety and health policies based on the best, most impartial validated scientific knowledge.

Table 13 - Legislation in several countries

Country	Legislation
Germany	●
Denmark	○
Spain	○
USA	○
Finland	●
UK	●
Italy	●
Norway	○
Portugal	●
Sweden	○
Switzerland	●

○ None ● Transposition of EU directive

Source: Eurelectric 2006 - EMF Exposure Standards

In 2004, Portugal transposed into Portuguese law EU directive 1999/519/EC, which is based on the recommendations of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

However, some countries do not yet have any legislative framework on electric and magnetic fields.

Table 14 - Magnetic field values (in μ T)

Appliance	Distance	
	30 cm	1 m
Welding machine	191.00	78.40
Washing machine	8.20	2.38
Microwave	6.40	0.61
Television	0.50	0.09
Halogen bulb	0.42	0.14
Air conditioning	0.38	0.12
Alarm clock	0.23	0.03

Source: Adapted from Campos eléctricos y magnéticos de 50 Hz published in 2001 by Grupo Pandora, SA

A typical magnetic field generated by a 220 kV line measured at ground level 30 metres below the axis of the line is 2 μ T. For the sake of comparison, the table shows the common values for magnetic fields generated by ordinary appliances at a distance of 30 cm and 1 m.

REN's lines are regularly measured and the reports are analysed by the competent authorities. The reports are available at the electricity channel information centre on the company's website.

Emergency management and contingency planning (EU20)

As overall technical manager of the National Electricity System (SEN), Rede Eléctrica Nacional permanently ensures that the power generated is exactly the same as that consumed and monitors facilities and their components in real time in order to correct any imbalances immediately.

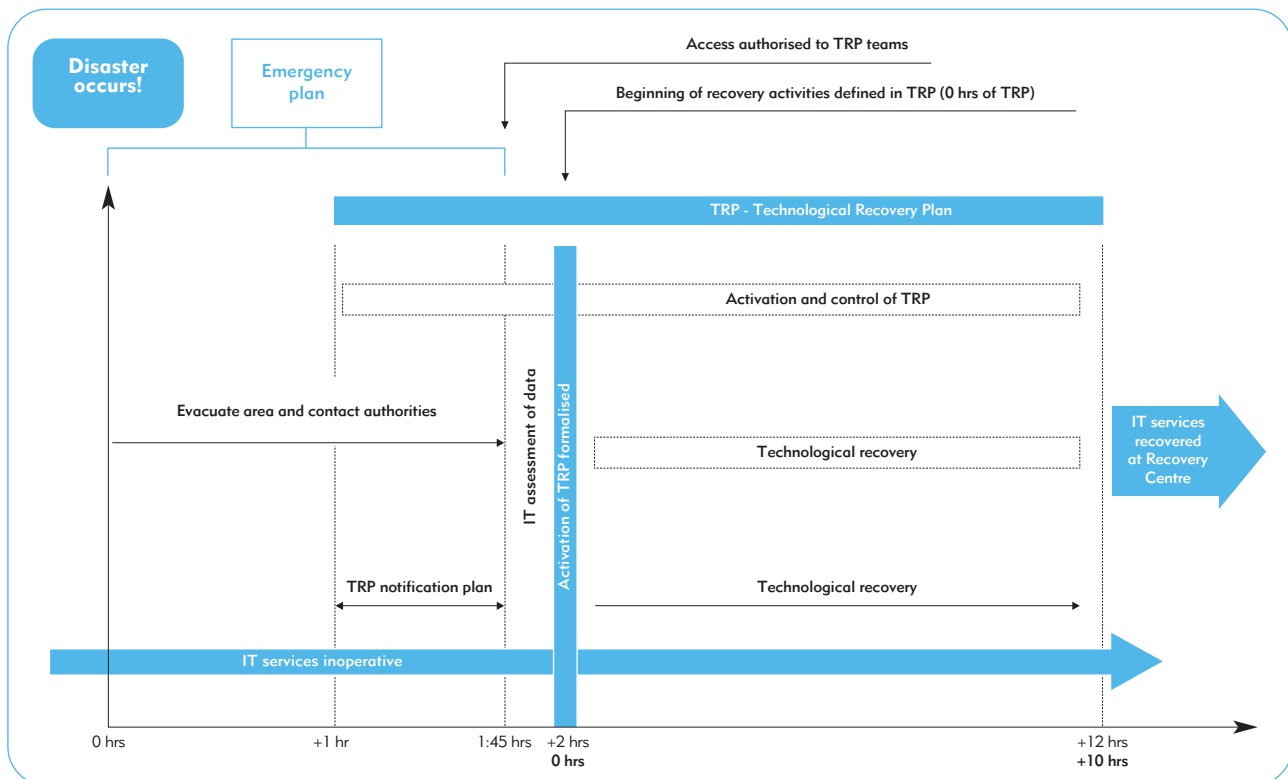
In order to do this, there are two control rooms operating 24 hours a day, 365 days a year, one in Lisbon and the other in the Greater Oporto area. Although they have dif-

ferent functions, both can operate as back-up to the other in case of emergency.

Operators are regularly trained in strategies for recovering the electricity system in case of regional or national failures of components of the transmission grid, including loss of one of the control rooms. In December 2007, Rede Eléctrica and REE operators participated in a joint exercise in Madrid for restoring the Iberian electricity grid. The main companies in the Spanish Electricity System also participated.

There is a technological recovery plan for our information systems based on a technological infrastructure with the necessary redundancy and geographical dispersal. It provides for a series of procedures for rapid system recovery in an emergency.

Figure 47 - Time frame for activation of the technological recovery plan (TRP)





COMMUNICATION WITH STAKEHOLDERS

“Errors of understanding are difficult to overcome”

António Vieira
Sermão de Santo António

This report is one of several REN initiatives for communicating with different groups of stakeholders and represents our commitment to an environment of permanent public scrutiny of the company's activities. This and other company reports and REN's website, which was totally revamped in 2007, are our preferred means of releasing information.



REN's first listing on the stock exchange in July 2007 resulted in an unprecedented publicity operation that attracted society's attention and used a wide variety of means of communication – television, press, radio, internet, posters and hoardings.



In connection with this operation, we redesigned the contents and graphics of the Group's intranet and web pages and created an investor area.

A new REN corporate video was produced and guided tours were organised to the company's operating units for journalists, giving them the opportunity to watch demonstrations of technical work. The purpose of these visits was to give the public an idea of the extent of REN's activity and the scope of its services and infrastructures.





Several press conferences were held and articles and interviews were published in the main national newspapers. REN featured in more than 300 articles during this period. From July 2nd to 6th, in the second phase IPO, the Board of Directors went on a road-show to some of the main institutions in the European capital market.

As mentioned before, 2007 witnessed an increase in public protests against the construction of new grid infrastructures. REN continued to collaborate with public bodies by providing information on projects subject to protests and granted many media interviews. Meetings were also held with residents' committees and there were public hearings where REN provided clarifications in the face of concerns regarding investment projects.

Under the partnership set up with the Pharmacy Faculty, the BioCEM Symposium was held in early 2008 and attended by a panel of speakers representing different bodies with responsibilities in the area, including the World Health Organisation (WHO), the Health Department, the DGEG and the ERSE. The main presentations and conclusions of the symposium are available on REN website.

In order to increase the amount of information available to the general public on electromagnetic fields associated with electricity transmission, in the first half of this year, REN published a Q&A leaflet (Did you ask about high voltage?), which is also available online.



BioCEM Symposium on January 23rd at the Pharmacy Faculty Auditorium at Lisbon University and the signing of the memorandum of understanding on January 10th



RESPONSIBILITY FOR OUR PRODUCT

“...when fishing for understanding, only he who knows how to make a net knows how to cast it... and only he who makes the net knows how to manage the light and the heavy.”

António Vieira
Sermão da Sexagésima

The power transmission sector in Portugal is strictly regulated by laws, public bodies and independent authorities, which are responsible for checking compliance with applicable laws and regulations, especially with regard to safety.

In 2007, there were no injuries or fatalities to the public involving company assets and no non-conformities with regulations or health and safety codes were identified (EU24).

QUALITY OF SERVICE: OUTAGES

The technical performance of the electricity grid is analysed by means of service continuity indicators and the results of monitoring energy quality.

Where energy quality is concerned, we can say that average levels of disturbance in 2007 continued relatively low and regulatory limits were respected, with the exception of some rare occasions on which there were very slight, generally discontinuous deviations from standard values.

As for continuity of service, the table below shows 2007 figures for the main general indicators* and compares them to 2006 and the average for the last five years (EU27/ EU28).

It is therefore clear that the quality of the service provided by Rede Eléctrica Nacional, regarded as a safe, continuous electricity supply with appropriate technical characteristics, once again reached a high level in 2007, maintaining and consolidating the trend of previous years towards a sustained improvement in the grid's performance.

For the third year running, equivalent interruption time was less than one minute. Continuity of service was guaranteed for 99.99986% of the time.

For more information on the subject, our 2007 Quality of Service Report is available on REN website.

