

# In search of more and better energy

Sustainability Report 2013





# In search of more and better energy

Sustainability Report 2013

# Sustainability Report 2013

<b>01</b>	<b>Background</b>	<b>6</b>
1.1	Materiality principle	8
<b>02</b>	<b>Galp Energia in 2013</b>	<b>9</b>
2.1	Messages	10
2.2	Awards and recognition received in 2013	13
2.3	Galp Energia in the world	14
2.4	Multi-energy in Galp Energia's value chain	16
<b>03</b>	<b>Sustainability at Galp Energia</b>	<b>18</b>
3.1	Galp Energia's sustainability strategy	19
3.2	Galp Energia's strategy on climate change	21
<b>04</b>	<b>Galp Energia's corporate principles</b>	<b>24</b>
4.1	Governance model and codes of ethics	25
4.2	Risk management	26
<b>05</b>	<b>Sustainability in business</b>	<b>28</b>
5.1	Exploration & Production	29
5.2	Refining & Marketing	32
5.3	Gas & Power	35
5.4	Other businesses	38
<b>06</b>	<b>Environment</b>	<b>40</b>
<b>07</b>	<b>Occupational health and safety</b>	<b>44</b>
<b>08</b>	<b>Human capital</b>	<b>47</b>
<b>09</b>	<b>Commitment to the community</b>	<b>51</b>
<b>10</b>	<b>Dialogue with stakeholders</b>	<b>56</b>
<b>11</b>	<b>Appendices</b>	<b>63</b>
11.1	Appendix I – Assurance letter	64
11.2	Appendix II – GRI table - Key sustainability indicators	65
11.3	Appendix III – Notes on methodology	75
11.4	Appendix IV – Status of the list of commitments for the sustainability strategy published in the 2012 Sustainability Report	77
11.5	Appendix V – Other indicators	79
11.6	Appendix VI – Abbreviations, initials and acronyms	81

01



# Background

## 1.1 Materiality Principle

This year Galp Energia publishes its eighth Sustainability Report, which details its activity and performance on relevant sustainability issues for the year 2013.

The data published in this report are intended to inform stakeholders about the Company's performance in economic, environmental and social fields, demonstrating to investors, authorities and the public in general Galp Energia's good practices in the area of sustainable development.

In 2013 sustainability reporting covers the operations of companies in which Galp Energia holds a share equal to or greater than 50%, or for which it has operational control. With regard to exploration and production of oil and gas, Galp Energia reports the data according to (minority) share in consortia, due to its interest in its activity.

Reporting methods may be adjusted to reflect the diversity of Galp Energia activities, particularly due to changes in regulations or the setting of international standards, procedures for collecting information or changes in methodology. Appendix III contains the methodological notes on the calculation of the indicators.

The information presented in this report should be complemented and considered in conjunction with the information available in the Annual Report & Accounts and the Corporate Governance Report, on the Galp Energia website at [www.galpenergia.com](http://www.galpenergia.com) and on the sustainability channel.

This report was prepared in accordance with the Global Reporting Initiative (GRI3) guidelines and is compliant with level A+. Appendix II contains a table of correspondence between the contents of the report and the requirements of the said level.

The 2013 Sustainability Report has been verified by PricewaterhouseCoopers, an accredited third party.

The following contacts may be used to clarify any questions or to send suggestions about the content of this report.

**Galp Energia, SGPS, S.A.**

Public Company  
Department of Corporate Strategy and Investor Relations

Rua Tomás da Fonseca, Torre C  
1600-209 Lisboa  
Tel.: +351 217 240 866  
Fax: +351 217 242 965  
e-mail: [investor.relations@galpenergia.com](mailto:investor.relations@galpenergia.com)  
[www.galpenergia.com](http://www.galpenergia.com)

**GRI rating**

	C	C+	B	B+	A	A+
						✓
						✓
<b>Optional</b>						



## 1.1 Materiality principle

The process of reporting Galp Energia sustainability information is based on the "Oil and Gas Industry Guidance on Voluntary Sustainability Reporting" by the International Petroleum Industry Environmental Conservation Association (IPIECA)/American Petroleum Industry (API)/International Association of Oil and Gas Producers (OGP).

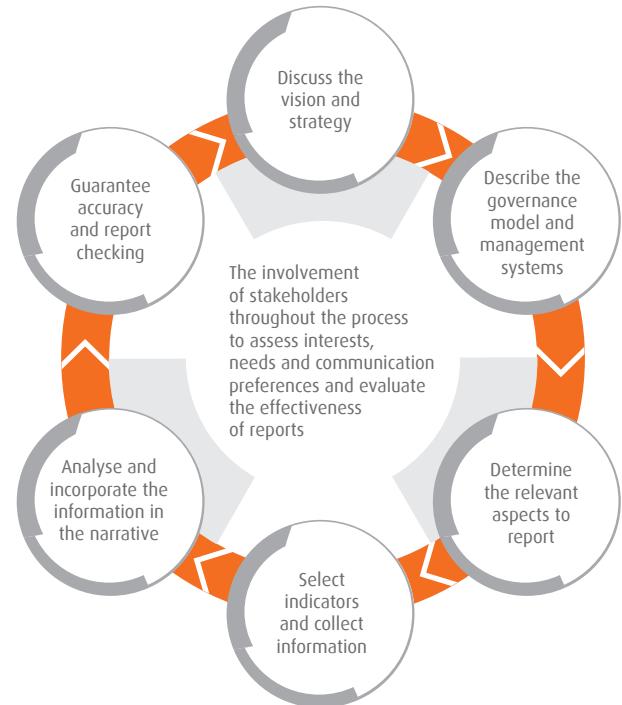
The determination of Galp Energia's material issues took place on the basis of methodologies: Accountability and IPIECA/API/OGP — Oil and Gas Industry Guidance on Voluntary Sustainability Reporting.

In addition to the regular communication methods and channels with stakeholders, Galp Energia consulted them formally on their expectations, interests and the Company's performance on sustainability. In the stakeholder consultation process, the score for the criticality of each stakeholder as well as the selection of relevant topics was carried out according to the AA1000 Accountability criteria.

The stakeholder consultation involved approximately 270 stakeholders, selected from the various business areas and corporate services at Galp Energia, including: shareholders, employees, customers, the technical and scientific community, financial institutions, governmental bodies and officials, suppliers, the media, retailers and distributors, and other entities.

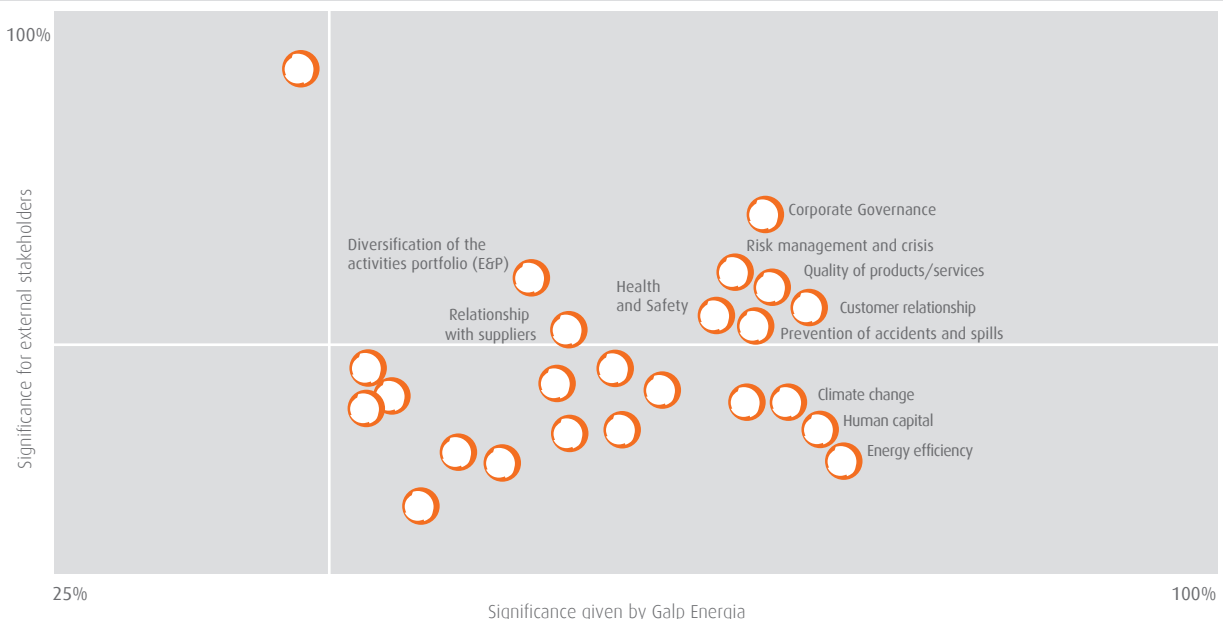
Determining the materiality of the themes in this report was achieved by integrating the results of the stakeholder consultation process, conducted in 2012/2013, with an analysis of the relevance of the themes by top management. By combining the external and internal expectations gathered, the material issues to be reported were identified and defined.

### Methodology for determining materiality



Source: IPIECA/API/OGP Reporting Guidance.

### Analysis of the materiality of sustainability aspects



Note: in addition to the issues identified in the "relevant quadrant", Galp Energia considers the "climate change", the "energy efficiency" and "human capital" material aspects by virtue of being an integral part of sustainability and the Company's business strategy.



# Galp Energia in 2013

- 2.1 Messages
- 2.2 Awards and recognition received in 2013
- 2.3 Galp Energia in the world
- 2.4 Multi-energy in Galp Energia's value chain

## 2.1 Messages

### Chairman's message

Nearly a century ago, the world's energy consumption was two million tonnes of oil equivalent (toe) each day. In contrast, today, 35 million toe are consumed every day. If this trend persists, a wide variety of international institutions predict that daily consumption will grow to around 41 million toe in 2035.

Renewable energies, such as wind and solar power, will continue to increase in weight, but fossil fuels are still expected to account for more than two thirds of energy demand in 2050, according to the International Energy Agency.

This means that, in 2035, the economic progress and a higher quality of life will only exist if the oil industry provides an additional daily oil and gas output of around 11.5 million toe, representing approximately one third of the world's current capacity, to offset the declines in currently active fields and address the expected mounting demand.

This new production capacity will come from a variety of new sources forged by recent technology disruptions, such as those involving enhanced oil recovery, ultra-deep waters, shale gas and oil, and other fields yet to be discovered.

This change in energy consumption is a story of human progress. Safe, accessible energy facilitates social development, allowing more and more people in developing economies to access basic health, hygiene and education, improving the quality of life and even increasing longevity. All around the world, a growing energy supply will help to rescue people from extreme poverty and increase opportunities for inclusive growth.

Galp Energia is at the forefront of this change, not only on the technology frontier of oil exploration in deep and ultra-deep waters, but also through its proactive involvement in developing industry and the energy system of its core markets: the emerging economies of Brazil, Angola and Mozambique.

Scientific and technological cooperation and continued rigour will be increasingly important to overcome the technical, environmental and social challenges of exploration in deep and ultra-deep waters, particularly in the Brazilian pre-salt.

This is why Galp Energia created the Institute of Oil and Gas (ISPG) in partnership with Portugal's six largest universities representing a structured, open platform with the scientific system of Portuguese-speaking countries to conduct advanced training and cutting-edge research and development (R&D) addressing the growing need for highly qualified human capital, helping to make business more profitable with fewer environmental impacts.

In fact, sustainable development lies at the very heart of our strategy. By working together with communities, governments, non-governmental Organisations and other entities we will be able to operate safely and responsibly.



Américo Amorim,  
Chairman of Galp Energia's Board of Directors

A wide variety of international acknowledgements of the solidity of Galp Energia's sustainable DNA - from the distinction of being among the five best European companies on the Dow Jones Sustainability Indexes, to the excellent environmental performance scored in the Carbon Disclosure Project - are proof positive of this.

Therefore, sustainable management in the oil and gas business is intelligent management, since it creates human and technological capacities that facilitate solid economic growth, with the lowest possible environmental impact, while acting as a driver for inclusion.

Américo Amorim  
Chairman of Galp Energia's Board of Directors.



## CEO's message

In the transition phase in which we find ourselves to a low-carbon economy, the analyses of a number of international entities are unanimous on one point: by the middle of this century, fossil fuels will continue to be the basis of the world's energy mix, accounting for more than two thirds of primary energy supply.

In this context, it should be noted that, according to the International Energy Agency, around one third of global hydrocarbon production is carried out in offshore maritime territory, with an increasing number of sources located in deep and ultra-deep waters, primarily in the South Atlantic and Indian Oceans. Developing existing resources will allow Galp Energia to achieve the goal of surpassing current daily production of around 25,000 barrels of oil and natural gas to 300,000 over the next decade.

In fact, after the discovery of the gigantic Tupi reservoir in 2006, around 30% of new oil and gas discoveries are located in the open ocean of the Portuguese-speaking countries of Brazil, Angola and Mozambique. Between 2006 and 2012 new resources have been discovered totalling 216 billion barrels of oil equivalent (mboe). Of the new volumes discovered, around 48% were deep offshore, with 52% of these discovered in these same countries, i.e. Brazil, Angola and Mozambique. To the extent that technical solutions have allowed, technology barriers have been surmounted, and regions until recently inaccessible are now undergoing intense prospecting and research campaigns.

Galp Energia's strategy in recent years has been fully aligned with European energy policy objectives, primarily from the standpoint of sustainability.

Exploration and production activities use cutting-edge technology for safe, sustainable and cost-efficient exploration; as such, by ensuring a safe supply of natural gas, we believe we are also helping to streamline energy efficiency and combat climate change. It is a clean, abundant and flexible hydrocarbon at a competitive cost, and the cleanest fossil source. In addition to having 75% less carbon dioxide (CO<sub>2</sub>) emissions than coal, its introduction into the energy system immediately reduces emissions (when replacing coal), it can also be used as a backup energy source to offset intermittent renewable sources such as wind and solar power.

