

## **SUSTAINABILITY**

2013



# CARRYING THE ENERGY OF CHANGE

Our mission is to guarantee an uninterrupted supply of electricity and natural gas. But we also look for new ways to protect the environment, support and develop our employees and foster dialogue and community engagement, thereby contributing responsibly to a more sustainable future based on best social and environmental practices.







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# **REN** IN 2013

**0.09** MIN

ELECTRICITY:
EQUIVALENT INTERRUPTION
TIME

49,5 TWh

**ELECTRICITY SUPPLIED** 

8,733 KM

**ELECTRICITY GRID** 

PLATFORMS INSTALLED FOR STORK NESTS

STORK NESTS TRANSFERRED

426,500

BETWEEN 2010 AND 2013, IN REFORESTATION INITIATIVES OVER AN AREA OF MORE THAN 600 ha



47,9 TWh

NATURAL GAS SUPPLIED

1,375 KM GAS PIPELINES

1,64 TWh
MAXIMUM UNDERGROUND
STORAGE CAPACITY









## **INVESTMENTS AND DONATIONS**

INVESTMENT IN ENVIRONMENTAL **PRESERVATION** 

**DONATIONS** AND SPONSORSHIP

**INVESTMENT IN R&D** 

## RECOGNITION

 Gold Stevie in Best Corporate Website and Best Investor Relations Website categories.

International Business Awards

- Silver Stevie in Best Online/Electronic Annual Report category. International Business Awards
- Silver in 2013 Best Corporate Website.

Best in Biz Awards

- Bronze Stevie in Best Overall Web Design of the REN website. International Business Awards
- Bronze in the Annual Report and Accounts category. ARC Awards
- **Bronze in Best Corporate Website.** XV Festival do Clube dos Criativos Portugal (CCP)



## A SUCCESS--ORIENTED PLAN

TRANSMITTING THE COUNTRY'S ENERGY

By transmitting energy from the north to the south of Portugal, we are actively contributing to the wellbeing and quality of life of millions of people.







Electricity consumption from the public grid supply in 2013 totalled 49.2 TWh, 0.2% more than in 2012. This variation is zero after considering the effects of temperature and number of business days. There was, however, a recovery in consumption, mainly in the second half of the year, as there was still a 1.7% fall at the end of the first half. After two years of contraction, 2013's consumption was still 5.8% away from the all-time high in 2010.

Demand for natural gas in 2013 totalled 47.9 TWh, which was 4.6% lower than in 2012. This was the third year running of falling consumption, totalling 17% against the all-time high in 2010.

Conditions were particularly favourable for renewable generation in 2013, with capability indices of 1.17 (17% above average) at hydroelectric plants and 1.18 (18% above average) at wind farms. Thanks to 11 above-average months, the conditions were the most favourable ever in the Portuguese wind farm system. Renewable generation therefore reached 57% of consumption, as opposed to 37% in 2012, recorded in highly unfavourable hydrological conditions. Hydroelectric plants supplied 27% of consumption while wind farms supplied 24%, biomass plants 5% and photovoltaic plants 1%.

#### **ELECTRICITY**

	'09	10	111	<b>`12</b>	<b>'13</b>
CONSUMPTION, TWh	49,9	52,2	50,5	49,1	49,2
ANNUAL CHANGE IN ELECTRICITY CONSUPTION, %		4.6%	0.070	2.070	0.2%
INSTALLED CAPACITY, MW	16,519	17,806	18,801	18,494	17,792
POWER TRANSMITTED ON THE NTG, TWh	42,5	42,6	42,2	40,0	41,5
ENERGY TRANSMISSION LOSSES, %	1.37%		1.54%	1.56%	1.75%
EQUIVALENT INTERRUPTION TIME, MINUTES	0.42	1.15	0.27	0.00	0.09