Regarding the transportation of natural gas, continuity of service figures in 2007 (0.013 interruptions per exit point, 0.16 minutes per exit point and 12 minutes per interruption) were the result of a single occurrence during maintenance work. There were no incidents in the high-pressure transport infrastructure and the accumulated indicator of unintentional gas releases published by the EGIG (European Gas Pipeline Incident Data Group), to which REN Gasodutos belongs, was equal to zero incidents per 1 000 km of exposed infrastructure per year.

Table 15 - Continuity of service – general indicators

CONTINUITY OF SERVICE (General indicators)					
	2006	2007	2007 vs. 2006	2007 vs. average for last 5 years	
PNS – power not supplied (MWh)	42.1	69.1	+64%	-56%	▲
EIT – equivalent interruption time (min.)	0.57	0.74	+30%	-65%	▲
SAIFI – system average interruption frequency index	0.13	0.10	-23%	-38%	▲
SAIDI – system average interruption duration index (min.)	0.91	0.73	-20%	-77%	▲
SARI – system average restoration index (min.)	7.31	7.16	-2%	-35%	▲

Legend: ▲ Better than average for last 5 years ▼ Not as good as average for last 5 years ● Same as average for last 5 years

* As required by the Quality of Service Regulations, these indicators take into consideration all outages lasting more than three minutes and exclude fortuitous cases or force majeure. In 2007, only one of the eight outages in the transmission grid, associated with unsupplied energy estimated at 6.2 MWh, was classified as a fortuitous case or force majeure.





Annex 1
Commitments and
achievements in 2007

COMMITMENTS AND ACHIEVEMENTS IN 2007

Energy grids and networks				Achievements in 2007
Focus	Commitments/ goals	Action for 2007-2009	Status	Remarks
Category	Economy			
Tariffs	Helping to contain electricity costs borne by consumers.	REN will continue to provide full support to promoters of special regime generation (SRG) in order to rationalise the connections of SRG to the transmission grid so as to minimise losses and reduce the number and length of lines interconnecting SRG and the grid. This will help reduce grid costs and thereby contain electricity costs borne by consumers. The commercial management of the MIBEL will be adapted to the new electricity sector framework. The energy market's information system will be converted to the new electricity sector model.	■	Following the international call for tenders awarding reception points in the public service electricity grid for a wind power connection of 1,400 MVA plus 280 MVA of over-equipment, REN has been analysing the ways of connecting their wind farms with the winners, DGEG and EDP.
Primary energy sources	Helping to diversify primary energy sources.	Renewable energies will continue to predominate and their intermittency will require a higher capacity for regulating the electricity system, as the natural variability of demand now overlaps intermittency of this type of electricity generation. The proposed reinforcement of the hydroelectric component is, however, one way of mitigating this intermittency. These different types of generation, some more volatile than others, have effects on the flows of power in the grid, making them more variable and unpredictable.	■	REN has been expanding its grid to accommodate electricity generated by an increasingly wide range of sources of primary energy, including renewable energies. Where overall management of the national electricity system is concerned, REN participated in the Iberian Reservas project aimed at establishing operating reserve needs and in the European Windgrid project, aimed at promoting the dispatchability of wind power and other conditions designed to accommodate its high penetration of the grids.
	Guaranteeing the supply to new and existing combined-cycle plants, thereby making an important contribution to the diversification of primary energy for electricity generation.	Requests for supplies from the following combined-cycle plants will be met: > Galp Energia CC plant in Sines;	●	Plans have been drawn up to supply the following combined-cycle plants: > Galp Energia CC plant in Sines – landscape conformity assessment and basic plan under way;
		> Tejo Energia CC plant in Pego;		> Tejo Energia CC plant in Pego - landscape conformity assessment and basic plan completed and detailed plan under way;
		> Carriço-Leirosa-Lares high-pressure gas pipeline (to supply EDP and Iberdrola CC power plants)		> Carriço-Leirosa-Lares high-pressure gas pipeline (to supply EDP and Iberdrola CC power plants). Environmental impact assessment, basic and detailed plans completed; construction contract tender under way


Energy grids and networks			Achievements in 2007	
Focus	Commitments/ goals	Action for 2007-2009	Status	Remarks
Category	Economy			
Climate change	Defining methods for recording and calculating costs associated with atmospheric phenomena and climate change.	We will conduct a study to characterise the economic implications, risks and opportunities associated with climate change.	○	Goal postponed in the revision of the action plan in 2008 in the sphere of the new corporate context.
Indirect economic impacts	Quantifying indirect economic implications of REN's activity.	We will set up a working group with universities and other bodies. We will identify the key variables for assessing the indirect economic impacts based on a validation of known variables. We will work on the calculation method.	○	Goal postponed in the revision of the action plan in 2008 in the sphere of the new corporate context.
Commercial issues	Expanding the national natural gas system's RNTIAT infrastructures in order to guarantee security of supply of the network to the market and satisfy the needs for this fuel while respecting the safety of people, property and the environment.	The following activities are planned > Study, planning and installation of a compression station in the RNTGN.	●	Plans are under way and will be included in the 2008-2011 PDIR. A preliminary study of the station's capacity has been completed. The preparation of consultations is under way for consultancy and engineering services.
		> Study, planning and installation of a third LNG tank and processing facilities at the Sines LNG terminal.		Preliminary technical studies have been carried out for the project (environmental incidence reports, risk analysis and geology). Prospective studies of natural gas demand in Portugal and the Iberian Peninsula have been conducted with a view to correct sizing of the expansion project. A specific technical team has been set up to support the project.
	Guaranteeing the high-pressure supply to present and future industrial customers in order to respond fully to the NG needs of Portuguese industry.	Requests for supplies from the following industrial customers will be satisfied > Portucel in Setúbal;	●	The supply plans have been completed for the following industrial customers: > Environmental impact assessment and basic plan completed and detailed plan under way;
		> Galp refinery in Matosinhos;		> Basic plan completed and environmental impact assessment and detailed plan under way;
		> Repsol in Sines;		> Environmental impact assessment and basic plan completed and detailed plan under way;
		> Advansa in Sines;		> Environmental impact assessment and basic plan completed and detailed plan under way;

Energy grids and networks				Achievements in 2007
Focus	Commitments/ goals	Action for 2007-2009	Status	Remarks
Category	Economy			
Commercial issues		> Biodiesel in Sines.	●	Cancelled as the customer did not submit formal request.
	Promoting interoperability of the RNTIAT with international networks to which the system is connected and promoting the development of the Iberian NG market.	The following actions are planned: > Study, planning and installation of a remote parameterisation system of the odourisation rate at GRMS stations in the RNTGN; > Installation of equipment for analysing sulphur components at the different RNTGN entry points with connections to the Spanish gas network.		Planned action is under way.
Category	Environment			
Environmental impact	Minimising REN's contribution to depletion of the ozone layer by programmed replacement of cooling and air conditioning equipment containing CFC and HCFC.	In the electricity area, we will continue replacement of cooling and air conditioning equipment until 2010.	●	The equipment replacement plan for 2007 was completed.
	Continuing the development of our infrastructure in harmonious interaction with the environment and adopting best international practices.	In the electricity sector, we will continue initiatives and activities planned in environmental impact assessments of new projects. We will execute the second year of the 2006-2008 Environmental Performance Plan. We will maintain ISO 14001. In the gas sector, we will continue to develop its infrastructure in harmonious interaction with the environment and adopt best international practices.	●	The following activities were carried out: Environmental impact assessments, environmental impact statements, and environmental compliance reports for execution projects, mitigating measures, Environmental Performance Plan. Environmental certification was renewed (ISO 14001:2004). In 2007, the first draft Environmental Performance Plans were drafted for the three gas companies.
	Implementing measures to minimise noise from substations, whenever technically and economically feasible.	An overall reassessment will be made of the noise environment at the company's facilities on the basis of noise pollution laws. In the electricity sector, we will carry out the work in the agreement between REN and the IDAD (Environment and Development Agency) to consolidate methods and submit a proposal to the competent authority (Environment Institute).	●	The implementation of the REN/IDAD agreement was completed and monitoring actions for 2008 were identified.
	Minimising substations' impact on the landscape in order to preserve surrounding scenery.	We will continue the landscaping work at the Palmela, Fernão Ferro and Custóias substations until 2008.	●	The landscaping at these facilities was completed.