Since many projects under way at Galp Energia are located in developing regions with a highly valuable natural heritage, the Company integrates sustainable development principles into its decision-making and actions, namely in terms of environmental protection, social and community development, and economic growth.

Among others, processes are used to assess environmental impacts to foresee the project's degree of impact on the existing physical, biological and socio-economic environment, and to identify measures to minimise and mitigate impacts and maximise positive aspects. As regards transparency, we continue to support the principles of the Extractive Industries Transparency Initiative (EITI).



Manuel Ferreira De Oliveira,  
Galp Energia's CEO

The year 2013 was marked by a number of occurrences relevant to the Company's business. First and foremost is the entry into operation of the FPSO Cidade de Paraty, in the Lula-Iracema field, and discoveries in the exploratory prospects of Agulha, in Mozambique and Pitu, in Brazil. Both will contribute directly to the sustainable business growth of Galp Energia, which is increasingly becoming an integrated energy Company focused on exploration and production.

The commissioning of new units at the Sines Refinery marks the start of a new era in Galp Energia's refining business. Thanks to the largest industrial investment ever made in our country, the Portuguese refining base is now among the most efficient and sustainable in Europe.

I also wish to point out the significant progress made in our biofuels project with the inauguration of Enerfuel, the first domestic plant producing biodiesel using waste products from the food industry and used oils as primary raw materials, which will greatly help to reduce CO<sub>2</sub> emissions compared to fossil fuel-based diesel.

An unprecedented initiative in the Portuguese science and technology system was the establishment of the Institute of Oil and Gas (ISPG), Association for Research and Advanced Training, a partnership between Galp Energia and Portugal's six largest universities, whose main goals are to develop research projects and advanced training in unique areas of expertise, and to help develop knowledge and technology "in portuguese" in the Oil & Gas sector.

Fully aware of the crisis our country is experiencing, Galp Energia aims to help solve general social problems together with other actors in civil society, one example of this being the launch of the “Energia Solidária” card.

Another key event during the year was Galp Energia’s adhesion to the United Nations Global Compact, where the Company agrees to respect the 10 universal principles of this Organisation in relation to human rights, labour practices, environmental protection and anti-corruption.

I must also make mention of our performance in health, safety and environment. The results achieved in 2013 speak for themselves. Not only did we have the lowest number of accidents resulting in work absence of all times, but we also had a significant decrease in the number of events in terms of process safety, putting Galp Energia well below the average of European Association for Environment, Health and Safety in Refining and Distribution (CONCAWE) companies. Although these are results we can be proud of, we must use them as an incentive to continue our prevention work, avoiding accidents and strengthening the sustainability of our Company.

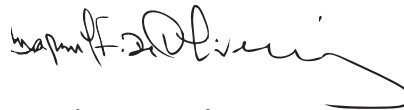
Another noteworthy fact is our redefining of Galp Energia’s values to align them with our strategic positioning and ambitions.

Due to the great size of the projects we have in hand, we must look to the future with a “GALP” attitude. We must grow together and create value (*Growing Together*). We must want to do things, full of an entrepreneurial spirit that sets us apart from our competitors (*Action*). We must do so by working for tomorrow, always focused on sustainability and innovation (*Looking into the Future*). We must do all of this without forgetting the passion that drives us, making us proud of who we are and what we do (*Passion*).

In 2013, our Company maintained its position on the prestigious Dow Jones Sustainability Index, an outside acknowledgement of Galp Energia’s sustainability, leveraged by processes and practices in line with the very best in Europe and the world. The Company further distinguished itself for its reporting practices in the area of carbon emissions (Carbon Disclosure Project), being included for the second year running on the Climate Disclosure Leadership Index.

Today, we are a changing Company with major projects ahead, requiring the will and commitment of everyone. Although we have laid the necessary groundwork to achieve our strategic goals, everything will depend on the people who make up our Company. They are the ones who will forge the path of success for Galp Energia 2020+, the project we want to build for the future.

With all of our energy, enthusiasm, determination and commitment, we can and should continue on the path we have taken, delivering the results expected from our undertakings.



**Manuel Ferreira De Oliveira**  
Galp Energia’s CEO

## 2.2 Awards and recognition received in 2013

### The energy efficiency project for the Corinthia Hotel Lisbon was awarded the title Western Europe Region - Energy Project of the Year by the Association of Energy Engineers (AEE)

This prize is awarded to projects developed and implemented outside the USA that stand out for innovation in energy efficiency measures and the energy performance contract model.

The project implemented at the Corinthia Hotel Lisbon by Galp Soluções de Energia (GSE), in partnership with the Instituto de Soldadura e Qualidade (ISQ), is innovative for the use of particular engineering solutions in the energy efficiency implemented and renewable energy components, which were designed specifically for the project.

The AEE is the largest association of energy engineers in the world, with over 16,000 members spread over 90 countries.

### Galp Energia won first place in Portugal in the Investor Relations category at the 2013 Extel Pan-European awards

The aim of the Extel survey, conducted annually by Thomson Reuters, is to reward companies for best practices in investor relations. In 2013, the survey involved 2,297 companies with approximately 11,500 professionals and 2,517 analysts from 953 companies who voted and elected the best companies in this field.

### Galp Energia gets maximum (AAA) ranking in Corporate Governance in the Católica Lisbon/AEM

Galp Energia gained the highest ranking (AAA) in the report "Governo das Sociedades em Portugal 2013", published independently by the Universidade Católica de Lisboa and promoted by the Portuguese Issuers Association (AEM). The study adopted a methodology in which the degree of compliance with the recommendations on corporate governance is assessed by giving greater weight to the most relevant recommendations in terms of international benchmarks.

### Galp Energia rejoins the Dow Jones Sustainability Indexes (DJSI) World and Europe

In 2013, Galp Energia resumed its place amongst the most sustainable companies in the world, once again fulfilling the strict criteria for integrating the DJSI World and Europe. In its sector (Oil & Gas), only five European companies achieved this feat, with Galp Energia showing significant developments on the economic and social dimension.

In addition, Galp Energia was also awarded the Bronze Class Sustainability Award 2014. The Dow Jones sustainability indexes were created in 1999 and are intended to monitor the financial performance of the leading global companies for which value creation is governed by the highest standards of sustainability. The assessment includes economic, social and environmental criteria and the published results serve as a reference for global investors.

### Galp Energia commended in the European Investor Relations Perception Study

Galp Energia was recognised in the categories Best CEO, Best Investor Relationship, and Best Investor Relations Department for the European Oil & Gas Exploration & Production sector.

In the Best CEO category, Manuel Ferreira De Oliveira won second place in the European ranking and remained in the top five chief executive officers in the industry for the third consecutive year.

The European Investor Relations Perception Study is carried out annually by Institutional Investor magazine. In 2013, the study covered 858 investors and analysts from 460 financial institutions and 1,580 analysts from 152 investment banks.

### "Missão UP" wins the Energy Globe Award

Galp Energia was the national winner of the Energy Globe 2013 award for its Missão UP project.

The Energy Globe award is the most important environmental prize in the world and the largest sustainability platform for best practices, for which more than 1,000 sustainable projects from more than 100 countries compete each year.

### Carbon Disclosure Project (CDP)

Galp Energia was ranked among the five Iberian companies whose practices in the area of climate change – and quality of information produced about such practices – most stood out, obtaining a total score of 99 out of a possible 100 points. This ranking enabled Galp Energia to enter the Climate Disclosure Leadership Index (CDLI) for the second year running.

The CDP is a non-profit-making Organisation that represents more than 700 institutional investors with a total of 87 billion dollars in assets.

### Galp Energia amongst the 100 most sustainable companies in the world

Galp Energia was considered one of the 100 most sustainable companies in the world for the second year in a row by the Canadian Corporate Knights, which annually produces what is considered the most credible corporate sustainability ranking worldwide: the Global 100 Most Sustainable Corporations in the World. The 2014 selection, announced at the World Economic Forum in Davos (Switzerland), put Galp Energia in 56th place in the general ranking and 6th best in the energy sector.

The 2014 ranking includes companies from 21 countries with stock market valuations of over 2 billion dollars, of which Galp Energia is the sole Portuguese representative in the energy sector.



## 2.3 Galp Energia in the world

### VENEZUELA



Two E&P projects.

2

### OTHER AFRICAN COUNTRIES

5

Marketing of oil products in Cape Verde, Gambia, Guinea-Bissau, Malawi and Swaziland, through a network of 68 service stations.

### BRAZIL



Present across 28 E&P projects. Working interest production totalled 12.5 kboepd in 2013.

**+70%**  
reserves and contingent  
resources<sup>1</sup>  
**28**  
projects

### URUGUAI

2



Two E&P projects.

### IBERIAN PENINSULA



Eight E&P projects in Portugal. Integrated refining system comprising two refineries. Marketing of oil products across a broad network of around 1,300 service stations in the Iberian Peninsula. Second largest natural gas player.

**12,5mt**  
sales of refined  
products<sup>2</sup>

**4bcm**  
sales of natural gas  
to direct clients<sup>2</sup>

### MOROCCO



Eight E&P projects

8

### EQUATORIAL GUINEA



Present in one LNG project.

1



## Developing Energy

Galp Energia has been expanding its exploration and production portfolio, which currently includes over 60 projects. The Company is focused on the execution of its Exploration & Production development projects, with the goal of reaching a production of 300 kboepd over the next decade.

This unrivalled growth in the industry will be supported by the resilient contribution of the Refining & Marketing and Gas & Power businesses cash flows. These activities are centred on the Iberian Peninsula, where Galp Energia is a leading player.

### NIGERIA AND ALGERIA

6 bcm



Long-term supply contracts for 6 bcm of natural gas and LNG per year.

### FAR EAST

13  
LNG  
cargoes



One of the main destinations of 3 bcm annual sales of LNG<sup>3</sup>.

### MOZAMBIQUE

+80 tcf  
natural gas  
discoveries



One E&P project, namely for production and liquefaction of natural gas. Marketing of oil products via a network of 33 service stations.

### ANGOLA

12,0 kboepd  
working interest  
production<sup>2</sup>



Five E&P projects. Annual oil product sales of 271 kt.

### EAST TIMOR

1



One E&P project.

### NAMIBIA



Present in seven E&P blocks.



Exploration & Production (E&P)



Refining & Marketing (R&M)



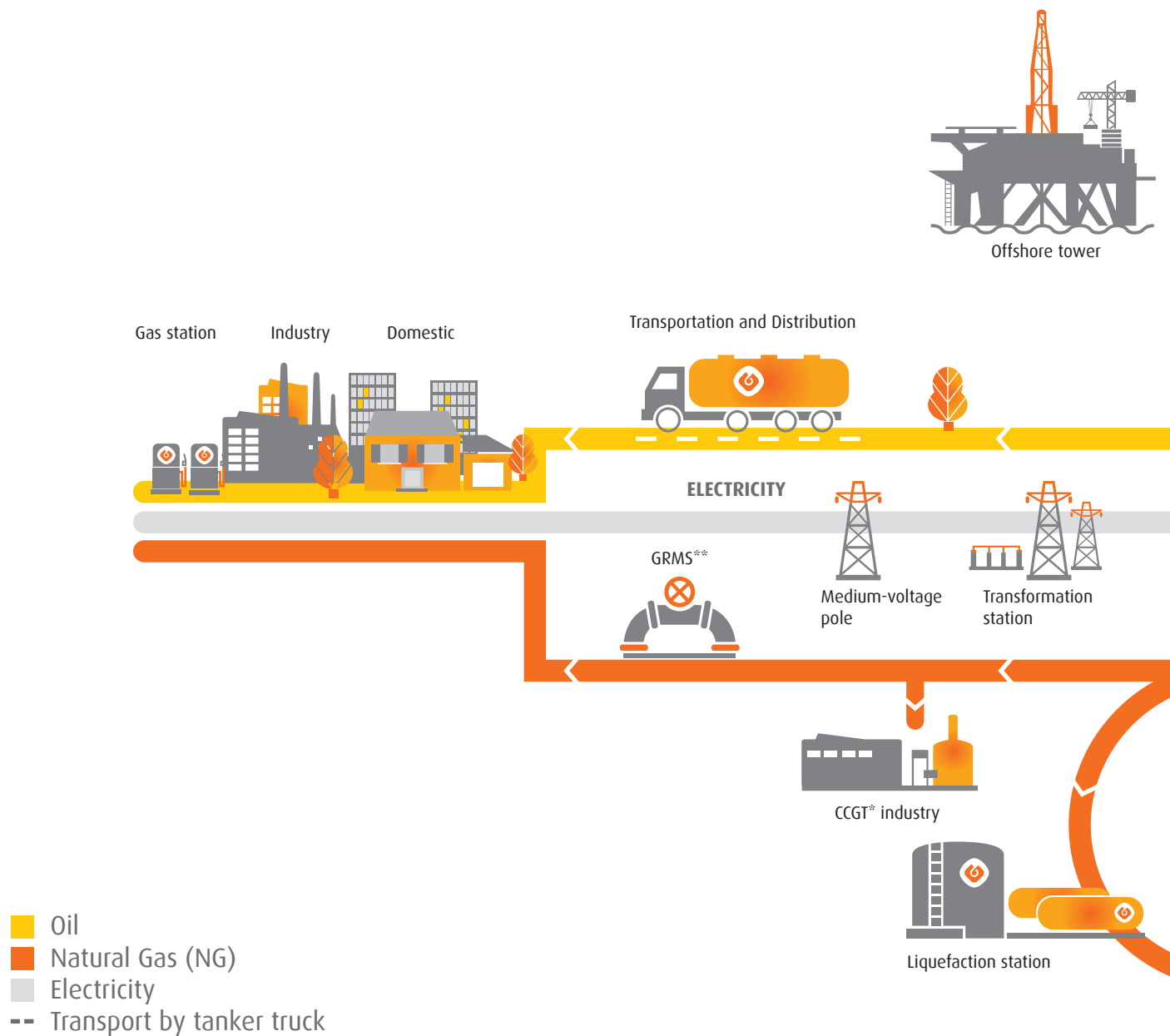
Gas & Power

<sup>1</sup> Considers 3P reserves and 3C contingent resources as of the end of 2013.