## **NATURAL GAS**

	'09	10	111	<b>'12</b>	113
ANNUAL CHANGE IN NATURAL GAS CONSUPTION, %	-1.0%	9.1%	-0.5%	-13.0%	-5.0%
INPUTS TO RNTGN, TWh	54,3	58,3	58,1	50,3	48,8
OUTPUTS FROM RNTGN, TWh	54,4	58,3	58,2	50,3	48,9
LENGTH OF THE RNTGN, Km	1,267	1,296	1,298	1,298	1,375
UNDERGROUND GAS STORAGE CAPACITY, Mm³(°)	138.2	138.2	132.7	132.7	132.7

(\*) THE VOLUME SHOWN EXPRESSES THE MAXIMUM AVAILABLE CAPACITY FOR COMMERCIAL PURPOSES, WHICH IS CONDITIONED BY THE SPECIFIC THERMODYNAMICS OF STORING NATURAL GAS AT HIGH PRESSURE IN SALT CAVERNS.



## MAIN ACHIEVEMENTS

Thanks to its reforestation programme, REN has planted over 420,000 trees in recent years and its target is 875,000 by 2017.

REN is one of the best companies when it comes to providing information on the company's climate change policies and activities. Its ground-breaking role was recognised with the Regional Award from the International Association for Impact Assessment, an organisation that promotes best environmental practices in 120 countries.

REN encourages its employees' participation in corporate volunteering, fostering good citizenship and work for the good of the communities. Its Share Programme was set up for this purpose. In 2013 REN was one of the 100 Portuguese companies that invested most in research and development. REN and the State Grid Corporation of China founded the R&D Nester centre, which has placed Portugal at the heart of international research and involves the best Portuguese and international universities. REN is a founder member of the Lisbon MBA. The REN Award has also been rewarding the best master's theses in the energy field for the last 18 years.









## BUILDING A BETTER FUTURE

TRANSMITTING
THE ENERGY OF THE FUTURE

The work that we do reflects a sustainable growth strategy inspired by a greener future







REN endeavours to address every stakeholder's specific expectations and concerns, individually or generally. As part of the design of its new sustainability strategy, which began in 2013, REN is consulting its stakeholders again so that it can update their mapping and identify important issues.

## **CODES AND PRINCIPLES**

- REN GroupCode of Conduct
- Functional codes of conduct
- Global Compact
   Anti-corruption principle
- Companies and HIV (Human immunodeficiency virus)
   Code of Conduct
- Quality, Environment and Safety
   Policy Statement
- Social Responsibility
   Policy Statement
- UN Global Compact

#### **Human Rights Principles**

- 1 Respect and protect human rights
- 2 Prevent violations of human rights

#### **Labour Rights Principles**

- 3 Support freedom of association
- 4 Eliminate forced and compulsory labour
- 5 Eliminate child labour
- 6 Eliminate discrimination in the workplace

#### **Environmental Protection Principles**

- **7 Support a preventive approach** to environmental challenges
- 8 Promote environmental responsibility
- 9 Encourage environmentally friendly technologies

#### **Anti-Corruption Principle**

10 Fight against all forms of corruption, including extortion and bribery



REN respects the commitment arising from its signing of the United Nations Global Compact initiative in 2005 to provide information on the implementation progress of the ten principles on human rights, labour practices, environmental protection and anti-corruption.



## MANAGEMENT AND DEVELOPMENT OF HUMAN CAPITAL

TRANSMITTING ENERGY COMPETENTLY

Our highly qualified, specialised workforce guarantees meticulous attention to everything we do.





## ABOUT REN'S EMPLOYEES

676
NO. OF EMPLOYEE

11.5 %

## **BY AGE GROUP**

**73** 

**359**EMPLOYEES 30-50 YEARS

**244**EMPLOYEES > 50 YEAR:



# HUMAN RESOURCE FIGURES

OF OUR DIRECTO

58 %
OF OUR EMPLOYEES

**41,225** 

651
OF EMPLOYEES HAVE
PERMANENT CONTRACT

**22** % RATIO OF MEN TO WOME



## PILLARS OF HUMAN CAPITAL MANAGEMENT

#### Organisational culture.

fostering activities common to all departments as a way of promoting REN's mission, values and culture