Energy grids and networks			Achievements in 2007	
Focus	Commitments/ goals	Action for 2007-2009	Status	Remarks
Category	Environment			
Environmental impact	Minimising the risk of contamination of soil and water resources by encouraging service providers to adopt good environmental practices in all work done for REN.	In the electricity area, we will announce the new modular technical specifications for all REN's outsourcing activities, with environmental requirements for service providers. In the gas area, we will minimise the risk of contamination of soil and water resources by encouraging service providers to adopt good environmental practices in all work.	●	The technical specifications for environmental management in the provision of services are now part of the specifications of Rede Eléctrica Nacional. This method will be extended to the gas companies in 2008.
Consumption of basic resources	Reducing consumption of paper in offices, electricity at REN's head office and water for irrigation and toilets at facilities with their own supply.	We will circulate posters showing good practices for reducing consumption. We will calculate unit indicators of per capita consumption of basic resources.	●	Posters showing good practices for reducing consumption of paper, electricity and water were distributed.
Environmental communication	Developing communication and information material for the general public online and in printed leaflets.	We will draw up a communication plan to fit the target audience and the most important aspects to be considered.	●	Completed.
Category	Society			
Dialogue with stakeholders	Improving the way in which stakeholders' expectations and satisfaction are assessed.	We will continue to carry out the three programmes for improving dialogue with stakeholders - employees, customers and other stakeholders.	●	As part of the project for improving stakeholder relations based on the method in standard AA 1000 SES, we implemented a customer programme involving the introduction of a system for assessing perceived quality and customer satisfaction. The results are mentioned in this report.
Human capital	Implementing a competence management system that will tell us more about the competences needed for each function, the competences that are being used to do each job and the competences that employees have.	We will implement the competence management model defined in 2006.	●	Ongoing.
	Encouraging the initiatives of employees wishing to use RVCC – Recognition, Validation and Certification of Competences, which allows people to obtain a certificate based on what they have learned from their life experience outside formal education and training systems.	We will distribute information to employees on this government initiative and help them to apply.	●	Completed.

Energy grids and networks				Achievements in 2007
Focus	Commitments/ goals	Action for 2007-2009	Status	Remarks
Category	Economy and environment			
Environmental accounting	Improving the calculation of environmental costs and investments to ensure compliance with accounting standard 29.	We will complement in the gas sector what has already been done in the electricity sector.	◐	Ongoing.
	Implementing a method for recording environmental costs and earnings for the centralised collection of information.	We will complement in the gas sector what has already been done in the electricity sector.	◐	Ongoing.
Energy Efficiency	Promoting action to improve energy efficiency and indoor air quality at REN facilities.	We will guarantee energy and indoor air quality certification of all major REN service buildings. We will implement measures to foster greater energy efficiency whenever economically feasible.	○	Beginning in 2008.
		We will introduce free-cooling equipment at the REN data centres in Ermesinde and Sacavém.	○	Beginning in 2008 under the ERSE PPEC programme.
		We will participate actively in initiatives promoting energy efficiency and rational energy use with local and regional institutions.	○	Beginning in 2008.
Category	Socioeconomic issues			
Category Quality of service	Continuing efforts to maintain and, if possible, improve the performance of the electricity transmission grid, based on an appropriate volume of investments.	We will execute three-year investment plans totalling around EUR 877 million (see section on economic performance at the end of the chapter).	◐	Ongoing – around EUR 250 million were invested in 2007.
	Guaranteeing the continued supply of NG in accordance with the ERSE Quality of Service Regulations, with regard to availability of the transport system.	We will continue not only our annual maintenance plans but also essential investments in developing the network, as proposed in the interim Plan for the Development of NG Transport Infrastructures: > System maintenance and integrity management scheme; > Replacement and improvement of systems and equipment at the end of their useful life or technologically obsolete; > Improvement in monitoring capacity for quality parameters of natural gas received, transported and supplied.	◐	Ongoing.

Energy grids and networks			Achievements in 2007	
Focus	Commitments/ goals	Action for 2007-2009	Status	Remarks
Category	Sustainability			
Social responsibility policy	Implementing a social responsibility policy.	We will revise our code of ethics in accordance with standard NP 4460-1 and set up the management process for applying it and consider conducting internal ethics audits.	●	In 2007, a new version of the code was issued now covering all the group's companies. It will be revised under standard NP 4460-1 in 2009.
		We will re-launch, this time at Group level, risk analysis and/or management and set up a crisis office.	●	Harmonisation of risk management procedures is ongoing at group level.
		We will cooperate with the Portuguese Global Compact Network in the publication and implementation of the 10 principles and include new clauses on compliance with these principles in specifications.	●	REN continues to participate in the Portuguese Global Compact Network and has signed a United Nations declaration on the fight against climate change. Specifications are in the final stages of adaptation to the new code on public contracts and incorporation of clauses on the Global Compact principles.
		We will formalise support mechanisms for employees who help refer and deal with situations falling under the heading of human rights and equal opportunities.	○	This goal will be reviewed /implemented during the ongoing restructuring.
		We will promote part-time work and other mechanisms to help employees reconcile their working and family lives.	○	This goal will be reviewed /implemented during the ongoing restructuring.
		We will implement the new environmental risk management method.	●	This method has been implemented at Rede Eléctrica Nacional. It will be applied to the remaining companies in 2008.
		We will have talks with suppliers on quality, environment, safety and social responsibility statements, bring them on board and foster the development of plans of action for putting them into practice.	●	Several initiatives have been organised, including seminars and safety awards for suppliers.



Annex 2

Cross references
GRI indicators and
electric utility supplement



CROSS REFERENCES

GRI INDICATORS AND ELECTRIC UTILITY SUPPLEMENT

PROFILE						
Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
Strategy and analysis						
1.1	Chairman's statement	-		●	7	
1.2	Impacts, risks and opportunities	-		●	33, 82-87	
Organisational profile						
2.1	Name of the organisation	-		●	12	
2.2	Primary brands, products and/or services	-		●	12	
2.3	Operational structure	-		●	13	
2.4	Location of headquarters	-		●	13	
2.5	Countries in which the organisation operates	-		●	13	
2.6	Nature of ownership and legal form-	-		●	13	
2.7	Markets served	-		●	13-14	
2.8	Scale of organisation	-		●	15	
2.9	Significant changes	-		●	15	
2.10	Awards received	-		●	17	
EU1	Installed capacity (MW), broken down by energy source and by country or regulatory regime	-		○	-	Not material
EU2	Number of residential, industrial and commercial customer accounts	-		○	-	Not material
EU3	Length of transmission lines	-		●	17	
Report Parameters						
Report profile						
3.1	Reporting period	-		●	18	
3.2	Date of most recent report Data	-		●	18	
3.3	Reporting cycle	-		●	18	
3.4	Contact point	-		●	18	
Report scope and boundary						
3.5	Definition of content	-		●	18-19	
3.6	Boundary of the report	-		●	20	
3.7	Specific limitations	-		●	20	
3.8	Basis for reporting	-		●	20	
3.9	Data measurement techniques	-		●	21, 104-109	
3.10	Re-statement of information	-		●	21	
3.11	Significant changes from previous report	-		●	21	
GRI content index						
3.12	GRI content index	-		●	21, 91-97	
Assurance						
3.13	Assurance	-		●	22	
Governance, commitment and engagement						
Governance						
4.1	Governance structure	-		●	*12-19	Corporate Governance Report
4.2	Role of the Chairperson	-		●	*16	Corporate Governance Report
4.3	Independent and/or non-executive directors	-		●	*14-15	Corporate Governance Report
4.4	Communication mechanisms with shareholders and employees	-		●	*22-23, *28-29, *40-43	Corporate Governance Report
4.5	Linkage between compensation and organisational performance	-		●	*36	Corporate Governance Report
4.6	Conflicts of interest	-		●	*12	Corporate Governance Report
4.7	Qualifications and expertise of directors	-		●	*51-56	Corporate Governance Report
4.8	Mission and value statements, codes of conduct and principles	-		●	32	
4.9	Procedures for overseeing economic, environmental and social performance	-		●	*40-43	Corporate Governance Report

PROFILE

Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
4.10	Processes for evaluating the highest governance body's own performance		-	●	*36	Corporate Governance Report
Commitment to external initiatives						
4.11	Implementation of the principle of precaution		7	●	23	
4.12	Charters, principles or other initiatives to which the organisation subscribes or endorses		-	●	23	
4.13	Membership in associations and/or national/international bodies		-	●	24	
Stakeholders' engagement						
4.14	List of stakeholders		-	●	25	
4.15	Basis for identification and selection of stakeholders		-	●	25	
4.16	Approaches to stakeholder engagement		-	●	25-27, *40-41	
4.17	Key topics and concerns raised through stakeholder engagement and organisation's response		-	●	25-27	

ECONOMIC PERFORMANCE

Management approach		E	-	●	13, 17, 36-39, 41-43, 70-71, 82-87	
Availability and reliability						
EU5	Availability and reliability of electricity supply	E	-	●	39-40	
Supply management						
EU6	Demand-side management programmes including residential, commercial and industrial programmes	E	-	○	-	Not relevant
Research and development						
EU7	Approach to research and development	E	-	○	-	Not material
Decommissioning of plants						
EU8	Provisions for decommissioning of nuclear power sites	E	-	○	-	Not relevant
Economic performance						
EC1	Direct economic value generated and distributed	E	-	●	36-37	
EC2	Financial implications of climate change	E	-	○	-	Web version
EC3	Coverage of obligations	E	-	●	37-39	
EC4	Financial assistance received from government	E	-	○	-	Web version
Market presence						
EC5	Ratio of standard entry level / national minimum wage	A	-	○	-	Web version
EC6	Policy, practices and proportion of spending on locally-based suppliers	E	-	○	-	Web version
EC7	Procedures for local hiring and percentage of senior management hired from the local community	E	-	○	-	Web version
Indirect economic impact						
EC8	Development and impact of infrastructure investments and services provided primarily of public benefit through commercial, in-kind, or pro bono engagement	E	-	○	-	Not relevant
EC9	Indirect economic impact	A	-	●	41-42	
Availability and reliability						
EU9	Long-term coverage of demand (including reserve)	E		●	39	
Demand management						
EU10	Estimated capacity (MW) saved through demand-side management programmes	E	-	○	-	Not relevant
EU11	Estimated energy (MW) saved through demand-side management programmes broken down by residential, commercial and industrial customers	E	-	○	-	Not relevant
System efficiency						
EU12	Average generation efficiency by energy source and by country or regulatory regime	E	-	○	-	Not relevant
EU13	Transmission and distribution efficiency	E		●	39-40	