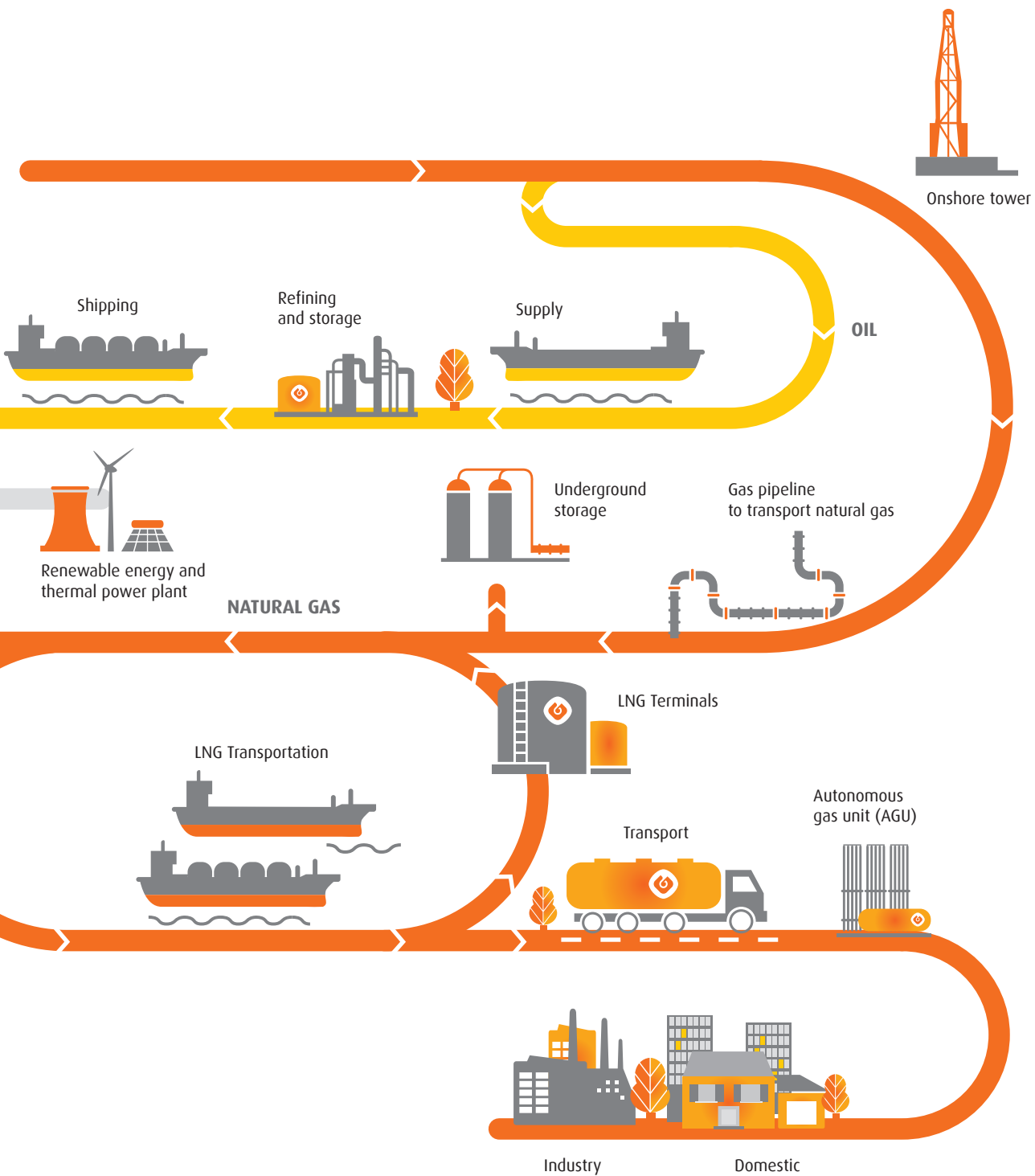
<sup>2</sup> Figures for 2013.

<sup>3</sup> Natural gas/LNG sales through the trading segment in 2013.

## 2.4 Multi-Energy in the value chain of Galp Energia



\*CCGT Power Station - combined cycle gas turbine  
 \*\*GRS- gas regulation and metering station





# Sustainability at Galp Energia

- 3.1 Galp Energia's sustainability strategy
- 3.2 Galp Energia's strategy on climate change



## 3.1 Galp Energia's sustainability strategy

The world today is facing great challenges. Governments, companies and businesses are faced with economic, ecological and social challenges that require effective action.

Everything is tied-in and, just like an ecosystem, the process of balance and dynamics between the different dimensions of sustainability allows for renewal and regeneration, compensating each component and the whole system.

All economic decisions have an impact on the Company and in our natural heritage. Likewise, generating economic value depends on human/social and environmental/ecological resources. A vision of long-term sustainability therefore becomes imperative.

Galp Energia has made its way with sustainability as a guiding principle. That is what drives the Company to base its strategy on the development and expansion of its businesses, and to invest in new opportunities, in innovation, R&D, quality and safety. All this while maintaining a solid capital structure, respecting the social environment and natural surroundings while engaged and aware of its responsibility to create value and reward.

The value generated by the Company is redistributed, directly or indirectly, among all stakeholders, in a wide variety of ways. For example, investments performed, especially in developing regions, create new business opportunities for partners, generate employment, boost the local economy and develop

human capital through structured and targeted training programmes. The innovative products and services provided also benefit clients, through their efficiency and quality, creating new opportunities for business.

The relevance of "sustainability" in the Company's strategy has led to the creation of the Sustainability Committee. The scope of this Committee cuts across the Organisation, defines and approves commitments and initiatives, and depends on the Executive Committee.

A sustainability plan was drawn up which will be common to all businesses and countries in which Galp Energia operates. Its content takes into consideration the materiality of the themes, which concern:

- global trends;
- stakeholders expectations;
- Company strategy;
- universal best practices in the sector with regard to the Company's corporate governance, the protection of the environment, defence of human and employment rights, as well as anti-corruption practices.

### Process of defining the sustainability plan



Issue	Initiative/Action	Deadline
Ethics, conduct and human rights	Provision of training on sustainability, the code of ethics, combating corruption and protecting human rights available for all employees through an e-learning tool.	2013-2015
	Guarantee that the audit process is applied to the operations of the Committees on Ethics and Anti-Corruption.	2014
	Review the internal audit plan with regard to the specific requirements on human rights, labour rights and corporate responsibility.	2014
	Review of the code of ethics.	2013-2014
Human capital	Continue the work plan of defining and implementing human resource (HR) policies at the various affiliates in Africa and in operations in Brazil.	2013-2014
	Development of training initiatives with employees in Africa.	2013-2017
	Joining the Company Forum for Gender Equality (IGEN).	2014
	In-house training to raise awareness of sustainability issues.	2014-2017
	Develop action plans in line with employee expectations measured via the survey on workplace morale for corporate human resources management.	2014-2015
	Promote the new corporate values throughout the Company.	2014
Stakeholders/ Customer Relationship	Implement Galp Energia brand repositioning reinforcing the topic of sustainability, which will involve getting input from stakeholders.	2013-2014
	Beginning of the "customer Ombudsman" activity.	2014
	Against a background of increasing energy costs and taking into account its impact on customers' budgets, develop offers with advantageous conditions, namely the Galp On service, a competitively priced tariff plan for the electricity and natural gas free market.	2013-2014
	Extend the process of assessing customer satisfaction in different areas.	2013-2015
Stakeholders/ Surrounding communities	Define the critical financial Key Performance Indicators (KPI) related with social responsibility.	2014
	Continue the programme for raising awareness and publicising safety conditions with the community - Alliance for Road Safety and Prevention project.	2013-2015
	Foster participation in volunteer programmes promoted by Galp Voluntária.	2013-2017
	Develop and implement a social responsibility programme based on the Millennium Goals that cover various regions where Galp Energia operates.	2013-2015
	Promote the use of the cleanest energy solutions in the local communities in the different countries where Galp Energia operates.	2013-2017
	Implement a social responsibility management system in Portugal and in other countries (Spain, Brazil, Angola and Mozambique).	2015
	Develop a plan for setting up a technological college in Mozambique.	2013-2014
	Create a technical training programme in E&P for mozambicans.	2013-2014
Stakeholders/ Relationship with suppliers and partners	Improve qualification process of suppliers by implementing new tools in the suppliers management platform.	2013-2015
	Strengthen the audit process of key suppliers, ensuring compliance with sustainability requirements, namely HSE requirements and the code of ethics.	2013-2015
	Review the procurement policy, reinforcing environmental and social concerns.	2013-2015
Health, safety and environment (HSE)	Implement the audit programme to the G+ System.	2013-2017
	Setting quantitative goals for the Environment, Quality and Safety (EQS) annual indicators which are more relevant in areas with higher materiality.	2014
	Strengthening and improving processes for integrating EQS performance and employee performance assessment.	2014
HSE/Minimise impacts	Strengthen the monitoring associated with the reporting and investigation of loss of containment for understanding, awareness-raising and defining lines of action towards prevention.	2014-2017
	Control of discharges in E&P: definition of standards and integration of best practices.	2014-2015
HSE/Minimising the depletion of resources	Implement campaigns to combat desertification/deforestation in Malawi, Mozambique, The Gambia and in Guinea-Bissau.	2015
	Promotion of an efficient use of water in administrative and industrial activities.	2015
	Draw up guidelines for the implementation of projects to improve biodiversity.	2015
	Participation by Galp Energia in a project related to the theme of water (e.g.: adaptation of the Global Water Tool for Portugal and Spain).	2014
HSE/Promote safety	Minimise the generation of wastewater and minimise water consumption in industrial activities (e.g.: Sines Refinery).	2014-2017
	Develop a road safety plan for the transport of goods and products for Brazil and Mozambique (E&P and Biofuels).	2013-2015
Climate change	Develop awareness raising and prevention programmes on AIDS, malaria and tuberculosis for Africa's operations.	2013-2017
	Implement Galp Energia's strategy for climate change.	2014-2020
Innovation	Implement the R&D strategic plan for E&P operations in Brazil.	2013-2017
	Promote R&D projects on the strategic axes defined: energy efficiency, sustainable mobility and renewable energy, in alignment with the corporate strategy.	2013-2017

For more detailed information on the current status of the actions defined in the 2013 sustainability strategy, see Appendix IV.

## 3.2 Galp Energia's strategy on climate change

Being aware of the importance of this issue and in order to consolidate the strategy outlined, Galp Energia has revised its strategy for climate change, from the perspective of continuous improvement. This review is based on two premises: (1) the importance of continually reflecting on the expansion of activities and the increasing focus on E&P, as well as market trends having an impact on the Company value chain; (2) the urgent need to include adaptation to climate change as a complement to mitigation, to ensure the proper management and "cost-effectiveness" of Company risk and responsibility towards its stakeholders. Taking into consideration the Group's business strategy, its sustainability commitments and respective portfolio, the report outlines the way this review was conducted, the main results and future courses of action for the period 2014-2020.

It should be noted that this review required the integration of the strategy adopted in 2012, in a conscious and harmonised manner. Reducing fuel emissions and promoting energy efficiency throughout the value chain remain firmly at the heart of the strategy for the period 2014-2020.

### Review of climate change strategy – main results

Amongst the main results of the review process for the climate change strategy, we would like to highlight the following.

- The definition of the corporate vision for climate change, in line with Company business strategy with the focus on the main themes:
  - efficiency/minimising the intensity of emissions;
  - research, innovation and technological development;
  - the expectations of relevant stakeholders.
- The definition of corporate policy on climate change, comprising the major commitments addressed in the strategic plan, which include the promotion of:
  - responsible growth in exploration and production;
  - energy efficiency and minimisation of the intensity of emissions in operations undertaken;
  - innovation, research and development of more efficient solutions in energy and environmental terms in its various operations and products.
- The corporate strategic plan for climate change based on four fundamental axes, fed by strategic objectives.

### Strategic Axes

Axis I – Responsible exploration and production.

Axis II – Efficient refining and marketing.

Axis III – Innovation, research and development and promotion of efficient technologies.

Axis IV – Anticipating trends and the expectations of stakeholders as regards energy and climate.

### Assessment of risks and opportunities

Under this project, an assessment was made of the risks aligned with the corporate risk management model defined by Galp Energia. Given the specific nature of the analysis required, it was imperative to apply an approach to risk and opportunities assessment specific to this area. To be precise, the level of risk exposure was obtained by assessing the probability and impact of key risks identified, and these were grouped into different categories of risk.

Risks classified as having a high level of exposure were therefore considered more significant for the Galp Energia strategic plan.

In addition to the risks, the main opportunities for Galp Energia were also listed in the area of climate change. These were classified in terms of relevance, on a scale from "low" to "very high". The opportunities classified as "of very high importance" were considered more significant for the Galp Energia strategic plan.

## Strategic plan for climate change

## Responsible E&amp;P

## STRATEGIC OBJECTIVES &gt; GUIDELINES

- Consider criteria related to climate change in the investment phase, preserving natural gas resources in the E&P portfolio.
- Achieve the best market benchmarks in terms of emissions intensity in the operations phase.
- Connect social responsibility programs with E&P and climate change strategies.
- Incorporate an assessment of exposure of infrastructure to the physical risks of climate change into the decision-making process.