#### Organisational alignment and development.

to promote efficient activities, adaptation of the structure to the progress of the business, internationalisation and competitiveness in the sector

#### Promotion of policies and programmes for developing and keeping REN's critical talent.

that are suited to its employees' individual and organisational development needs

- Recognition of individual and organisational merit
- Promotion of consistency of REN's activity with regard to people, thereby ensuring equality and articulation between all policies

## PERSONAL AND PROFESSIONAL DEVELOPMENT

In 2013, REN continued its REN Trainee Programme, which is designed to provide the company with the best and most appropriate human resources. It consists of vocational, academic and summer internships and interns have the opportunity to undertake special projects that create value for their education.

Job rotation vocational internships involve an extra challenge. In 2013 the challenge was to develop REN's building and contents on the virtual Talent City platform.

INDICATORS	<b>'13</b>
VOCATIONAL INTERNSHIPS	*10
ACADEMIC INTERNSHIPS	15
SUMMER INTERNSHIPS	11
TOTAL	36

<sup>\* 9</sup> JOB ROTATION INTERNSHIPS

110 110





As a continuous development process, REN defines an annual training programme that includes company-wide and specific courses, shared training, seminars, congresses and conferences. In 2013, the focus was on improving the qualifications of specialised staff, technical training and in-house training.

In general terms, two new development programmes were implemented in line with REN's organisational strategy and employees' needs in 2013: the Energy Academy and General Management Programme. The aim of these is to develop management and leadership skills, which are essential for keeping and developing talent at REN and providing experiences that inspire employees to do more and better. REN's goal is to continue and extend this type of programme in the future, while always taking account of the specificities and characteristics of the groups involved.

Team Offsite was another initiative with a comprehensive impact. The aim was to use teambuilding to align and promote greater proximity between teams and their leaders, reinforce team spirit and create a positive attitude in REN employees.

TRAINING

TRAINING	- 11	12	<u> </u>
NO. OF TRAINING HOURS		46,882	41,225
NO. OF PARTICIPANTS	2,256	3,324	3,576
NO. OF TRAINING HOURS PER EMPLOYEE	41.9	63.1	61
TRAINING AREA (NO. HOURS)	711	112	713

TOTAL	31,241	46,882	41.225
GAS	2,611	4,623	4,430
TECHNICAL	15,079	37,350	28,161
BEHAVIOURAL	13,551	4,909	8,635

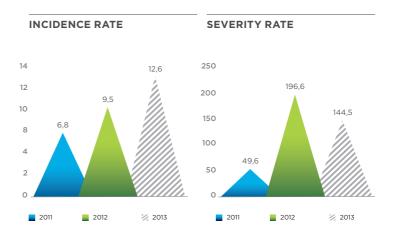
FUNCTIONAL GROUP (NO. HOURS)	11	<b>'12</b>	<b>°13</b>
TOP MANAGEMENT	1,869	1,751	1,502
MANAGEMENT	3,885	3,527	2,613
TECHNICAL / OPERATIONAL COORDINATORS	2,088	2,340	1,405
SPECIALISED MANAGERS	11,406	22,920	25,423
OPERATIVES	9,421	13,244	7,366
ADMIN STAFF	2,571	3,101	2,915
TOTAL	31,241	46,882	41,225

## HEALTH AND SAFETY

REN's awareness that a safe, healthy environment is decisive to stakeholder satisfaction means that it is committed to effective management of occupational health and safety.

In 2013, around 33% of REN's contractors and service providers had OHS AS 18001/NP 4397 certified safety management systems in place.

During the year, REN provided safety training and awareness sessions to 133 contractors and service providers.



As guaranteeing good occupational health and safety conditions is one of REN's constant concerns, its employees undergo tests and exams, using occupational medicine as a form of preventive action for their health.