ENVIRONMENTAL PERFORMANCE – REDE ELÉCTRICA NACIONAL

Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
	Management approach	-	-	●	30-31, 46-50, 71, 82-87	
Materials						
EN1	Materials used	E		○	-	Web version
EN2	Percentage of recycled materials used	E	8+9	○	-	Web version
Energy						
EN3	Direct energy consumption	E		○	-	Web version
EN4	Indirect energy consumption	E		●	53-54	
EN5	Energy conservation and efficiency improvements	A	8+9	○	-	Web version
EN6	Initiatives to acquire energy-efficient or renewable energy products and services and reductions achieved	A	8+9	○	-	Not relevant
EN7	Reduction in indirect energy consumption	A	8+9	○	-	Not material
Water						
EN8	Total water consumption	E		○	-	Web version
EN9	Water sources significantly affected by withdrawal of water	A		○	-	Not relevant
EN10	Recycled and reused water	A	8+9	○	-	Not relevant
Biodiversity						
EN11	Land in protected areas or in areas of high biodiversity value	E		●	58-59	
EU14	Biodiversity of replacement habitats compared to the biodiversity of the areas that are being replaced	E		○	-	Not relevant
EN12	Significant impacts on protected areas or areas of high biodiversity value	E		●	59-62	
EN13	Protected and restored habitats	A	8	●	60-62	
EN14	Managing impact on biodiversity	A	8	●	60-62	
EN15	Number of species on IUCN red list	A		○	-	Web version
Emissions, effluent and waste						
EN16	Direct and indirect greenhouse gas emissions	E		●	56	
EN17	Other indirect greenhouse gas emissions	E		●	56	
EN18	Initiatives to reduce greenhouse gas emissions	A	8+9	●	57	
EN19	Emissions of ozone-depleting substances	E		○	-	Not relevant
EN20	NOx, SOx and other air emissions	E		○	-	Not material
EN21	Total water discharge	E	8	○	-	Not relevant
EN22	Total weight of waste by type and disposal method	E	8	●	57-58	
EN23	Significant spills	E		●	63	
EN24	Waste generated according to the Basel Convention	A		●	58	
EN25	Water resources and habitats affected by discharges of waste water	A		○	-	Not relevant
Products and services						
EN26	Initiatives to assess and mitigate environmental impacts	E	8+9	●	48-49	
EN27	Products sold and packaging recovered s	E	8+9	○	-	Not relevant
Compliance						
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	E		●	63	
Transport						
EN29	Environmental impact from transport	A		○	-	Not material
Overall						
EN30	Total environmental protection expenditure and investment	A	8	●	62-63	

ENVIRONMENTAL PERFORMANCE – GAS NETWORK – PIPELINES

Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
	Management approach	-	-	●	30-31, 46-50, 71, 82-87	
Materials						
EN1	Materials used	E		○	-	Web version
EN2	Percentage of recycled materials used	E	8+9	○	-	Web version
Energy						
EN3	Direct energy consumption	E		●	53-54	
EN4	Indirect energy consumption	E		●	53-54	Not material
EN5	Energy conservation and efficiency improvements	A	8+9	○	-	Not material
EN6	Initiatives to acquire energy-efficient or renewable energy products and services and reductions achieved	A	8+9	○	-	Not relevant
EN7	Reduction in indirect energy consumption	A	8+9	○	-	Not material
Water						
EN8	Total water consumption	E		○	-	Not material
EN9	Water sources significantly affected by withdrawal of water	A		○	-	Not material
EN10	Recycled and reused water	A	8+9	○	-	Not relevant
Biodiversity						
EN11	Land in protected areas or in areas of high biodiversity value	E		●	58-59	
EN12	Significant impacts on protected areas or areas of high biodiversity value	E		●	50	
EN13	Protected and restored habitats	A	8	●	50	
EN14	Managing impact on biodiversity	A	8	●	50	
EN15	Number of species on IUCN red list	A		○	-	Not material
Emissions, effluent and waste						
EN16	Direct and indirect greenhouse gas emissions	E		●	56	
EN17	Other indirect greenhouse gas emissions	E		●	56	Not material
EN18	Initiatives to reduce greenhouse gas emissions	A	8+9	○	-	Material indicator
EN19	Emissions of ozone-depleting substances	E		○	-	Information not available
EN20	NOx, SOx and other air emissions	E		○	-	Not relevant
EN21	Total water discharge	E	8	○	-	Not material
EN22	Total weight of waste by type and disposal method	E	8	○	-	Not material
EN23	Significant spills	E		○	-	Not material
EN24	Waste generated according to the Basel Convention	A		○	-	Not relevant
EN25	Water resources and habitats affected by discharges of waste water	A		○	-	Not relevant
Products and services						
EN26	Initiatives to assess and mitigate environmental impacts	E	8+9	●	49	
EN27	Products sold and packaging recovered s	E	8+9	○	-	Not relevant
Compliance						
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	E		●	63	
Transport						
EN29	Environmental impact from transport	A		○	-	Not material
Overall						
EN30	Total environmental protection expenditure and investment	A	8	●	62-63	

ENVIRONMENTAL PERFORMANCE – GAS NETWORK – STORAGE						
Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
	Management approach	-	-	●	30-31, 46-50, 71, 82-87	
Materials						
EN1	Materials used	E		○	-	Not material
EN2	Percentage of recycled materials used	E	8+9	○	-	Not material
Energy						
EN3	Direct energy consumption	E		●	53-54	Not material
EN4	Indirect energy consumption	E		●	53-54	Not material
EN5	Energy conservation and efficiency improvements	A	8+9	○	-	Not material
EN6	Initiatives to acquire energy-efficient or renewable energy products and services and reductions achieved	A	8+9	○	-	Not relevant
EN7	Reduction in indirect energy consumption	A	8+9	○	-	Not material
Water						
EN8	Total water consumption	E		●	55	
EN9	Water sources significantly affected by withdrawal of water	A		○	-	Not material
EN10	Recycled and reused water	A	8+9	○	-	Not relevant
Biodiversity						
EN11	Land in protected areas or in areas of high biodiversity value	E		○	-	Not material
EN12	Significant impacts on protected areas or areas of high biodiversity value	E		●	50	
EN13	Protected and restored habitats	A	8	●	50	
EN14	Managing impact on biodiversity	A	8	●	50	
EN15	Number of species on IUCN red list	A		○	-	Not material
Emissions, effluent and waste						
EN16	Direct and indirect greenhouse gas emissions	E		●	56	Not material
EN17	Other indirect greenhouse gas emissions	E		●	56	Not material
EN18	Initiatives to reduce greenhouse gas emissions	A	8+9	○	-	Not material
EN19	Emissions of ozone-depleting substances	E		○	-	Not relevant
EN20	NOx, SOx and other air emissions	E		○	-	Not material
EN21	Total water discharge	E	8	●	55	
EN22	Total weight of waste by type and disposal method	E	8	○	-	Not material
EN23	Significant spills	E		○	-	Not material
EN24	Waste generated according to the Basel Convention	A		○	-	Not relevant
EN25	Water resources and habitats affected by discharges of waste water	A		○	-	Not relevant
Products and services						
EN26	Initiatives to assess and mitigate environmental impacts	E	8+9	●	49	
EN27	Products sold and packaging recovered	E	8+9	○	-	Not relevant
Compliance						
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	E		●	63	
Transport						
EN29	Environmental impact from transport	A		○	-	Not material
Overall						
EN30	Total environmental protection expenditure and investment	A	8	●	62-63	