## MEASURES

- In new projects, identify the best technologies in terms of energy efficiency to use in each type of activity.
- The production of natural gas is expected to reach an annual compound growth rate of at least 50% between the years 2013 and 2020.
- Increase the natural gas proved reserves and production.
- Scale 100% of new development projects and production to zero flaring.
- Ensure the use of best practices and technologies in E&P activities to increase energy efficiency and reduce the intensity of emissions.
- Gradually reduce the difference between the amount of gas flared by hydrocarbons produced and the oil and gas sector average (OGP data), with the aim of not exceeding 25% in 2020.
- Gradually reduce the difference between direct CO<sub>2</sub> emissions per hydrocarbons produced and the oil and gas sector average (OGP data), with the aim of not exceeding 15% in 2020.

## Efficient R&amp;M

## STRATEGIC OBJECTIVES &gt; GUIDELINES

- Gradually evolve towards the best market benchmarks in terms of emissions intensity and energy efficiency.
- Identify and mitigate impacts associated with trends and regulatory requirements, particularly with regard to emission limits in the refining phase.
- Identify exposure, in the medium term, to the physical risks of climate change and draw up plans or adaptation measures.
- Connect social responsibility programs with R&M and climate change strategies.

## MEASURES

- Implement energy efficiency initiatives at the refineries.
- Monitor the change in carbon markets and manage the portfolio of Galp Energia licences across all areas.
- Take part in group discussion and development of new standards/regulations/laws to anticipate trends and new legal requirements specific to refining [e.g., CONCAWE, European Petroleum Industry Association (Europia), Portuguese Petroleum Company Association (APETRO)].
- For 100% of new projects involving the expansion of activity, consider reviewing the physical risks of climate change.

## Innovation, research and development and promotion of efficient technologies

## STRATEGIC OBJECTIVES &gt; GUIDELINES

- Ensure that innovation and research strategy includes areas of activity related to climate change.
- Monitor emerging technologies and understand their impact on business and the various markets.
- Promote research and production of biofuels, maximizing the position in the value chain wherever is relevant.
- Promote research, development, implementation of services and innovative solutions to improve energy efficiency in operations, clients and partners.

## MEASURES

- Allocate a specific budget in the R&D strategic plan for E&P activities in Brazil for the development of projects related to energy efficiency and mitigation of greenhouse gas emissions (GGE).
- Annual increase by 5% in the number of customers with access to energy efficiency deals (green customers) as against the previous year.
- Establish partnerships with the national and international science and technology community to carry out specific energy efficiency projects and reduce GGE, including:
  - Galp 20-20-20 programme;
  - Advanced training (PhDs) to Galp Energia employees in specific areas related to energy efficiency and mitigation of greenhouse gases.
- Through implementation of the Galp 20-20-20 programme, achieve a reduction by 10 to 15% in energy consumption (relative to the base line before the project).
- Produce raw materials for biofuels, specifically palm oil (Brazil - Belém project).
- Produce biodiesel:
  - from non-food waste raw material (Portugal - Enerfuel project);
  - from 2<sup>nd</sup> generation material through HVO co-processing technology (Portugal - Sines Refinery).
- Achieve, by 2020, 10% replacement of fuel by renewable energy sources for road transportation, ensuring a minimum 60% reduction in GGE during the life cycle.

## Anticipate trends and expectations of stakeholders in the area of energy and climate

## STRATEGIC OBJECTIVES &gt; GUIDELINES

- Ensure that the topic of “climate change” is included in the development and monitoring process of the expectations of relevant stakeholders.
- Anticipate the impact of industry trends and create active participation in policy-making processes in the context of climate change.
- Monitor and report the Galp Energia carbon footprint and promote the adoption of practices that minimise its emissions.

## MEASURES

- Participate in working groups and in discussion of new standards/regulations/laws to anticipate trends and to ensure compliance with all the new legal requirements [e.g.: CONCAWE (ADH - Marine Fuels; ADH - Aviation Fuels), Europia, APETRO, Committee on Sector Standards for NG in transport, etc.].
- Analyse the materiality of the categories to be included in the carbon footprint (including scope 3 - upstream and downstream).



The carbon footprint is defined as the total set of GHG (Greenhouse Gas) emissions caused directly and indirectly by an individual, organization, event or product.

In 2013 Galp Energia reinforced its commitment to determine the carbon footprint and widened the range covered, including, amongst others, information relating to Galp Energia's retail

business in Africa, E&P (operated blocks), Biofuels and Bitumen plant. Determining GHG emissions enables the Company to track and analyse emission sources and helps monitoring the strategy on climatic changes.

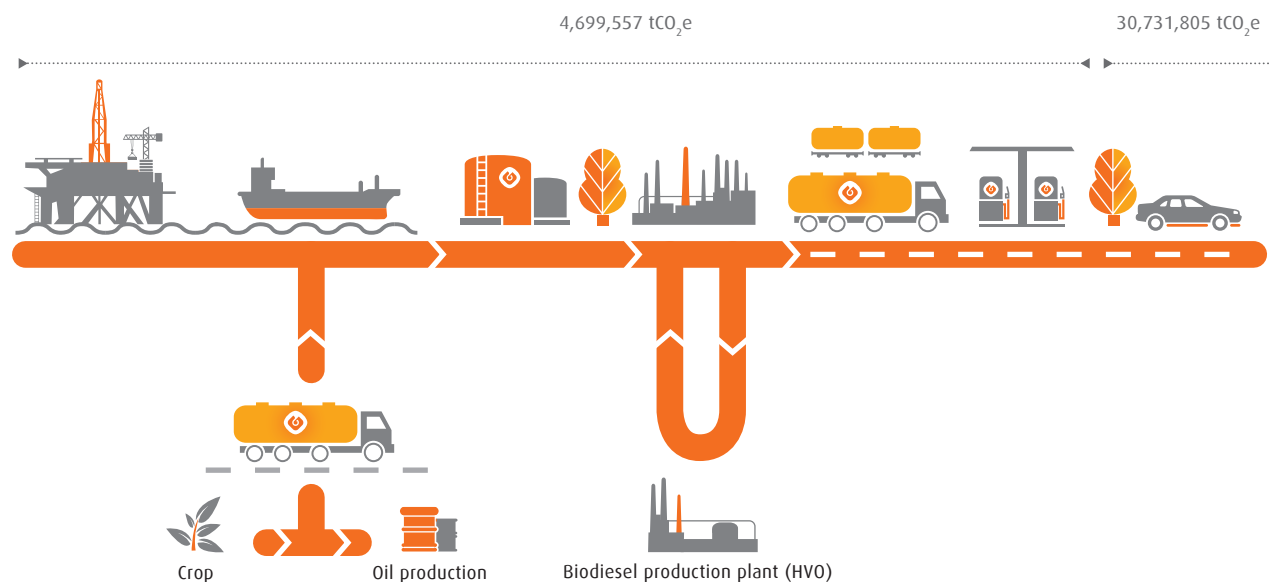
### Summary of emissions

unit: tCO <sub>2</sub> e	A1	A2	A3	Total 2013	% Without the use of products
<b>Total without using products</b>	<b>4,148,633</b>	<b>154,510</b>	<b>396,413</b>	<b>4,699,557</b>	<b>100%</b>
<b>Total with using products</b>	<b>4,148,633</b>	<b>154,510</b>	<b>31,128,219</b>	<b>35,431,362</b>	<b>-</b>
E&P (operated)	4,088	0	0	4,088	0.1%
Refining	3,696,377	125,416	0	3,821,793	81.3%
Power	185,975	46	0	186,021	4.0%
Supplies & Logistics	4,781	8,125	352,269	365,175	7.8%
Distribution & Retail (Oil)	0	18,997	42,372	61,369	1.3%
Distribution & Trading (Gas)	241,263	223	0	241,486	5.1%
Others	10,626	1,677	1,732	14,035	0.3%
Biofuels	5,523	25	40	5,589	0.1%
Use of product	0	0	30,731,805	30,731,805	-
E&P (non-operated)	182,772	0	0	182,772	

Methodological notes in Appendix III.

The GHG emissions indicators, scope A1 and A3, were not subject to verification for Brazil activity in the Biofuels area.

### Limits of the carbon footprint in 2013



04



# Galp Energia's corporate principles

- 4.1 Governance model and codes of ethics
- 4.2 Risk management

## 4.1 Governance model and codes of ethics

Galp Energia is committed to and is governed by high ethical standards that address the principles of transparency and combating corruption. To meet this commitment, the Company has developed and implemented several tools for monitoring and control, including procedures and internal standards, adhesions to international initiatives and the establishment of committees.

### Internal procedures and standards

Galp Energia, as an Organisation with globally distributed operations and active in highly competitive markets, considers it crucial to manage its purchasing processes. In response to this challenge, it has reviewed the regulatory standard for purchasing to facilitate the creation of value for the Company's business, ensuring the recording and transparency of processes and promoting ethics and continuous improvement.

### Performance of the committees for monitoring and checking

In 2013, the committee for verification of compliance of the code of ethics received two requests for opinions, and found that none of the interventions explicitly violated the code of ethics.

In 2013, the committee for monitoring anti-corruption policy did not receive any requests for clarification or questions on the application or interpretation of anti-corruption policy. In 2013, the committee continued monitoring a situation of possible irregularity, which was reported in 2012 and sent to the Central Internal Audit Department, resulting in an internal audit without recommendatory or disciplinary consequences.

Consult Galp Energia's code of ethics.



### Whistle-blowing policy

Galp Energia adopted another mechanism for the prevention of irregular acts through a policy of reporting irregularities. This provides all employees, shareholders and other stakeholders with a procedure that enables them to report, either openly or confidentially, any knowledge of irregularities and illegal activities in any area of the Company.

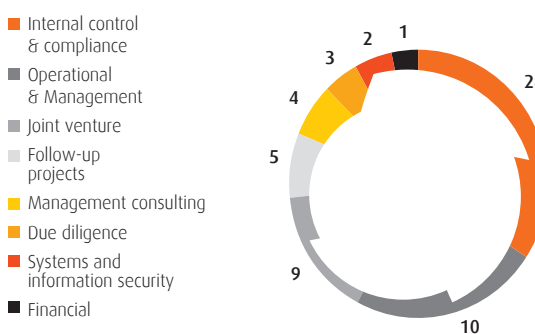
The Supervisory Board, as an independent entity, has the power to receive communications on irregularities presented by the aforementioned parties, and to inform the Board of Directors and the General Shareholders Meeting of any irregularities detected and the procedures used to verify and correct them.

Galp Energia thereby makes a mechanism available to all employees, shareholders, customers or suppliers which allows them to communicate, confidentially, by letter or by email (irregularidades@galpennergia.com), information about possible irregularities. This procedure aims to promote a culture of responsibility and ethics, as well as prevent or stop incorrect or unlawful practices.

### Internal audit

The underlying aim of the Central Internal Audit Department is to identify the main risks to the Organisation and validate in an objective, systematic and independent way the control mechanisms that comprise the system of internal controls from an integrated perspective. During 2013 internal audit projects were carried out in all the business units of the Galp Energia group.

Number of projects by type of internal audit



Within the scope of its activities in 2013 the Central Internal Audit Department considered the main concerns arising from the commitment to the sustainability strategy, in particular, compliance with the regulations and procedures that comprise the Organisation's governance model, the provisions of the code of ethics, the principles of anti-corruption policies and the specific issues of human rights, employment rights and corporate responsibility.

### Internal audit programme for the environment, quality and safety

In 2013, the internal audit programme for the environment, quality and safety retained its strategic orientation of maximising the use of available resources and consolidating the audit process, in particular by improving the monitoring of corrective actions arising from audits undertaken. In 2013, 51 audits were conducted, involving 74 internal auditors, a total of 115 stakes, and five external auditors with 19 stakes.

### Certifications

In 2013, Galp Energia obtained six new certifications, totalling 51 qualifications in the areas of the environment (ISO 14001), quality (ISO 9001), safety (OHSAS 18001) and energy (ISO 50001) and laboratories (ISO/IEC 17025).

For further details see:

<http://www.galpennergia.com/EN/sustainability/Safety-Health-Environment-Quality/Management-systems/Paginas/Management-systems.aspx>

## Sustainability Committee

The Sustainability Committee, whose mission is to ensure the integration of sustainability principles into the Group companies' management processes, had a full work schedule in 2013 and met five times.

Some of the matters dealt with by the Sustainability Committee were:

- the monitoring and updating of the sustainability strategy;
- the alignment of Galp Energia's sustainability practices with best international practices;
- the integration of sustainability practices in business development;
- the analysis and preparation of sustainability information for stakeholders.

## International initiatives

### UN Global Compact

Galp Energia, in the process of meeting its sustainability strategy, formally joined the United Nations Global Compact (UN) The Company thereby undertakes to respect the 10 universal principles on human rights, employment practices, environmental protection and anti-corruption, by establishing policies, setting objectives and targets, and implementing and monitoring measures. The annual report, *Communication on Progress (COP)*, will describe how the Company has adopted the principles and supported the issues and broader objectives of the United Nations. Through this commitment, Galp Energia aims to realise its principles, and simultaneously meet the needs and expectations of its stakeholders and ensure integration and continuous communication with the communities and markets in which it is involved.

### Extractive Industries Transparency Initiative (EITI)

In 2010, Galp Energia established a commitment to ensuring the transparency of revenues generated from the extraction and production of oil and gas through its membership and support of EITI principles.

In 2013, the Company guaranteed compliance with these procedures through the distribution of funds delivered to State authorities in Brazil, Mozambique and East Timor.

### Payment to States

Country	2012	2013
Brazil	€111,448,571	€113,649,527
Mozambique	€302,388	€989,564
East Timor	2010-2011	€192,735

See the Galp Energia support statement to EITI in:  
<http://eiti.org/supporters/companies/galp-energia>.