- Compliance with compulsory medical exam plan
- 415 diagnostic tests
- 445 medical acts
- 415 nursing acts
- Doctors' visits to the workplace

	111	<b>'12 '13</b>
ABSENTEE RATE	3.1%	2.9% <b>2.7%</b>





## COMMUNITY ENGAGEMENT

TRANSMITTING ENERGY TO COMMUNITIES

Wherever we go, you will also find our social work to benefit local communities and increase the public's wellbeing

## SUPPORT FOR THE COMMUNITY



#### Launch of the Share corporate volunteer programme

The Share corporate volunteer programme is based on three aspects – education, environment and solidarity. It places employees' skills and time at the service of the community. Examples are clearing of brush in Tapada Nacional de Mafra and monthly work at Comunidade Vida e Paz.

## RELATIONS WITH LANDOWNERS

REN contacted 2,700 owners of land crossed by new stretches of the electricity transmission grids in ongoing projects in 2013. It acquired 23 properties to install other electricity and natural gas infrastructures. After this expansion, REN's landowner database contained around 68,000 entries at the end of 2013.

REN always endeavours to reconcile the installation and operations of its infrastructures with the legitimate interests of other stakeholders.

## INNOVATION, RESEARCH AND TECHNOLOGY

TRANSMITTING ENERGY AND INNOVATION

We are at the cutting edge of technological innovation thanks to state-of-the-art know-how and facilities







## INTERNATIONAL INITIATIVES AND WORKING GROUPS

Energy research and development centre - R&D NESTER set up.

In February 2013, REN - Redes Energéticas Nacionais signed an agreement with CEPRI 8- China Electric Power Research Institute (representing State Grid International Development) to set up an energy R&D centre in Portugal.

It focuses on the development and management of innovative energy projects and has five full-time and five part-time researchers working on four ongoing projects:



RENEWABLE ENERGY DISPATCH TOOLS



SUBSTATION OF THE FUTURE



ENERGY STORAGE DI ANNING



PLANNING AND OPERATION OF LARGE AC/DC POWER GRIDS WITH RENEWABLES

REN has continued to step up its presence in a wide variety of international fora in the electricity and natural gas sectors, where it takes part in definition of their policies, technical studies and lobbying of entities that promote their activities there. This presence is one of the components that pursues the company's internationalisation strategy.

## SOME OF THE INTERNATIONAL BODIES TO WHICH REN BELONGS:

CIGRÉ - Conseil International des Grands Réseaux Électriques

**EUROELECTRIC -** Union of Electricity Industry

**ENTSO-G -** European Network of Transmission System Operators for Gas

**ENTSO-E -** European Network of Transmission System Operators for Electricity

**CCE -** Economic Cooperation Council

GIE - Gas Infrastructure Europe

FSR - Florence School of Regulation

#### FRIENDS OF THE SUPERGRID

METSO - Mediterranean Transmission System Operators

**MEDGRID** - a consortium that promotes electricity interconnections between the north, south and east of the Mediterranean

# ENVIRONMENTAL MANAGEMENT

TRANSMITTING ENERGY AROUND THE COUNTRY

One of our main goals has always been to grow sustainably while respecting nature and the balance of ecosystems.







#### **ENVIRONMENTAL IMPACT**

	'11	<b>'12</b>	<b>'13</b>
ENVIRONMENTAL IMPACT ASSESSMENT	5	7	13
POST-ENVIRONMENTAL IMPACT PROCESSES	0	0	1
ENVIRONMENTAL IMPACT STATEMENTS	6	2	9
PROJECT ENVIRONMENTAL STUDIES	8	5	3
ENVIRONMENTAL IMPACT STUDIES	3	5	7
ENVIRONMENTAL COMPLIANCE REPORT OF EXECUTION PROJECT	1	1	1

## STRATEGIC ENVIRONMENTAL ASSESSMENT

REN concluded the second equivalent exercise, with the strategic environmental assessment as part of the PDIRT 2012-2017 (2022). The environmental report resulting from the new PDIRT environmental assessment was submitted for public consultation jointly with the PDIRT. 48 contributions were made at the public consultation, 43 of which were opinions from central and local government bodies and five participations from other entities. Most of the comments and opinions received were about spatial planning (48%) and 11% of the comments were from private promoters in the area of special scheme generation. The contributions were considered and, whenever appropriate, were included in the final version of the PDIRT.