ENVIRONMENTAL PERFORMANCE – GAS NETWORK – TERMINAL

Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
	Management approach	-	-	●	30-31, 46-50, 71, 82-87	
Materials						
EN1	Materials used	E		○	-	Not material
EN2	Percentage of recycled materials used	E	8+9	○	-	Not material
Energy						
EN3	Direct energy consumption	E		●	53-54	Not material
EN4	Indirect energy consumption	E		●	53-54	
EN5	Energy conservation and efficiency improvements	A	8+9	○	-	Not material
EN6	Initiatives to acquire energy-efficient or renewable energy products and services and reductions achieved	A	8+9	○	-	Not relevant
EN7	Reduction in indirect energy consumption	A	8+9	○	-	Not material
Water						
EN8	Total water consumption	E		●	54	
EN9	Water sources significantly affected by withdrawal of water	A		○	-	Not material
EN10	Recycled and reused water	A	8+9	○	-	Not relevant
Biodiversity						
EN11	Land in protected areas or in areas of high biodiversity value	E		○	-	Not material
EN12	Significant impacts on protected areas or areas of high biodiversity value	E		●	50	
EN13	Protected and restored habitats	A	8	●	50	
EN14	Managing impact on biodiversity	A	8	●	50	
EN15	Number of species on IUCN red list	A		○	-	Not material
Emissions, effluent and waste						
EN16	Direct and indirect greenhouse gas emissions	E		●	56	Not material
EN17	Other indirect greenhouse gas emissions	E		●	56	
EN18	Initiatives to reduce greenhouse gas emissions	A	8+9	○		Material indicator Information not available
EN19	Emissions of ozone-depleting substances	E		○	-	Not relevant
EN20	NOx, SOx and other air emissions	E		○	-	Not material
EN21	Total water discharge	E	8	●	54	
EN22	Total weight of waste by type and disposal method	E	8	○	-	Not material
EN23	Significant spills	E		○	-	Not material
EN24	Waste generated according to the Basel Convention	A		○	-	Not relevant
EN25	Water resources and habitats affected by discharges of waste water	A		○	-	Not relevant
Products and services						
EN26	Initiatives to assess and mitigate environmental impacts	E	8+9	●	60	
EN27	Products sold and packaging recovered	E	8+9	○	-	Not relevant
Compliance						
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	E		●	63	
Transport						
EN29	Environmental impact from transport	A		○	-	Not relevant
Overall						
EN30	Total environmental protection expenditure and investment	A	8	●	62-63	

SOCIAL PERFORMANCE

Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
	Management approach	-	-	●	67,68-69,70-72,73,82-87	
Labour practices and decent work						
Employment						
EU15	Retention and renewal of skilled workforce	E		●	70	
LA1	Workforce by employment type, contract and region	E		●	67-68	
EU16	Total subcontracted workforce	E		●	72	
EU17	Training of subcontracted workforce	E		●	73	
LA2	Employee turnover by age group, gender and region	E	6	●	68	
LA3	Benefits provided to full-time employees	A		○	-	Web version
Labour/management relations						
LA4	Employees covered by collective bargaining agreements	E	3	●	67-68	
LA5	Minimum notice period(s) regarding operational changes	E	3	○	-	Web version
Occupational health and safety						
LA6	Number of employees represented in occupational health and safety committees	A		●	71	
LA7	Rates of injury, occupational diseases, lost days, absenteeism and number of work-related fatalities by region	E		●	71-72	
LA8	Programmes concerning serious diseases	E		○	-	Not material
LA9	Health and safety topics covered in formal agreements with trade unions	A		○	-	Not material
Training and education						
LA10	Annual training per employee	E		●	68-70	
LA11	Skills management programmes	A		●	70	
LA12	Employees undergoing performance and career-development assessment and review	A		○	-	Web version
Diversity and equal opportunities						
LA13	Employees by diversity indicators	E	6	●	68	
LA14	Ratio of basic salary of men to women by employee category	E	6	●	69	
Human rights						
Investment and procurements practices						
HR1	Investment agreements including human rights clauses	E	1+2	●	73	
HR2	Suppliers screened on human rights	E	2	●	73	
HR3	Employee training on human rights	A	1	●	73	
Non-discrimination						
HR4	Incidents of discrimination	E	6	○	-	Not relevant
Freedom of association and collective bargaining						
HR5	Freedom of association and collective bargaining risk	E	3	○	-	Not relevant
Child labour						
HR6	Child labour risk	E	5	○	-	Not relevant
Forced and compulsory labour						
HR7	Forced and compulsory labour risk	E	4	○	-	Not relevant
Security practices						
HR8	Security personnel trained in human rights	A	2	○	-	Not relevant
Indigenous rights						
HR9	Cases of violation of indigenous peoples' rights	A	1	○	-	Not relevant
Society						
Community						
EU18	Participatory decision making processes with stakeholders and outcomes of engagement	E	7+8	●	47-50, 74	
EU19	Approach to managing the impacts of involuntary displacement	E		○	-	Not relevant
EU20	Contingency planning measures and disaster/emergency management	E		●	76	

SOCIAL PERFORMANCE

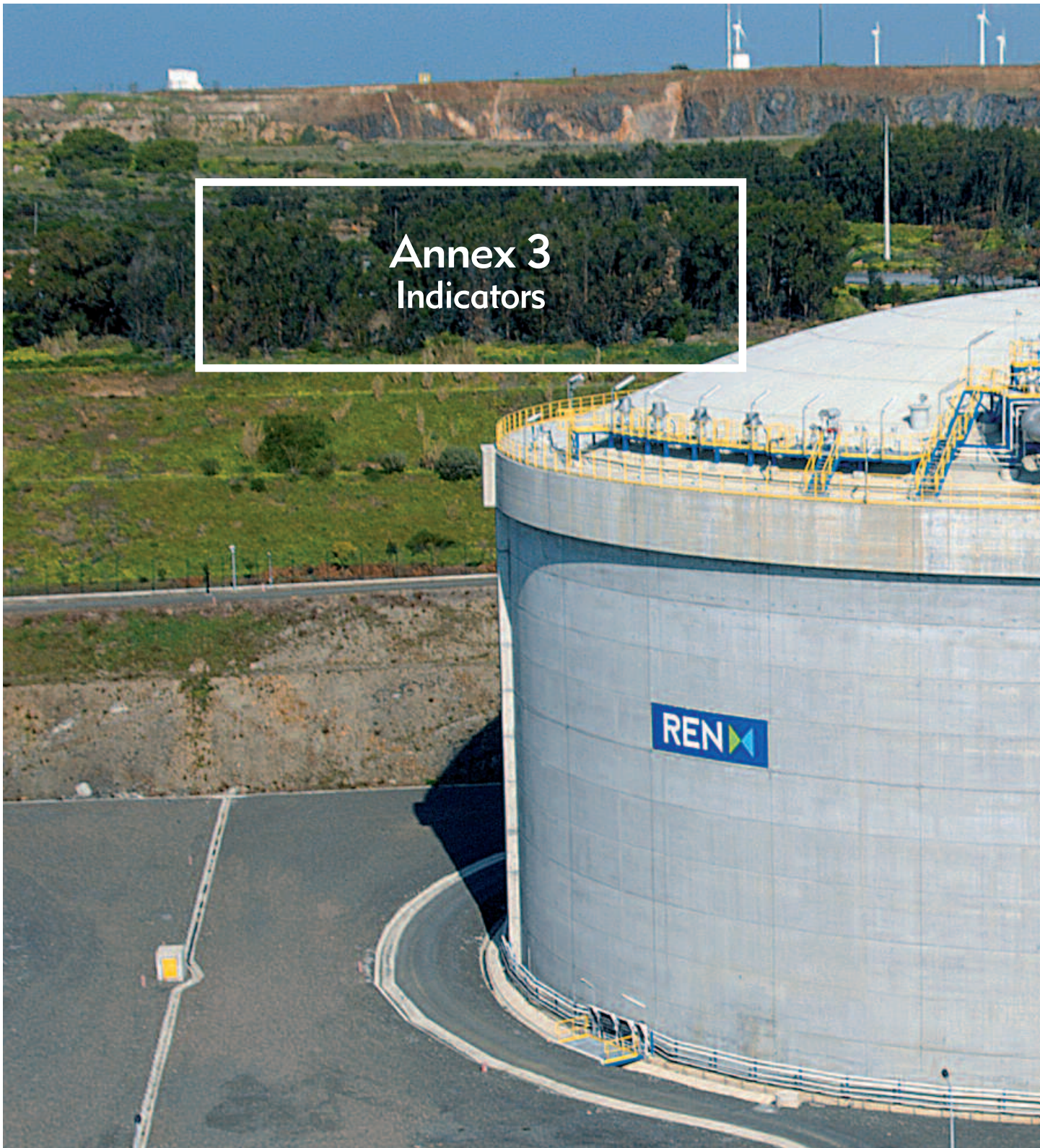
Ref.	Description	Type	GC	Report Reported	Page	Reason for omission
SO1	Management of impact on communities	E	7+8	●	74-76	
EU21	Number of people displaced by new or expansion projects related to generation facilities and transmission lines broken down by physical and economic displacement	E		○	-	Not relevant
Corruption						
SO2	Assessment of corruption risks	E	10	○	-	Not material
SO3	Training of employees in anti-corruption practices	E	10	○	-	Not material
SO4	Action taken in response to incidents of corruption	E	10	○	-	Not relevant
Public policy						
SO5	Stance on public policy and the practice of lobbying	E		●	74	
SO6	Financial contributions to political parties	A		○	-	Not relevant
Anti-competitive behaviour						
SO7	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	A		○	-	Not relevant
Compliance						
SO8	Fines and sanctions for legal non-compliance	E		○	-	Web version
Product responsibility						
Accessibility						
EU22	Programs, including those in partnership with government, to improve or maintain access to electricity services	E		○	-	Not relevant
Provision of information						
EU23	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity services	E		○	-	Not relevant
Customer health and safety						
PR1	Health and safety related to products and services	E		●	71	
PR2	Incidents of non-compliance with regulations concerning the health and safety impacts of products and services	A		○	-	Web version
EU24	Number of injuries and fatalities to the public involving company assets	E		●	79	
Product and service labelling						
PR3	Information on products and services	E		○	-	Not relevant
PR4	Incidents of non-compliance with regulations concerning labelling	A		○	-	Not relevant
PR5	Customer satisfaction	A		○	-	Web version
Marketing communications						
PR6	Laws, standards and voluntary codes related to marketing communications	E		○	-	Not relevant
PR7	Incidents of non-compliance with regulations concerning marketing communications	A		○	-	Not relevant
Customer privacy						
PR8	Complaints regarding breach of customer privacy	A		○	-	Not relevant
Compliance						
PR9	Fines for legal non-compliance concerning the provision and use of products and services	E		○	-	Web version
Accessibility						
EU25	Percentage of population unserved in licensed distribution areas, broken down by population in rural areas and urban areas	E		○	-	Not relevant
EU26	Number of residential disconnections for non-payment, broken by duration of disconnection	E		○	-	Not relevant
EU27	Power outage frequency	E		●	79	
EU28	Average power outage duration	E		●	79	
EU29	Average plant availability factor by energy source and by country or regulatory regime	E		○	-	Not relevant