## Human Rights

Galp Energia assumes its responsibility in the communities in which it operates with regard to respect for human rights. In 2013 the Company established a corporate policy for the protection of human rights in all countries in which it operates. This policy is aligned with internationally recognised standards, namely the Principles of the United Nations Global Compact, the UN Universal Declaration of Human Rights and with the International Labour Organisation, as well as the recommendations of ISO 26000: 2011 and the requirements of NP4469-1: 2008, IQnet SR10: 2011 and ABNT NBR16001: 2012, on this subject.

In 2013, the diagnostic phase of the implementation of the management system for corporate responsibility was completed.

As a member of international associations, Galp Energia participates in international forums and has access and privileged knowledge on best practices and guidelines related to human rights.

## 4.2 Risk management

During 2013 an intensive reassessment was carried out of the main risks to which Galp Energia is exposed. The Company groups its main risks into four broad categories: strategic, operational or compliance, external and financial. Risk reduction initiatives were drawn up in order to adjust exposure to these risks to the level of shareholder tolerance. Among the risks that may affect Galp Energia activities or its financial position are those published in the Annual Report & Accounts 2013.

Galp Energia has established policies and procedures to monitor, measure and manage the risks to which it is exposed. The purpose of this is to assist business segments to achieve their respective goals and monitor the potential impact of risks on results.

The operation of the Galp Energia risk management system is guaranteed through:

- continuous monitoring of their adequacy and effectiveness;
- monitoring of corrective measures for any shortcomings in the system;
- ongoing monitoring of risk levels;
- implementation of control mechanisms for the various risks.

The internal control system implemented is based on guidance from the Committee of Sponsoring Organisations of the Treadway Commission (COSO) on the main aspects of Galp Energia's internal control: control environment, risk assessment, monitoring, information and communication.

As the inherent risks and effectiveness of internal controls rely on endogenous and exogenous variables, periodic reassessments of the risk to the Group's main businesses are carried out so that there is alignment between the risk profile set out by the Executive Committee and the risk response from the business units.

More detail on risk management and the internal control system can be found in the Annual Report & Accounts 2013.

#### Risk assessment methodology of the Galp Energia group



#### CASE STUDY - QUANTIFICATION OF CREDIT RISK – OIL BUSINESS IN SPAIN

Galp Energia has promoted the standardisation, systematisation and assessment of risks, with consequent benefits for the internal control systems of different business units. Internally, but not forgetting the importance of this issue abroad, a systematisation and quantification of credit risk was carried out in every Galp Energia Oil Company in Spain.

The objectives of the project were:

- develop a debt prediction model to support management;
- support the construction of a process of risk management which analyses and considers mitigating aspects based on a reasoned analysis of management options, as far as possible, in realistic scenarios or forecasts.

Thus, conditions for the quantification of credit risk were defined, taking into account their statistical relevance to a recent historical period, namely by:

- using the Monte Carlo simulation for predicting results;
- using the concept of “New Debt Owning”.

From the results of study, it is worth highlighting:

- the forecast for the commercial behaviour of Oil businesses, by sales channel, with an associated degree probability;
- the ability to simulate variations in some scenarios and then check predictions of their impacts.

Analysis of this subject allows us to anticipate the economic impact of current business policies, raising the need to define and revise internal policies and manuals, but also to analyse the effectiveness of external mitigators (risk transfer). It allows the business to have an additional support tool to achieve their respective goals and monitor the potential impact of risks on results.





# Sustainability in business

- 5.1 Exploration & Production
- 5.2 Refining & Marketing
- 5.3 Gas & Power
- 5.4 Other businesses



## 5.1 Exploration & Production

### Presentation of the Galp Energia E&P portfolio

From the current Galp Energia exploration portfolio, the presence of the Company in the Eastern Atlantic region stands out, reflecting its strategic decision to be present from the start in large projects of emerging importance in the oil and natural gas sector.

Stressing the undisputed significance of Africa and the Atlantic basin for Galp Energia's growth and international expansion strategy, the development of existing resources will help it achieve its goal of increasing its current production from about 25,000 barrels of oil and natural gas per day to 300,000 over the next decade.

#### Reserves and resources (mboe)

	2011	2012	2013
Proven reserves (1P)	145	154	178
Proven and probable reserves (2P)	399	640	579
Proven, probable and possible reserves (3P)	709	783	707
Contingent resources (3C)	2,672	3,245	3,923
Exploration resources mean unrisked estimate	2,821	3,203	2,495

Reserves on a net entitlement basis. Contingent and exploration resources on a working interest basis.

#### Main indicators

	2011	2012	2013
Average working interest production (kboepd)	20.8	24.4	24.5
Average net entitlement production (kboepd)	12.1	18.1	20.5
Average sale price (\$/bbl)	107.1	101.3	100.8
Operating costs (\$/bbl)	15.9	13.3	13.7
Amortisations (\$/bbl)	34	20.6	22.5
EBITDA RCA (€m)	251	374	396
Operational result RCA (€m)	130	245	231
Investment (€m)	299	653	723

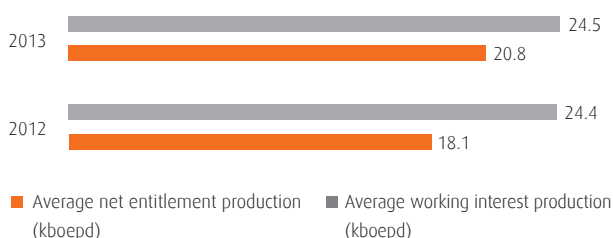
Amounts related to investment for 2011 include capitalized interest, not comparable with the figures from 2012.

In 2013 Galp Energia recorded an average working interest production of 24.5 kboepd, in line with 2012's, where the increase registered in Brazil offset a drop in Angola.

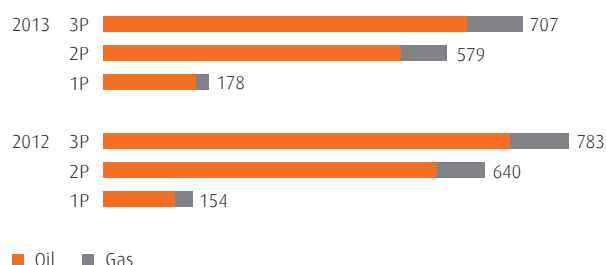
In Brazil, production of oil and natural gas in 2013 totalled 12.5 kboepd, rising by 21% over 2012.

In terms of CO<sub>2</sub> emissions per tonne of oil equivalent produced, the company recorded 153 kg CO<sub>2</sub>/toe, i.e. a decrease around 5% in relation to the previous year.

#### Production (kboepd) (working interest and net entitlement)



#### Reserves (mboe)



### Morocco project

In Morocco, the farm-in process was completed and subsequent transfer of the operation of the blocks owned by the Australian Company Tangiers to Galp Energia.

In 2013 Galp Energia made efforts to carry out a proper survey and preparatory work for drilling the first exploratory well, including acquisition of data from the seabed and an environmental impact study. This was the first offshore well drilled by Galp Energia as an operating Company.

## CASE STUDY - HSE IN E&amp;P OPERATIONS IN MOROCCO

Galp Energia expanded its exploration activity and production to North Africa - through a drilling project in the offshore Tarfaya Area – TAO1 in Morocco, an area covering 11,281 km<sup>2</sup>.

The HSE component comprises the following main phases.

<b>Regulations</b>	Compliance with regulations: the process of environmental impact assessment in accordance with Moroccan law and international standards. Selection of the best alternatives for the project in relation to HSE.
<b>Planning and control</b>	Integrated into the HSE governance model for the E&P business unit, the following relevant facts should be highlighted: <ul style="list-style-type: none"> <li>• incorporation of industry best practices and applicable standards;</li> <li>• integration of HSE in all consultations and selection of suppliers;</li> <li>• HSE criteria in the choice of equipment and critical processes;</li> <li>• ongoing identification and risk assessment in order to minimise it to tolerable levels;</li> <li>• establishment of agreements and partnerships with other operators;</li> <li>• ensuring compliance with HSE policy and requirements by all stakeholders.</li> </ul>
<b>Environmental and social management</b>	Oil Spill Contingency Plan (OSCP). Waste management plan. Assessment of environmental and social impacts in the project (e.g.: biodiversity, water quality, socio-economic activities). Identification of mitigation measures conducive to minimising the impact of drilling activity.
<b>Emergency management</b>	Emergency plan and contingency plan. Support in emergencies guaranteed by specialised teams and emergency equipment. Emergency response coordinated among operators in Morocco – establishment of agreements between parties.

## Amazonas project

The required fieldwork was carried out for gathering 2D and 3D seismic data from the blocks in Amazonas State, northern Brazil, where Petrogal Brasil has had stakes since 2009. At that time, on the tenth round, the consortium Petrobras (60% )/ Petrogal Brasil (40%) obtained the rights to exploration and research in three blocks located in the middle of Amazonas.

The geophysical survey in the rainforest is a multiple challenge to obtain quality data, not damage the sensitive environment and carry out work in operational safety. As the Amazon is an environmentally sensitive region, the work required a responsible approach, conducted with the strictest criteria to minimise the impact on the environment and ensure the health and safety of workers and local populations. The whole of Amazon is considered an endemic area for malaria, leishmaniasis and yellow fever, diseases transmitted by mosquitoes and quite common in the region. Therefore, field teams were accompanied by safety technicians, doctors and nurses, who constantly monitored the occurrence of endemic diseases in all of the 2,100 workers involved in the operations.

## Social and environmental projects in Block BM-S-11

Galp Energia continues to develop social responsibility and environmental protection programmes, through its stakes in consortia.

Under the programme of CO<sub>2</sub> offsetting \$R327,834 were paid in 2013 for the Fundo Amazônia (compensation of CO<sub>2</sub> emissions). Continuing the reforestation project of the Parque Natural Pedra Branca, and in response to the damage caused by two fires in 2013, an addition of approximately \$R610,000 was added to the project.

Environmental programmes provided for in the various environmental licences include the following:

- environmental education programme in Rio de Janeiro (covering about 48 neighbouring communities of the projects);
- fishing landing monitoring project, commencing in August 2013 and ending in 2015;
- design of socio-economic characterisation of the Fishing activity, starting in October 2013 and lasting one year.

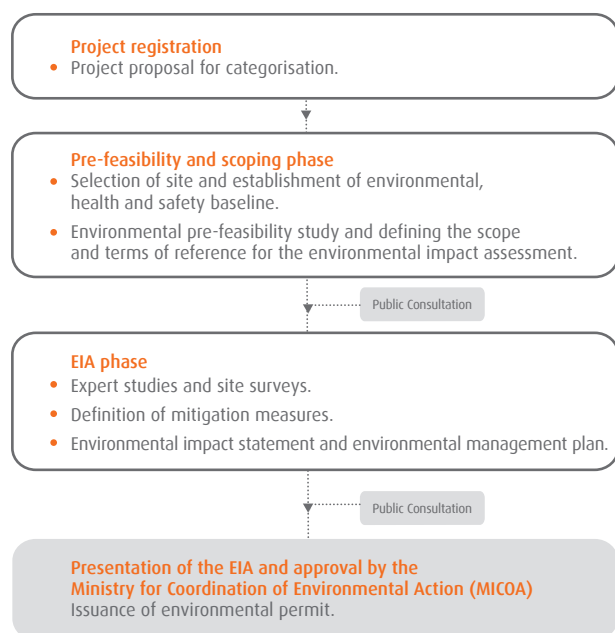
Galp Energia, by Petrogal Brasil, contributed in proportion to its participation in the consortium BM-S-11 (10%) for the development of the programmes listed.

## Mozambique project

### The increasing importance of natural gas in Galp Energia's E&P portfolio

As part of consortium operations in Rovuma Area 4, where Galp Energia holds a 10% stake, an Environmental Impact Assessment (EIA) was carried out in order to predict the impacts of the project on the existing physical, biological and socio-economic environment (baseline) and to identify measures to minimise impacts and maximise the positive aspects.

#### Flow diagram of the environmental impact assessment process in Mozambique



#### Contracted suppliers



##### LOCAL

Implementation of activities necessary to comply with the EIA process, such as local legislation and development of the environmental impact assessment and environmental management plan.

##### INTERNATIONAL

Implementation of specialised preliminary baseline studies and studies relevant to the process, to comply with EIA standards, health and safety defined for the E&P activity:

- Biodiversity and ecosystem.
- Geology, hydrogeology and geomorphology.
- Air quality and air emissions.
- Water quality and water management.
- Noise emissions.
- Impact on health.
- Social impact.

The key objectives of the project on the environment, health and safety are:

- accident-free zone;
- compliance with environmental legislation and national regulations;
- zero flaring target (except in emergencies);
- efficient use of water in the facilities;
- management of waste generated during all phases of project activities taking into consideration the requirements of applicable law and international standards;
- design of facilities to avoid and/or reduce any potential and impacts on biodiversity and ecosystems.

#### Overview indicators – Non-operational E&P blocks

Materiality		Indicator	2013	Δ [2012 – 2013]	
Block	Proportion to consolidated Galp Energia				
BM-S-11		Direct energy consumption by primary sources (TJ)	2,189	↑ 26%	Increase in scope of reporting.
Block 14	4.61%				
Others					
BM-S-11		Total consumption of untreated water (10 <sup>3</sup> m <sup>3</sup> )	1,776	↓ -14%	The salt water which is collected serves mainly to be injected to maintain reservoir pressure. In block 14 some injection blocks were closed.
Block 14	14.66%				
Others					
Block 14	13.24%	Effluents (10 <sup>3</sup> m <sup>3</sup> )	748	↑ 43%	This variation is due to a change in the methodology for calculating the indicator and does not represent worse performance.
BM-S-11		Flared gas (10 <sup>3</sup> m <sup>3</sup> )	15,093	↓ -53%	
Block 14	NA				
Others					The reinjection of gas in BMS-11 led to the minimisation of flare burning in 2013. On the other hand, there was better performance and interruption to the Kuito FPSO operation.
BM-S-11		CO <sub>2</sub> emissions (t)	182,772	↓ -2%	
Block 14	4.50%				
Others					

The block BM-S-11 is in Brazil and the block 14 in Angola.