## FLORA AND LAND USE

Thanks to its easement reforestation programme, REN has planted more than 420,000 trees in over 600 hectares in recent years.

As a result of its construction and maintenance work, REN has a direct impact on flora and soil use. This impact occurs, for example, when the line protection corridors for REN's infrastructure (electricity lines and gas pipelines) are created or maintained. As a way of offsetting this impact, since 2007 REN has been undertaking tree planting projects when building its new facilities.

In 2013, measures were taken towards the future integrated management of vegetation in REN Eléctrica and REN Gasodutos easements. As part of this strategy, a cooperation agreement was signed with the environmental organisation Quercus to associate REN's afforestation programme with the Quercus Floresta Comum programme.

## **BIRDLIFE**

For more than ten years REN has monitored the nesting patterns of the white stork population in its infrastructure. It has created nesting conditions in favourable habitats for the bird and installed devices that minimise the risk of electrical accidents.

The installation of fans and platforms has prevented nesting in the most dangerous sites with a high probability of incidents, thereby helping ensure that more nests do not mean more accidents.

	111	<b>'12</b>	<b>°13</b>
NUMBER OF PLATFORMS INSTALLED	150	155	97
NUMBER OF PERCHING DETERRENT DEVICES INSTALLED	481	975	649
NUMBER OF NESTS TRANSFERRED	43	51	51







## **CLIMATE CHANGE**EMISSION MANAGEMENT

REN is one of the companies that best provide information on their climate change policies and activity, according to the Carbon Disclosure Project Iberia 125 Climate Change Report 2013. In terms of disseminating information, REN's response was above the Iberia 125 index average, which was 78.

REN continues to encourage the use of rail transport rather than cars, particular between Lisbon and Porto The number of train trips in 2013 increased by about 5% over 2012.

In recent years REN has been implementing an action plan to reduce its direct emissions, especially of sulphur hexafluoride (SF6), a gas used as an electrical insulator (dielectric) in high and very high voltage equipment. In 2013, despite the increase in installed mass, there was a decrease in leaks and, consequently, in the leak rate.

The company's efforts to reduce SF6 leakages is reflected in the leakage rates for this gas, with results that are technically highly positive on an international scale.

(tCO <sub>2</sub> eq)	11'	12	13
DIRECT EMISSIONS	17,288	32,491	20,991
NATURAL GAS PURGES (CH <sub>4</sub> )	853	11,590	1,275
FLARE BURNING	1,030	4,685	4,243
BOILERS' OWN CONSUMPTION	11,089	12,353	12,305
COGENERATION	1,590	1,229	641
SULPHUR HEXAFLUORIDE (SF <sub>6</sub> )	780	1,133	468
NATURAL GAS (BUILDINGS)	7	55	483
PROPANE GAS (BUILDINGS)	5	12	////11
DIESEL EQUIPMENT	38	1	/////77
VEHICLE FUEL	1,896	1,432	1,387
INDIRECT EMISSIONS	171,988	164,972	132,832
ELECTRICITY	16,885	17,070	11,162
ELECTRICITY LOSSES IN THE GRID	153,402	147,541	121,165
EMISSIONS FROM AIR TRAVEL	170¹	361	505

 $<sup>^{\</sup>rm I}$  THE FIGURE REPORTED IN 2011 WAS RECALCULATED SINCE A DOUBLE ACCOUNTING ENTRY WAS DETECTED FOR THE PREVIOUS FIGURE.



## **REN IS A MEMBER OF:**











# ABOUT THIS BROCHURE

This brochure is a summary of REN's Sustainability Report for 2013 and is in accordance with the full version. It was drafted in compliance with the requirements of the Global Reporting Initiative (GRI) G3 and its electric utilities sector supplement, to GRI level A+, and AA1000 APS (2008) (Accountability Principles Standard). It has received assurance from an independent body, PricewaterhouseCoopers & Associados - Sociedade de Revisores Oficiais de Contas, Lda. (PwC SROC)

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REN 2013 Annual Report and Accounts