GRI – Global Reporting Initiative; GC – Global Compact

Reporting of indicators: ● – Reported; ○ – Not reported

Type: E – Essential; A – Additional; * Pages of Corporate Governance Report

Annex 3 Indicators





INDICATORS - DATA

ECONOMIC INDICATORS

GRI indicators – economic data

Ref.	Description	Unit	2007	2006
EU5	Availability and reliability of product		Qualitative information	
EC1	Direct economic value generated and distributed	€M	315.0	648.8
	Gross value added(GVA)	€M	409.3	298.0
	Net value added (NVA)	€M	300.3	159.1
	Employees and senior management	€M	44.4	35.7
	Shareholders	€M	143.5	494.9
	Financial institutions	€M	82.8	42.6
	State	€M	43.4	74.8
	Community	€M	0.9	0.8
EC3	Retirement security		Qualitative information	
EC9	Indirect economic impact		Qualitative information	
EU9	Long-term coverage of demand (including reserve)		Qualitative information	
EU13	Transmission and distribution efficiency		Qualitative information	

ENVIRONMENTAL INDICATORS – ELECTRICITY GRID

GRI indicators – environmental data – electricity grid

Ref.	Description	Unit	2007	2006
EN4	Indirect energy consumption	GJ	2 123 098	-
EN11	Land in protected areas or in areas of high biodiversity value			
	Length of lines in protected areas or in areas of high biodiversity value	km	886	865
	Percentage of total lines	-	12%	12%
	Substation areas in protected areas or in areas of high biodiversity value	km ²	0.3	0.3
	Percentage of total substations	-	5%	5%
EN12	Significant impacts on protected areas or areas of high biodiversity value		Qualitative information	
EN13	Protected and restored habitats		Qualitative information	
EN14	Managing impact on biodiversity		Qualitative information	
EN16	Direct and indirect greenhouse gas emissions	tCO ₂ eq	278 349	268 083
EN17	Other indirect greenhouse gas emissions	tCO ₂ eq	1 349	1 327
EN18	Initiatives to reduce greenhouse gas emissions		Qualitative information	
EN22	Total weight of waste by type and disposal method			
	Total quantity of non-hazardous waste	t	25 345	14 430
	Total quantity of hazardous waste	t	1 603	666
	Total quantity of waste recovered	t	24 767	13 719
	Total quantity of waste destroyed	t	2 181	1 377
	Total quantity of waste stored	t	0	0
EN23	Significant spills	-	3	10
EN24	Waste generated according to the Basel Convention (PCB oils)	t	6	0
EN26	Initiatives to assess and mitigate environmental impacts		Qualitative information	
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	-	0	0
EN30	Total environmental protection costs and investment	k€	5 653	3 077

ENVIRONMENTAL INDICATORS – GAS NETWORK – PIPELINES**GRI indicators – environmental data – gas network - pipelines**

Ref.	Description	Unit	2007
EN3	Direct energy consumption	GJ	227 025
EN4	Indirect energy consumption	GJ	12 586
EN11	Land in protected areas or in areas of high biodiversity value		
	Pipeline in protected areas or in areas of high biodiversity value	km	127
	Percentage of total pipeline	-	10%
	Stations in protected areas or in areas of high biodiversity value	km ²	0.08
	Percentage of total stations	-	9%
EN12	Significant impacts on protected areas or areas of high biodiversity value		Qualitative information
EN13	Protected and restored habitats		Qualitative information
EN14	Managing impact on biodiversity		Qualitative information
EN16	Direct and indirect greenhouse gas emissions	tCO ₂ eq	14 149
EN17	Other indirect greenhouse gas emissions	tCO ₂ eq	681
EN26	Initiatives to assess and mitigate environmental impacts		Qualitative information
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	no./€	0/0
EN30	Total environmental protection costs and investment	k€	546.69

ENVIRONMENTAL INDICATORS – GAS NETWORK – STORAGE**GRI indicators – environmental data – gas network - storage**

Ref.	Description	Unit	2007
EN3	Direct energy consumption	GJ	28 869
EN4	Indirect energy consumption	GJ	22 457
EN8	Total water consumption	m ³	1 818 210
	Withdrawal of underground waster (leaching of salt caverns)	m ³	1 818 210
EN12	Significant impacts on protected areas or areas of high biodiversity value		Qualitative information
EN13	Protected and restored habitats		Qualitative information
EN14	Managing impact on biodiversity		Qualitative information
EN16	Direct and indirect greenhouse gas emissions	tCO ₂ eq	4 383
EN17	Other indirect greenhouse gas emissions	tCO ₂ eq	0
EN21	Total water discharge	m ³	1 763 666
	Channelled for use by another company	m ³	380 271
	Sea	m ³	1 383 395
EN26	Initiatives to assess and mitigate environmental impacts		Qualitative information
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	no./€	0/0
EN30	Total environmental protection costs and investment«	k€	5.9

ENVIRONMENTAL INDICATORS – GAS NETWORK – TERMINAL**GRI indicators – environmental data - Terminal**

Ref.	Description	Unit	2007
EN3	Direct energy consumption	GJ	1 608
EN4	Indirect energy consumption	GJ	134 550
EN8	Total water consumption	m ³	73 825 495
	Potable water	m ³	10 080
	Industrial water	m ³	14 290
	Seawater (circulated)	m ³	73 801 125

GRI indicators – environmental data - Terminal

Ref.	Description		
EN12	Significant impacts on protected areas or areas of high biodiversity value	Qualitative information	
EN13	Protected and restored habitats	Qualitative information	
EN14	Managing impact on biodiversity	Qualitative information	
EN16	Direct and indirect greenhouse gas emissions	tCO ₂ eq	17 628
EN17	Other indirect greenhouse gas emissions	tCO ₂ eq	36
EN21	Total water discharge	m ³	73 801 125
	Seawater (circulated)	m ³	73 801 125
EN26	Initiatives to assess and mitigate environmental impacts	Qualitative information	
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	no./€	0/0
EN30	Total environmental protection costs and investment	k€	31.496

SOCIAL INDICATORS

GRI indicators – Social data

Ref.	Description	Unit	2007	2006
Labour practices and decent work				
EU15	Retention and renewal of skilled workforces		Qualitative information	
LA1	Workforce by employment type, contract and region			
	Total employees	-	802	794
	Type of contract			
	Permanent	-	775	770
	Fixed-term contract	-	27	24
	Type of employment	-		
	Full time		100%	100%
	Part time		0%	0%
	Gender			
	Male		644	640
	Female		158	154
	Geographical location			
	North and centre	-	183	182
	Lisbon	-	560	558
	South (Alentejo and Algarve)	-	59	54
EU16 ²	Total subcontracted workforce			
	Average number of workers		1 336	1 874
	Hours of work		2 384 225	3 403 705
EU17	Training of subcontracted workforce			
	Subcontractors receiving safety training	-	100%	-
	Subcontractors with OHSAS 18001/NP 4397 certification	-	28%	-
LA4 ¹	Employees covered by collective bargaining agreements	-	100%	100%
LA6	Number of workers represented in occupational health and safety committees		100%	Qualitative information
LA7	Rates of injury, occupational diseases, lost days, absenteeism and number of work-related fatalities by region			
	Accident rate			
	Number of accidents with and without sick leave	-	14	9
	Frequency index ²	-	12.9	9
	Severity index ²	-	369.3	316.2