## 5.2 Refining & Marketing

The Refining & Marketing (R&M) business is centred on the Iberian Peninsula, although the Company continues to expand its marketing of oil products in Africa. Galp Energia owns two refineries with total processing capacity of 330,000 barrels of oil per day (kbopd). The marketing of oil products positions the Company as one of the most important Iberian players.

### Main indicators

	2012	2013
Crude oil processed (kbbl)	81,792	87,528
Sale of refined products (mt)	16.4	17.2
Sales to direct clients (mt)	9.8	9.9
Number of service stations	1,486	1,435

### Energy efficiency At the refineries

The last two years represent a milestone in the history of refining for Galp Energia. The construction of the new facilities was part of a global project for upgrading Galp Energia refineries, aimed at adapting the refining system to new trends in demand in the fuel markets.

The year 2013 was marked by the entry of the hydrocracking complex at Sines Refinery into stable operation, as well as cogeneration at Matosinhos Refinery, ushering in a new phase of integrated operations for the Galp Energia refinery.

#### Sines Refinery

In 2013, the Sines Refinery started a new production cycle, moving from the process of cracking to hydrocracking, and produced enough diesel not only to supply the domestic market, but also for export.

This new configuration allows Galp Energia to optimise its resources, with the ability to enhance production of gasoline or diesel fuel, according to market needs and product value. Galp Energia thus moved from being an importer of diesel to being an exporter. The new units were built according to the best available techniques and using the latest technologies, which has improved the energy efficiency of the refinery, resulting in a subsequent reduction in its Energy Intensity Index (EII).

In Sines Refinery, and despite the 1<sup>st</sup> quarter have been penalized by the stabilization period of the new units, it was achieved a cumulative reduction of 13% in EII compared to 2008.

#### Matosinhos Refinery

At the Matosinhos Refinery, in terms of energy optimisation projects, 2013 saw the start of the cogeneration unit. This contributed significantly to the optimisation of the production of steam and electrical energy, and the replacement of the heat exchanger load/wastewater from the Reforming II unit (U3300) with more up-to-date exchanger technology which

brought considerable energy gains and the installation of UN-3000 exchange train and the UN-3700 and H-3001 revamping.

Thus, a reduction was achieved corresponding to a cumulative reduction of 16% in EII, compared to 2008 consumption.

### Results of energy optimisation projects

Year	Projects	Poupanças previstas (Gcal/ano)
2013	Cogeneration	147,849
2013	Exchanger load/effluents	27,500
2014	ISOMAR	152,825

Specific emissions expressed in kgCO<sub>2</sub>/complexity weighted tonne (CWT) (benchmark recognised by the European Commission for the refining industry) maintained their downward trend in 2013 and stood at 36.3 kgCO<sub>2</sub>/CWT on this index. This figure, slightly below the European sector average (37 kg CO<sub>2</sub>/CWT) figure shows the positive change in the performance of refineries as a whole.

### At service stations

Since 2012 a systematic approach has been developed at service stations, in order to implement a combination of measures to enhance their energy efficiency and thereby reduce energy waste, without jeopardising the level of service. The project is now at the stage of monitoring results and has been tested at a total of 100 filling stations.

Typology of 12 energy efficiency measures adopted:

- Optimisation of equipment and processes.
- Promoting changes in behaviour.
- Reducing waste.

Duration of concept test:

- Six months.

Savings in overall energy bill:

- 10% in electricity consumption.
- 450 tCO<sub>2</sub> avoided.

### TOP REF

Galp Energia carried out a business case for the development and implementation of TOP REF, an energy and resource efficiency project at the Sines Refinery.

The TOP REF project aims to develop and validate specific indicators, methodologies and non-invasive tools focused on the development of resource efficiency in energy-intensive continuous industrial processes in the non-ferrous, chemical and petrochemical sectors. These methodologies and tools will achieve the ultimate impacts of TOP REF at Sines Refinery:

- increase the potential for energy efficiency (by up to 5%);
- reduce production costs (by up to 15%);
- significantly reduce environmental impacts (CO<sub>2</sub> emissions, aquifer footprint, pollutants, harmful emissions, etc.).

TOP REF develops and demonstrates an intersectoral, robust methodology focused on resource efficiency, which will be validated by demonstrating three pilots in three different sectors under real conditions.

The main results of the project include:

- the development of key resource indicators (KRI) to implement the methodology and normalise the eco-efficiency of industrial processes;
- the KRI will help measure the decoupling of environmental impacts from economic growth and resource use;
- the creation of an ecolabel based on the KRI.

TOP REF is a project financed by the 7<sup>th</sup> EU Framework Programme.

### Sustainable mobility

Galp Energia, assuming its responsibility to contribute to the sustainable development of the environment in which it operates, has chosen sustainable mobility as one of the focus areas.

On this theme several initiatives and projects have been developed with impact on different stakeholders.

#### Sustainable mobility



### CASE STUDY - LPG TESTS ON HEAVY GOOD VEHICLES

Galp Energia, in partnership with the Instituto Superior Técnico (IST) and Instituto de Engenharia Mecânica (IDMEC), has encouraged LPG injection tests in the diesel engines of heavy goods vehicles owned by partner companies such as Cisterpor, Barraqueiro and Transgama. This study viewing to acquire specific knowledge and monitor fuel consumption, lasted 18 months and included monthly laboratory tests on engine oil.

The test results on a heavy goods vehicle showed that:

- there was an increase in power and torque after adding the hybrid diesel/LPG system;
- the incorporation of LPG represents a saving of about 12% in diesel fuel consumption.

Additionally, with the reduction of consumption, there is a reduction of approximately 30% in CO<sub>2</sub> emissions, which ensures the reliability of the engine and its integral operation.

### LPG Auto

Considering that behavioural change is one of the pillars of sustainable mobility, Galp Energia has promoted several initiatives to increase customer awareness of the importance of saving and environmental conservation.

In an initiative to promote LPG Auto in the energy mobility chain, Galp Energia initiated a plan to expand its network (10 service stations per year) and several attractive campaigns for their clients, particularly through partnerships with the automotive industry.

LPG Auto sees the main advantages as savings in fuel consumption (40% vs. gasoline and 20% vs. diesel) therefore making it an environmentally-friendly fuel (reduction of CO<sub>2</sub> emissions, particles and nitrates).

### Energetically efficient fleet challenge

Galp Energia, in partnership with IDMEC/IST and with the support of the Innovation Incentives System (FAI), devised an initiative to demonstrate and quantify the impact of using on-board technology in vehicles, combined with practical training in eco-driving.

Thus, a pilot project will be developed involving 100 vehicles in the business world, resulting in the modification of behaviours, reducing fuel consumption and simultaneously strengthening the customer relationship.

Initially, 10 Galp Energia client companies from the transport sector will be chosen to participate in the project, and after an elimination round just four will be selected, involving a group of 40 cars.

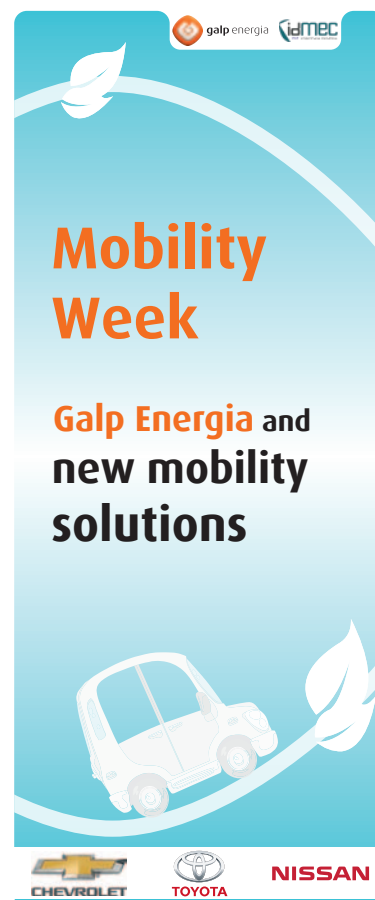
At the end of the challenge, the Company to be selected will be the one whose fleet of vehicles demonstrated the most efficient driving and the best driver will be selected. In 2014, the results of this initiative will be announced, with expected savings in fuel consumption of over 10% and therefore reduced GGE.

### Nucleus of R&D of fuel

In 2013, the installation of the Nucleus of R&D of fuel was completed, in partnership with the University of Coimbra (UC) and the Association for the Development of Industrial Aerodynamics (ADAI). In addition, preliminary calibration tests were also conducted for the methodology to be used in road tests, which will complement the engine tests to be carried out according to the R&D plan for 2014.

The Nucleus of R&D of fuel is a programme joint with the UC and ADAI with the following objectives:

- development of methodologies for the study of fuel performance when mixed in different proportions with biofuels and additives;
- laboratory tests in order to evaluate the performance of various mixtures as well as emissions and wear;
- evaluation of road behaviour, on a batch of vehicles, in order to confirm the data obtained in the laboratory tests.





## 5.3 Gas & Power

Galp Energia distributes and supplies natural gas in the Iberian Peninsula, and has been consolidating its activity in the power business. The Company has managed to position itself as the second largest player in the Iberian market through the business of supply of natural gas. Galp Energia has also been focusing on trading in liquefied natural gas (LNG).

In the context of sustainability, the Gas & Power business unit has been focusing on providing technical and energy efficiency services, in addition to the business of electricity and supply of natural gas to individual and business segments.

More than simply an energy supplier, Galp Energia aims to position itself as an energy partner for its customers, helping them manage and reduce their electricity bills, either through competitive tariffs or by reducing consumption, with a view to the rational and efficient use of energy.

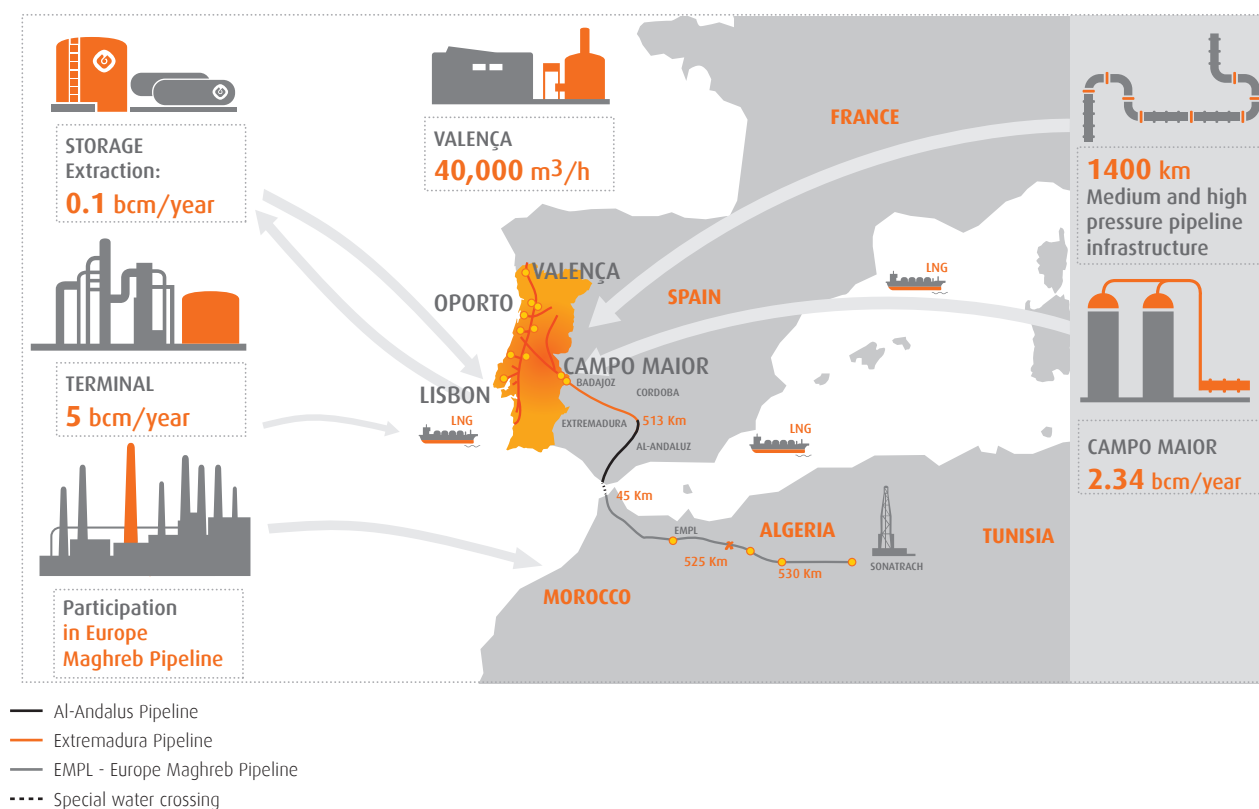
### Main indicators – Natural gas

	2012	2013
Sales of natural gas (millions of m <sup>3</sup> )	6,253	7,090
Natural gas distribution network (km)	11,948	12,159
Number of natural gas clients ('000)	1,261	Around 1,300