GRI indicators – Social data

Ref.	Description	Unit	2007	2006
	Incidence rate ²	-	21.4	15.1
	With contractors			
	Number of accidents	-	33	34
	Number fatalities	-	7	0
	Number of lost days	-	378	307
	Average number of workers	-	607	597
	Number of hours worked	-	1 007 249	998 340
	General absentee rate	-	2.7%	2.6%
LA10	Annual training per employee			
	Rede Eléctrica Nacional			
	Directors	Hours	9.80	6.57
	Senior management	Hours	26.12	21.41
	Middle management	Hours	22.00	4.66
	Supervisors	Hours	0.00	0
	Highly qualified and qualified professionals	Hours	18.64	4.47
	Semi-qualified professionals	Hours	7.42	0.18
	Gas companies			
	Directors	Hours	17.44	4.33
	Senior management	Hours	12.09	6.53
	Middle management	Hours	33.31	5.32
	Supervisors	Hours	45.00	7.00
	Highly qualified and qualified professionals	Hours	35.97	11.34
	Semi-qualified professionals	Hours	0.00	0.00
LA11	Skills management programmes		Qualitative information	
LA13	Employees by diversity indicators			
	Top management			
	Men	-	100%	100%
	Women	-	0%	0%
	Under 30	-	0%	0%
	30 to 50	-	22%	20%
	Over 50	-	78%	80%
	Directors			
	Men	-	84%	86%
	Women	-	16%	14%
	Under 30	-	0%	0%
	30 to 50	-	42%	45%
	Over 50	-	58%	53%
	Workers			
	Men	-	80%	80%
	Women	-	20%	20%
	Under 30	-	11%	13%
	30 to 50	-	49%	51%
	Over 50	-	40%	36%
LA14	Ratio of basic salary of men to women by employee category		Qualitative information	
Human rights				
HR1	Investment agreements including human rights clauses		Qualitative information	
HR2	Suppliers screened on human rights		Qualitative information	
HR3	Employee training on human rights		Qualitative information	

GRI indicators – Social data				
Ref.	Description	Unit	2007	2006
Society				
EU18	Participatory decision making processes with stakeholders and outcomes of engagement		Qualitative information	
EU20	Contingency planning measures and disaster/emergency management		Qualitative information	
SO1	Management of impact on communities		Qualitative information	
SO5	Stance on public policy and the practice of lobbying		Qualitative information	
Responsibility for product				
PR1	Health and safety related to products and services		Qualitative information	
EU24	Number of injuries and fatalities to the public involving company assets		Qualitative information	
EU27 ¹ and EU28 ¹	Power outage frequency			
	Number of outages	-	7	8
	Duration of outages	Minutes	50.1	58.5
	Energy Not Supplied	MWh	69.1	42.1
	Equivalent Interruption Time (EIT)	Minutes	0.74	0.57
	System average interruption frequency index (SAIFI)	-	0.10	0.13
	System average interruption duration index (SAIDI)	Minutes	0.73	0.91
	System average restoration index (SARI)	Minutes	7.16	7.31

¹ Not applicable to gas companies

² Gas companies: information not available

³ September 26th to December 31st, 2006

GRI - Global Reporting Initiative

LA; HR; SO; PR – social indicators in GRI guidelines

EC – Economic indicators from GRI guidelines

EU - Indicators from the GRI electric utility supplement

EN - Environmental indicators from GRI guidelines

INDICATORS - DEFINITIONS

ECONOMIC INDICATORS		
Ref.	Description	Definition
EU5	Availability and reliability of product	Planning to ensure long and short-term electricity availability and reliability.
EU7	Approach to research and development	Research and development activity aimed at providing reliable and affordable electricity and promoting sustainable development.
EC1	Direct economic value generated and distributed	Economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.
EC1.1	Gross value added (GVA)	Value created by the company's business over the year, calculated by means of gross margin less supplies and services, indirect taxation and other income not inherent in the enterprise's value added.
EC1.2	Net value added (NVA)	Gross value added less amortisation and provisions.
EC1.3	Employees and senior management	Remuneration and social costs of employees and senior management and profits distributed to investors to be paid the following year.
EC1.4	Shareholders	Total dividends (distributed to investors to be paid the following year) and retained earnings (net income without dividends or profit sharing).
EC1.5	Financial institutions	Total interest paid by the company to financial institutions.
EC1.6	State	Total taxes including income tax for financial year.
EC1.7	Community	Total donations made to the community in the form of cultural patronage and sponsorship of cultural, scientific, technological and social activities of utility to society.
EC2	Financial implications of climate change	Financial implications and other risks and opportunities for the company's activities due to climate change.
EC3	Retirement security	Ratio of payments made by REN to an independent pension fund and liabilities calculated periodically.
EC4	Significant financial assistance received from government	Amount of financial assistance received by REN from the state within the scope of its activity.
EC5	Compensation	Range of ratios of standard entry-level wage paid by REN compared to local minimum wage.
EC6	Suppliers	Policy and practices adopted by the company in qualifying, assessing and selecting suppliers of projects and contracts.
EC7	Local hiring of senior management	Criteria used in selecting senior management staff.
EC9	Indirect economic impact	List and description of significant indirect economic impacts, including their scope.
EU9	Long-term coverage of demand (including reserve)	Methods used to forecast medium to long-term development of the Portuguese electricity generating system in order to guarantee a certain level of supply.
EU13	Transmission and distribution efficiency	Difference between power entering and leaving the system.

ENVIRONMENTAL INDICATORS		
Ref.	Description	Definition
EN1	Materials used	Direct acquisition of raw materials for REN's activities (e.g. total oil for conservation and maintenance operations).
EN2	Percentage of recycled materials used	Quotient between use of recycled products and use of raw materials of the same nature (e.g. quantity of recovered oil used again in conservation and maintenance and REN's total oil use).
EN3	Direct energy consumption	Annual total of fuel used by fleet of vehicles and for rescue teams, natural gas in boilers and losses from the transport network.
EN4	Indirect energy consumption	Annual total electricity used at REN facilities for lighting and other purposes and total losses of electricity from national grid.
EN5	Energy conservation and efficiency improvements	Total energy saved due to conservation and efficiency improvements.
EN7	Reduction in indirect energy consumption	Reduction in employee travel by using videoconferences between company facilities.
EN8	Total water consumption	Total water used at REN facilities not directly associated with its activities and water used in regasification processes at REN Atlântico and REN Armazenagem.
EN9	Water sources significantly affected by withdrawal of water	Water sources affected by withdrawal for REN activities.
EN11	Land in protected areas or in areas of high biodiversity value	Length of lines crossing protected areas (including national parks, nature reserves, nature monuments, according to Decree-Law 19/93 of January 23 rd), Natura 2000 Network sites (defined on 27/09/2004) and special protection areas and locations of substation and gas stations in the above sensitive areas.
EN12	Significant impacts on protected areas or areas of high biodiversity value	Description of the main impact on biodiversity associated with REN's activities.
EN13	Protected and restored habitats	Description of action taken to conserve nature, including habitat management.
EN14	Managing impact on biodiversity	Objectives, programmes and targets for protecting and restoring ecosystems and native species in depleted areas.
EN15	Number of species on the IUCN red list	Species on the IUCN red list for Portugal, with distribution areas crossed by REN infrastructures.
EN16	Direct and indirect greenhouse gas emissions	Total quantity of greenhouse gases emitted directly (SF ₆ used as dielectric insulator, CH ₄ in gas pipeline purges and CO ₂ from boilers) and indirectly (from electricity consumption and line losses).
EN17	Other indirect greenhouse gas emissions	Indirect CO ₂ emissions associated with on-duty use of motor vehicles.
EN18	Initiatives to reduce greenhouse gas emissions	Initiatives to reduce direct and indirect emissions associated with Rede Eléctrica Nacional activities.
EN20	NO _x , SO _x and other air emissions	Emissions of NO _x , CO and pollutants associated with burning natural gas in boilers.
EN21	Total water discharge	Water discharged from regasification of LNG and leaching of caverns for underground storage.

ENVIRONMENTAL INDICATORS

Ref.	Description	Definition
EN22	Total weight of waste by type and disposal method	Total quantity of waste by type (hazardous and non-hazardous waste in accordance with Ministerial Order 209/2004 of March 3 rd , approving the European Waste Catalogue) and by disposal method (destruction or recovery).
EN23	Significant spills	Total recorded number of spills of chemical products, oil or fuel onto the ground or into water.
EN24	Waste generated according to the Basel Convention	Total annual production of waste considered harmful by the Basel Convention.
EN26	Initiatives to assess and mitigate environmental impacts	Impact assessment to comply with legislation and the assessment of environmental significance under REN's integrated management system.
EN28	Sanctions and fines for non-compliance with environmental laws and regulations	Administrative sanctions and notifications to REN by outside entities.
EN30	Total environmental protection costs and investment	Annual costs and earnings of an environmental nature.

SOCIAL INDICATORS

Ref.	Description	Definition
EU15	Retention and renewal of skilled workforces	Policies and incentives for retaining and developing the skills of the workforce: stable contracts, competitive pay policy, career progression prospects, development of personal and occupational skills, co-payment and leave to pursue studies (post-grad courses, PhDs, etc).
LA1	Workforce by employment type, contract and region	Full or part-time employment, indefinite or fixed-term contracts, in mainland Portugal's regions.
EU16	Total subcontracted workforce	Average number of workers for planning, access road and line and substation construction management and conservation of grid infrastructures plus, on a smaller scale, services in the areas of information and telecommunication systems, security, couriers, cleaning, gardening, canteens and building maintenance, reporting only services associated with a risk factor that Rede Eléctrica considers relevant.
EU17	Training of subcontracted workforce	Safety training for workers of contractors working in construction and maintenance of lines and substations.
LA2	Employee turnover by age group, gender and region	Percentage of employees that left the company against total employees at the end of the year.
LA3	Benefits provided to full-time employees	Personal accident insurance, preventive and curative health care, pension supplement, reduced cost energy for domestic consumption, attendance and years-of-service bonuses, study subsidy for employees and their children and for pensioners (electricity grid).
LA4	Employees covered by collective bargaining agreements	Percentage of workers covered by an agreement with trade unions (electricity grid).
LA5	Minimum notice period(s) regarding operational changes	Periods set forth in the Labour Code.
LA6	Number of employees represented in occupational health and safety committees	Percentage of employees represented on the health and safety committee.
LA7	Rates of injury, occupational diseases, lost days, absenteeism and number of work-related fatalities by region	Ratio of the sum of paid absences due to illness, accident, maternity and other reasons to unpaid absences, in relation to total theoretic hours.

SOCIAL INDICATORS

Ref.	Description	Definition
LA8	Programmes concerning serious diseases	Awareness raising campaigns are considered.
LA9	Health and safety topics covered in formal agreements with trade unions	Health and safety regulations, Annex IV of Collective Employment Agreement.
LA10	Annual training per employee	Average hours of training per year per employee including in-house and external training.
LA11	Skills management programmes	Skills required for the job and those possessed by employees.
LA12	Employees undergoing performance and career-development assessment and review	A management instrument for annual measurement of actual performance of each employee used as a contribution to career progression.
LA13	Employees by diversity indicators	For top management, directors and workers, broken down by gender and age group.
LA14	Ratio of basic salary of men to women by employee category	There is no differentiation in salary between men and women on hiring.
HR1	Investment agreements including human rights clauses	Contracts for infrastructure construction and maintenance work with clauses on non-existence of illegal workers or child labour.
HR2	Suppliers screened on human rights	Percentage of companies hired for infrastructure construction and maintenance work screened on human rights.
HR3	Employee training on human rights	Number of hours of training per year per employee in human rights policies and procedures.
EU18	Participatory decision making processes with stakeholders and outcomes of engagement	Forms of collaboration with different entities with responsibilities in the management of plots of land on which infrastructures are located (public bodies, local authorities, ENGOs, owners, residents' associations, etc) for finding and implementing the best solutions.
EU20	Contingency planning measures and disaster/emergency management	Description of strategies for restoring the electricity system and information systems in the event of failures and drills to test in-house emergency plans.
SO1	Management of impact on communities	Impact management tools.
SO2	Assessment of corruption risks	Means of ensuring transparency of company's management acts.
SO3	Training of employees in anti-corruption practices	Instruments addressing employees' duties to prevent corruption in relations with third parties.
SO5	Stance on public policy and the practice of lobbying	Active participation in preparation and revision of regulations and the sector's legislative package and in achieving national and EU goals defined for the sector.
SO8	Fines and sanctions for legal non-compliance	Penalties for non-compliance with laws and regulations applying to energy transport and transmission.
PR1	Health and safety related to products and services	Identification of dangers and assessment of risks and action to minimise them.
PR2	Incidents of non-compliance with regulations concerning the health and safety impacts of products and services	Incidents of non-compliance with regulations or codes.
EU24	Number of injuries and fatalities to the public involving company assets	Accidents and fatalities at infrastructures by electrocution, fallen material and diseases caused by electromagnetic fields.

SOCIAL INDICATORS

Ref.	Description	Definition
PR5	Customer satisfaction	System for assessing perceived quality and REN customer satisfaction (main sector agents: generators, distributors, suppliers, consumers, market operators and similar) based on the structural equation model.
PR9	Fines for legal non-compliance concerning the provision and use of products and services	Amount of compensation for quality of technical service due to non-compliance with standards established in quality of service regulations.
EU27	System average interruption frequency index (SAIFI)	<p>Quotient of total interruptions at delivery points over a certain period by the total number of delivery points in the same period.</p> <p>SAIFI is the average number of accidental interruptions lasting more than three minutes at delivery points during a certain period of time (usually one year).</p> <p>SAIFI = number of interruptions lasting more than three minutes / number of delivery points.</p>
EU28	System average interruption duration index (SAIDI)	<p>Quotient of the sum of interruption times over a certain period by the total number of delivery points in the same period.</p> <p>The SAIDI for a certain period of time (usually one year) is the average time of accidental interruptions lasting more than three minutes at delivery points.</p> <p>SAIDI = Σ total time of interruptions lasting more than three minutes / number of delivery points.</p>

Annex 4

Verification report





VERIFICATION REPORT



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To the Board of Directors of
REN - Redes Energéticas Nacionais, SGPS, S.A.

Independent verification report on Sustainability Report 2007

Introduction

We were asked by the Board of Directors of REN - Redes Energéticas Nacionais, SGPS, S.A., (REN) to conduct an independent assurance report of its "Sustainability Report 2007 – Abridged Version" (the Report), with regard to the indicators listed below under Scope and included in Annex 2 – Cross-reference– GRI Indicators and Electric Utility Supplement, which can be found in the different sections of the Report. Our check was carried out in accordance with REN's instructions and criteria as mentioned in the Report and with the principles and coverage described under Scope.

Responsibilities

The Board of Directors of REN is responsible for the preparation of the Report, disclosure of the performance information, its assessment criteria, internal control systems and processes for gathering, compiling, validating and reporting the information. Our responsibility is to draft a report containing our opinion on the appropriateness of the information, based on our independent assurance procedures and with reference to the agreed terms. We do not accept any responsibility for any other purpose or before any other persons or organizations. Any use by third parties of the data in this report is on their own account and risk.

Scope

Our review procedures were planned and carried out in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000) and with reference to the Global Reporting Initiative, version 3 (GRI3) in order to obtain a moderate degree of assurance as to the appropriateness of the information in the Report and of the underlying systems and processes. The extent of our procedures is smaller than that of an audit and the degree of reliability is therefore lower, consisting of examinations, analytical tests and some substantive work.

The scope of our check was the qualitative and quantitative information on economic, environmental and social performance referring to the performance indicators from the GRI3 and utility sector supplement listed in *Annex III – Indicators – Data* of the Report, which was prepared by reference to the assessment criteria in *Annex III – Indicators – Definitions* of the Report.

As regards our check of the self-assessment of compliance with Global Reporting Initiative version 3 (GRI3) carried out by the management and on the basis of GRI's



Reporting Framework Application Levels, our work was limited to checking consistency with requirements as to the existence of data and information but not their quality or veracity.

Our procedures in this independent assurance were as follows:

- (i) Examining the management and people in charge of the areas in question to ascertain how the information system was structured and the sensitivity of those involved to the matters included in the report
- (ii) Identifying in-house management procedures conducive to the implementation of economic, environmental and social responsibility policies
- (iii) Using sampling to check the efficacy of the systems and processes for collecting, compiling, validating and reporting the aforementioned performance information by means of calculations and validation of the data reported
- (iv) Confirming compliance by certain operating units with instructions on collecting, compiling, validating and reporting performance information
- (v) Using sampling to carry out some procedures to confirm the data by obtaining evidence on information reported and
- (vi) Confirming the existence of data and information required to reach level B, as declared by REN, for the application of GRI3 levels

The data and information analysed include those in the Report, information referred to in the Report and available in the company's 2007 Corporate Governance Report and 2007 Annual Report and Accounts.

Conclusions

Based on our work, nothing came to our attention to lead us to believe that the systems and processes for collecting, compiling, validating and reporting the information in the Report are not appropriate or that the information disclosed is not free of any materially relevant distortions. On the basis of our check of the Report and GRI3 guidelines with the assumptions included in the scope, we conclude that the Report contains the data and information required for GRI3 level B. As the company's external auditors, our opinion on the financial data is given in the 2007 Annual Report and Accounts.

Remarks

During our assurance, we identified areas and opportunities for improvement, which will be included in a report for the management. Without prejudice to the above conclusions, we consider that REN should take into account the following comments, which are aimed at improving its sustainability report:

- In its Report, REN included information on the gas sector, which joined REN in 2006. We found, however, that no information was yet available on this area for all the indicators reported and there were no standardised procedures or calculation methods used in each indicator in the company's different areas. We recommend that REN takes step to standardise procedures and methods in order to use the same criteria when collecting information from all its areas.
- The Report included REN's commitments and goals for 2007-2009. An improvement that could be made would be to establish a connection between stakeholders' expectations, REN's strategy and its commitments and goals. The criteria used in selecting the indicators reported are the significance and relevance of impacts. In future reports REN should reflect on this criterion and



seek to establish a closer connection between commitments made and indicators reported.

- We found that the data for many indicators were only calculated annually, with no guarantee of appropriate performance monitoring by REN. We recommend regular monitoring of indicators with an appropriate monitoring frequency defined for each indicator

Lisbon, 2 September 2008

PricewaterhouseCoopers & Associados, SROC, Lda.
represented by

António Joaquim Brochado Correia, Certified Auditor





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