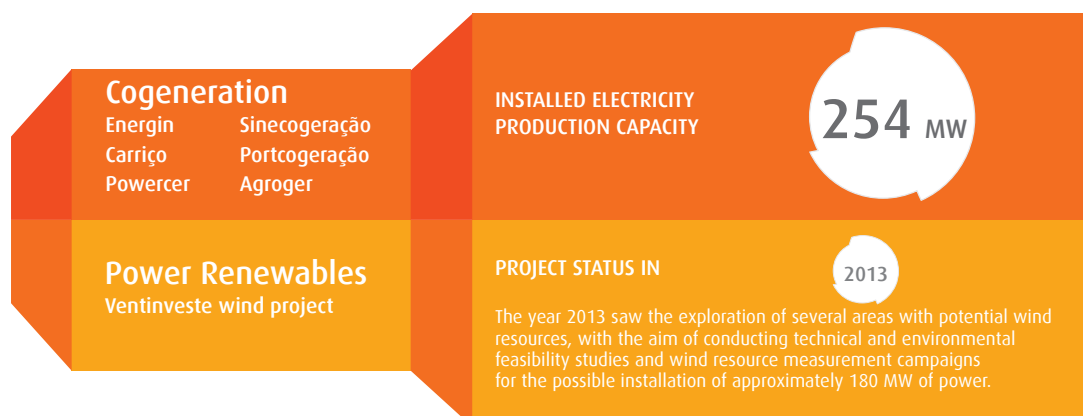
### Main indicators – Electricity

	2012	2013
Sales of electricity to the grid (GWh)	1,298	1,904
Market share (volume)	3.6%	5.9%
Electricity production from renewable sources (MWh/year)	30,044	33,370

### Portfolio of natural gas



## Galp Power portfolio



## Projects

### Ventinveste

Ventinveste, company owned by Galp Energia, is developing a project to build wind farms. In 2013, the following activity was carried out:

## Ventinveste projects

Wind farm	Characteristics	Location	2013
Vale Grande Wind Farm	Total power: 12.3 MW Six wind turbines	Arganil	Produced a total of 31.2 GWh of electricity.
Picos-Vale do Chão Wind Farm	Total power: 22.5 MW 11 wind turbines	Góis and Castanheira de Pera	Construction planned for 2014.
Douro Sul Wind Farm	Total power: 139.4 MW Two sub-farms	Moimenta and Sernancelhe	Licensing in final phase.
Maúña Wind Farm	Total power: 20.5 MW 10 wind turbines	Batalha and Leiria	Favourable environmental impact declaration issued.
Três Marcos Wind Farm	Total power: 24.6 MW 12 wind turbines	Castro Daire	Favourable environmental incidence declaration issued. Start of licensing phase.

## Promotion of natural gas vehicles

### – Galp Energia's participation in the Blue Corridor project

LNG Blue Corridors is a European project involving a consortium of 30 business entities (including Galp Energia), from 12 European countries. This consortium includes the most important players in the heavy goods value chain: energy operators, vehicle brands, equipment manufacturers, carriers, approval/accreditation organisations; etc.

The objective of this project is to demonstrate that NG is an alternative to conventional fuels, including diesel, in the heavy haulage industry. The expected impacts of implementing LNG Blue Corridors are the increased use of natural gas motor vehicles, a reduction in GGE, the increased use of NG vehicles, including LNG and the implementation of the standard EURO VI, and regulatory harmonisation.

This project is in line with the EC communication, *Clean Power for transport: an European alternative fuels strategy*, and the corresponding proposal for a directive which lays down the minimum requirements for the introduction of an alternative fuel infrastructure and the common technical specifications, including charging points for electric vehicles and NG and hydrogen supply points.

To achieve the aforementioned objective, a route of LNG supply points along four corridors was defined, covering the area from the Atlantic and the Mediterranean, connecting Southern with Northern Europe and the West with the East. As a consequence, in 2014 Galp Energia will open two stations for supplying LNG, in Azambuja (Lisbon) and Matosinhos (Oporto).

## Smart Galp

The Smart Galp project, started in 2010, is an innovative solution for monitoring energy consumption which allows residential customers to access a monitoring service for electricity, natural gas and fuels, through an interactive online portal.

The project is currently in the results monitoring phase of the proof of concept, and the preliminary results point to a very positive experience of using the portal (even when compared to other solutions) and a strengthening of the customer relationship. Over the next year the results of the actual energy savings achieved by the pilot project will be presented.

In 2013, the Smart Galp project was awarded an honourable mention at the 6<sup>th</sup> Green Project Awards Portugal, in the Information Technology category, and was a finalist in the European Smart Metering Awards and the World Smart Cities Awards.



Check the website of Smart Galp.

## Performance

### Cogeneration

	2012	Carriço	Powercer	Agroger	Snecogeração	Portcogeração	2013
Power (MW)	121.2	32	7.2	8.8	82	82	212.0
NG consumption (millions of m <sup>3</sup> )	307.2	63.1	15.3	7.3	239.9	193.79	519.4
Fuel Gas consumption (millions of m <sup>3</sup> )	14.1	-	-	-	14.96	-	15.0
Electricity production (GWh)	926.2	241.55	42.25	32.98	683.92	584.77	1,585.5
Thermal production (GWh)	1,984.4	313.89	65.96	36.01	1,652.78	1,013.00	3,081.6
CO <sub>2</sub> emissions (t)	686,135	144,483	33,208	8,285	539,967	418,992	1,144,935

### Energy efficiency in natural gas

	2012	2013
Periodic inspections of gas receiving facilities (GRF) (*)	93	135
Awareness-raising initiatives on safety and operation of GRF	6	9
Energy audits for industrial natural gas customers	5	8
Customers' energy-efficiency training programmes	5	1
Thermographic analysis of industrial clients	28	24
Consumption monitoring and energy management system	12	13

(\*) Change in reporting methodology.

### Natural gas for vehicles (m<sup>3</sup>)

	2012	2013
Public transport companies	12,725,765	12,124,772
Other/private	65,665	1,457,864
<b>Total</b>	<b>12,791,430</b>	<b>13,582,636</b>

## 5.4 Other businesses

### Biofuels

#### In Portugal – Enerfuel

In 2013 Galp Energia opened Enerfuel, the first national plant producing biofuel from animal fats.

Enerfuel has an installed production capacity of 27 thousand tons of biofuel per year. The biodiesel produced is intended to be incorporated into diesel fuel, reducing CO<sub>2</sub> emissions by over 80% compared to fossil alternatives (according to the criteria of the European Directive on Renewable Energy), which represents a potential reduction of about 100,000 tons of CO<sub>2</sub> per year. Enerfuel also produces glycerine, used in the production of candles and the cosmetics industry, and fertiliser from renewable sources used in agriculture.

The start of this Company is an important step for Galp Energia in its strategy of combating climate change. It aims to contribute to the European targets of a 6% reduction in GGE emissions by 2020. It intends to meet the goals for the introduction of renewable energy into the transport sector in Portugal, which is for 5.5% of energy used today and around 10% in the near future.

The social impact of this new plant should also be highlighted. Locally it provides 15 direct and around 50 indirect jobs, which will contribute to increasing exports and reducing imports, since the raw material used is exclusively from Portugal.

#### In Brazil

Continuing the project to produce palm oil in Brazil for biodiesel production in Portugal, in the first months of the year Belém Bioenergia Brasil S.A. (BBB) planted 14,650 hectares of palm trees, of which 85% were planted in leased areas, and 3% and 12% were developed under partnership agreements and in new Family Units, respectively, amounting over 27,000 hectares installed in 2013.

A new land raising phase started in October, along with the preparation of new areas to be planted in 2014. It is expected to reach the 48,000 hectares of plantation, from the original plan, in 2014.

In late 2013, work was started to formalise the certification of sustainability throughout the value chain for the production of biofuels from palm oil produced in Brazil.

To this end, the *International Sustainability and Carbon Certification* voluntary certification sustainability scheme was selected, designed to meet the requirements of sustainable production and processing of biomass, enabling BBB to establish compliance with the sustainability criteria laid down in European legislation (Directives 2009/28/EC and 2009/30/EC).

The annual audit of all palm oil production focuses the verification of emission reductions, but also verification measures to protect biodiversity and the environment, ensuring respect for human rights of people directly and indirectly involved in the project, as well as local communities in areas of operation.

When reaching cruise speed, It is expected, with the project in full operation, that average production of palm oil is estimated at 250,000 tonnes per year in rehabilitated areas, which will allow them to regenerate their productive potential and recover their biodiverse environmental value. This production will be turned into second generation biofuel in Portugal, using processes which will ensure a reduction by over 60% in GGE over the life cycle as compared to the alternative mineral resource.

#### In Mozambique

The areas of *Jatropha* (*Jatropha curcas* Linn.), planted by Galpbúzi Agroenergia S.A. and MoçamGalp - Agroenergias de Moçambique S.A., have stabilised at around 1,000 hectares. These areas were used for experimentation, improvement of production technology, seed production and training teams.

#### CASE STUDY – DEVELOPMENT OF SECOND GENERATION BIOFUELS

This project aims to develop the technology roadmap for biofuel production Fatty Acid Methyl Esters (FAME) from *Jatropha curcas* Linn. (JCL), from the harvesting of the fruit to its use in engines, by:

- building a machine for continuous harvesting and another for threshing;
- defining and testing the best technology for the extraction of JCL oil in technical, economic and environmental terms;
- defining and testing the best technology for the production of FAME from JCL oil in technical, economic and environmental terms.

During the last year several tasks were undertaken with partners, in particular the acquisition and installation of a pilot oil extraction press in Mozambique, extraction of the first JCL oil with this press and various tests to assess extraction yields.

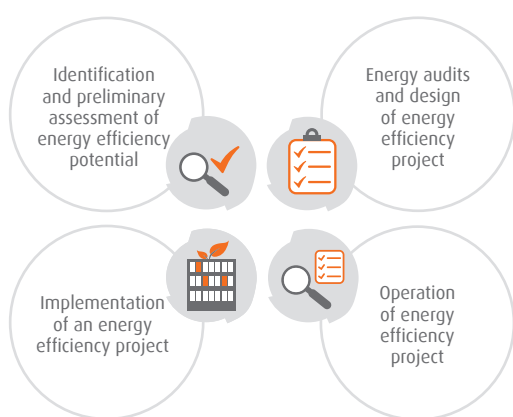
This project is financed by the FAI of Portugal's Energy Agency (ADENE).

## Galp Energy Solutions

The mission of GSE is to provide energy efficiency solutions to Galp Energia customers, developing and implementing innovative solutions and improvements in processes.

The “energetically efficient hotel”, a GSE concept, designates an integrated approach to all energy vectors of a hotel in order to identify, define, implement and operate various solutions and technically and economically feasible measures to provide energy optimisation, increase energy independence and reduce the energy costs and CO<sub>2</sub> emissions associated with the operation of the hotel.

### Energetically efficient hotel - Hotel Corinthia



#### 1<sup>st</sup> phase:

Reconversion of HVAC systems and thermal energy.  
Refurbishment of power station.  
Implementation of solar thermal plant.  
Implementation of cogeneration systems and management of energy performance.

Reduction in consumption of about 2.3 GWh/year (objective originally planned: 2.02 GWh/year).  
Emissions avoided: 740 tCO<sub>2</sub>.

#### 2<sup>nd</sup> phase:

Refurbishment of the laundry energy production systems.

Reduction in consumption of around 1.7 GWh/year.  
Reduction in consumption of 411.3 litres/year.

In 2013, the Hotel Corinthia project was awarded the title of Western Europe Region Energy Project of the Year, by the prestigious AEE, for projects developed and implemented outside the U.S. that stand out for performance, innovative features and integration of renewable energy solutions.

In 2013, the GSE started extending the “energetically efficient hotel” concept to the remaining units of the Corinthia chain, namely in two hotels located in Prague, Czech Republic.

Other units were also subject to this approach, namely the Santarém Hotel, with an approximate area of 9,000 m<sup>2</sup>, 100 rooms and eight conference rooms, the implementation of which also started in 2013. This hotel, which has an annual energy consumption of about 1.4 GWh, will benefit from a reduction in consumption of 325 MWh/year (around 25%).

### Other initiatives

The following projects should also be highlighted:

- the network of sustainable university campuses;
- energy efficiency for public sector clients;
- renewable energy production for GSE clients.

### Performance

The performance and characteristics of the projects implemented in GSE clients in 2013, are presented in the following table.

#### Projects implemented in GSE clients

Installed capacity of photovoltaic panels (kW)	2,380
Energy production (kWh)	2,057,301
Potential for reducing CO <sub>2</sub> (kg)	296,251
Energy savings at Hotel Corinthia (kWh)	1,496,269

Methodological notes in Appendix III.



06



# Environment



This section deals with the most relevant topics in the environmental field, taking into account Galp Energia's activities and operational locations.

Protecting the environment, in the context of Galp Energia activities, is a commitment made through corporate policies and directives which define management guidelines and are reflected at all levels of the Organisation.

System G+ (the HSE management system) promotes, among other things, continuous improvement in environmental performance, which is monitored by:

- conducting specific system audits which help to identify areas for improvement;
- tools such as balanced scorecards, which use different indicators, organised by key quadrants, on which the success of the Organisation is based: finance, processes, customers and employees.

## Biodiversity

In recognition of the importance of preserving biodiversity in the various countries in which it operates, particularly in the context of expanding its activities, and following previous initiatives to promote good management practices, in 2013 Galp Energia:

- systematised and consolidated knowledge about the potential impacts of activities on biodiversity, updating the *Study of Location of Galp Energia Facilities – Identification of Protected Areas and Biodiversity Conservation*, which is based on the Integrated Biodiversity Assessment Tool for Business, covering 50 installations (19 more than in the previous year);
- published additional documents to the Good Practice Guide published in 2012, establishing standards for the integration of biodiversity into the assessment of environmental and social impacts.

Further to this theme, see the section 5.1. Exploration & Production and for more detail on Galp Energia practices for managing biodiversity see the sustainability channel:  
<http://www.galpennergia.com/EN/sustainability/Safety-Health-Environment-Quality/Environment/Paginas/Biodiversity.aspx>

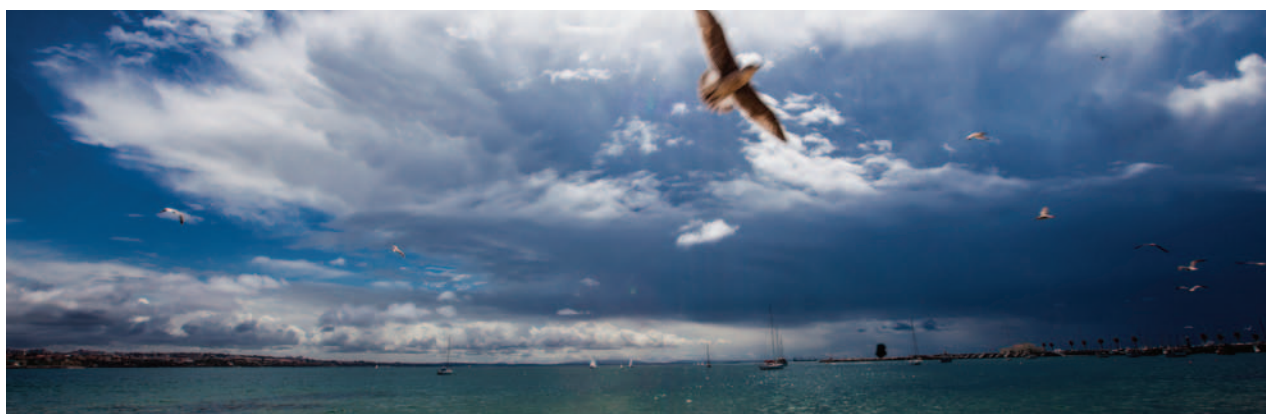
## Water and soil-related risks

Galp Energia is aware of the various risks associated with water and soil management and in 2013, in the context of expanding its activities, it continued the initiatives that it has been implementing over the past few years.

- Reassessment of the risks associated with water use, updating the relevant study with reference to the Global Water Tool for Oil & Gas. This study measures, for example, the Company's level of exposure to water scarcity using information on the percentage of installations in areas of water stress. This tool helps to identify priority actions on a regional and global scale with a view to mitigating risks relating to water use. In parallel, analyses of risk and on the river basin can be carried out locally, whenever necessary.
- Defining a methodology to determine the water footprint for storage facilities, involving the scientific community, through a pilot project to calculate the water footprint of the fleet used by the Companhia Logística de Combustíveis da Madeira (CLCM).
- Developing a study to support the corporate strategy for managing soil and subterranean water, reinforcing its commitment to the sustainable management of these resources and establishing new lines of business considering the best practices and management standards.
- Maintain a pool of service providers to act in emergency situations, minimising response times and thereby reducing the severity of potential impacts and the costs associated with the management of areas affected by hydrocarbons.
- Start-up of the cogeneration facility at Agroger, with capture, storage and use in a closed rainwater system.

Find out about Galp Energia practice on management of soil and water resources at:

<http://www.galpennergia.com/EN/sustainability/Safety-Health-Environment-Quality/Environment/Paginas/Water-resources-soils-and-waste.aspx>



## Waste management

Considering the importance of prevention in the production of wastes and their proper management using a life cycle approach, in 2013 Galp Energia activities included:

- developing a study to support the corporate strategy for managing waste, in order to reinforce its commitment to the sustainable management of the waste and establish new lines of business using the best practices and management standards;
- continuity of the project now called 3R<sup>6</sup> - voluntary programme for environmental certification by Sociedade Ponto Verde Serviços - the diagnosis was completed and certification of the facilities involved was obtained, promoting training and awareness-raising among Company employees on the subject; improvements were implemented, namely the placing of signs on waste bins viewing the separation of waste, and of battery receptacles at the entrance of the head-office at Torres de Lisboa;
- start-up of the Enerfuel plant for the production of second generation biofuels, enhancing the recovery of cooking oils and animal fats, provided by operators of integrated waste management, duly licensed for the purpose.

### Sustainable waste management



Find out about Galp Energia practices on waste management at:  
<http://www.galpenergia.com/EN/sustainability/Safety-Health-Environment-Quality/Environment/Paginas/Environment.aspx>

### CASE STUDY – DISCHARGES INTO THE ENVIRONMENT – FLARING AT E&P BRAZIL

Environmental requirements and awareness, together with a focus on resource efficiency, are leading to a reduction in gas flaring as part of E&P activities. This aspect of the operation must be considered from the conceptual phase, through project design, licensing and construction phases to operations, in strict compliance with the law and, as far as possible, in accordance with the highest international standards, irrespective of the part of the world we are operating in. Let us take, by way of example, the management of gas flaring in Brazil, which involves:

- Brazilian National Agency of Petroleum, Natural Gas and Biofuels Regulation no. 249, of 1 November 2011, which restricts gas flaring;
- environmental licensing, granted by the Brazilian Institute for the Environment and Natural Resources (IBAMA), which sets out compensation measures for the burning of gas, and limits on the volume of gas burned.

On the question of the environment, by way of example, Petrogal Brasil is currently developing a project for the recovery and sale of gas from the Rabo Branco field. The implementation of this project (1) will meet environmental regulations; (2) is in line with the aim of controlling and reducing the intensity of emissions, by minimising gas flaring (which is seen as a resource), which, consequently, will encourage the minimisation of CO<sub>2</sub> emissions and other pollutants; (3) and will produce cumulative economic benefits.

## Participation in legislative processes and work groups with Organisations

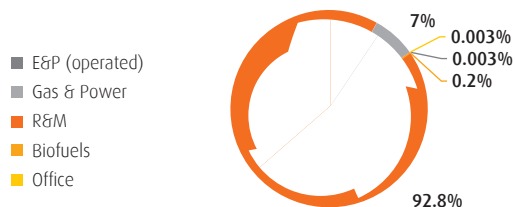
Galp Energia continues to monitor standard and legislative processes relevant to its business, and participates in national and international Organisations (including Europia, CONCAWE and CEN), where matters of strategic importance to the Organisation are discussed. In 2013, Galp Energia also became a member of the international association of Oil & Gas producers – OGP.

Here are some of the processes which required more involvement in 2013.

- The Directive on Industrial Emissions, incorporated into Portuguese law by Decree Law no. 127/2013, of 30 August, together with the review process of the Best Available Techniques Reference Documents on Refining (BREFs). This latter was intimately related to the certificate mentioned and both processes are subject to constant monitoring due to the impacts and challenges they will pose within the sector.
- Legislative and process developments around the European Trade in GGE Licences, with special focus on the new European Union Emission Trading Scheme (EU ETS) period 2013-2020, and respective allocation processes for free emission licences.

## Environmental performance 2013

Direct energy consumption by primary sources (TJ) (scope 1)



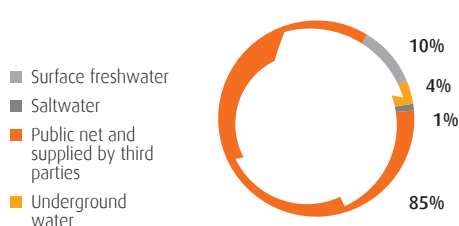
Purchase of electric energy (TJ) (scope 2)



Total consumption of raw water (10<sup>3</sup> m<sup>3</sup>)



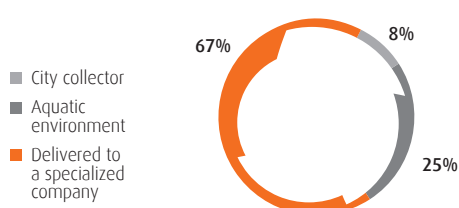
Water consumption by source



Total wastewater (10<sup>3</sup> m<sup>3</sup>)



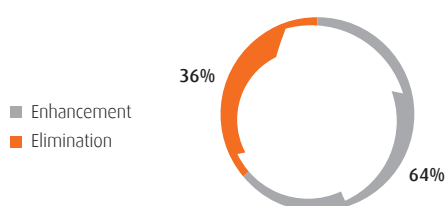
Final disposal of waste produced



Hazardous waste (t)



Destination of waste produced (t)



	E&P (*)	R&M	G&P	Biofuels	Office	Total
Direct energy consumption by primary sources (TJ) (scope 1)	1.59	45,493	3,349	74	1.5	48,919
Purchase of electric energy (TJ) (scope 2)	1.1	1,762	3.1	0.9	14.3	1,781
Total energy consumption (TJ) (scope 1 and 2)	2.7	47,255	3,352	75	15.7	50,700
Total consumption of raw water (10 <sup>3</sup> m <sup>3</sup> )	2.0	10,987	108	1,232	17	12,346
Total wastewater (10 <sup>3</sup> m <sup>3</sup> )	8	5,640	40	3	0	5,691
Waste produced (t)	n.d	19,963	129	259	280	20,631
Hazardous waste (t)	n.d	14,456	4	5	0	14,465
Non-hazardous waste (t)	n.d	5,507	125	254	280	6,166
NO <sub>x</sub> (t)	n.d	1,910	175	60	0.07	2,145
SO <sub>2</sub> (t)	n.d	7,507	0.94	0.25	0	7,508
Particle (t)	n.d	339	7.5	3.8	0.0012	350

(\*) Operated blocks.

Primary energy and associated air emissions indicators were not subject to verification for Brazil activity in the Biofuels area.

The related GHG emissions performance is in Chapter 03 of this document.

07



# Occupational health and safety



## G+ System

The HSE management system, known as System G+, is a cornerstone of HSE performance at Galp Energia. This system is applied in various of the Company's business units, and enables it to identify and manage the risks associated with its the operation and throughout the life cycle of projects, equipment and assets. It therefore guarantees compliance with legal requirements, the application of internationally recognised practices and standards with an ultimate commitment to "zero accidents".

## Process safety

Galp Energia is part of a group of European companies which in 2009 began to report process safety events to CONCAWE.

Since 2010 Galp Energia has achieved higher than average performance for Europe. Although the ratio of events per million hours worked saw a slight increase in 2011 and 2012 (the year that two new units came into operation at the two refineries), the number of Tier 1 events has been reduced significantly, especially after the positive impact of the publication of the *Guide to Process Safety* in 2012.

In 2013 improvements in process safety performance continued to be registered.

## Participation in legislative processes and in work groups with organisations

In the area of safety, here are some of the processes which required more involvement in 2013:

- Directive 2013/30/EU – Safety in offshore oil and gas operations – monitoring of the process of transposition into national law of directive ensuring the application on the upstream of the strictest safety rules in oil and gas offshore operations.
- Directive 2012/18/EU – Control of major-accident hazards involving dangerous substances – internal transposition phase (Seveso III).

## Performance

### Accidents worldwide

The reporting and investigation of incidents at Galp Energia is subject to continuous improvement, having led to the

reporting of a greater number of incidents but also to additional relevance being given to near-misses in overall reported figures.

Galp Energia has been registering a very positive evolution in its accident indicators, which stand below the CONCAWE benchmark levels.

One noteworthy statistic of that no workplace fatalities were recorded at Galp Energia in 2013.

There were three Class 4 accidents registered, which were duly investigated, and it was concluded that the reasons they occurred were unrelated to Galp Energia.

The weight of personal accidents on overall accidents has been declining at Galp Energia, which has been a motivating factor in the application of these principles (monitoring and investigation of all occurrences) to process safety events. Details at:

<http://www.galpennergia.com/EN/sustainability/Safety-Health-Environment-Quality/Safety-and-Health/Paginas/Safety-and-Health.aspx>

### Accidents at Galp Energia

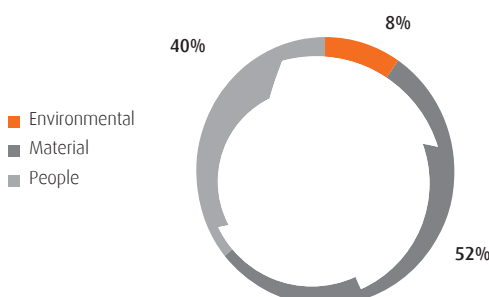
	2011		2012		2013	
	Accidents resulting in work absence	Lost time injury frequency rate (LTIFR)	Accidents resulting in work absence	Lost time injury frequency rate (LTIFR)	Accidents resulting in work absence	Lost time injury frequency rate (LTIFR)
Employees	16	1.3	20	1.7	16	1.4
Contractors	15	0.8	10	0.9	5	0.5
Employees and contractors	31	1.0	30	1.3	21	1.0

The reporting scope of these values is Iberia. Does not include the Biofuels, International Oil and E&P units.

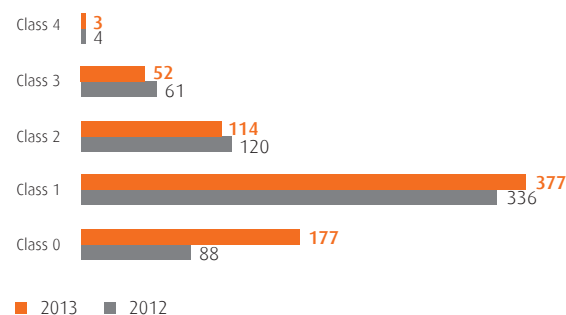
### Galp Energia employees

	2012	2013
Absenteeism (%)	2.4	2.37
Fatality (no.)	0	0
Occupational illness (no.)	0	0

### Incidents by type



### Incidents by class



The reporting scope does not include the Biofuels unit.

## Occupational health

### Vida Ativa Vida Positiva Project

As part of Galp Energia's corporate responsibility policy, the Vida Ativa Vida Positiva (Active Life Positive Life) project appeared in 2013. This programme is aimed at Galp Energia employees throughout the Iberian peninsula to promote a culture of prevention and anticipation of health risks, while simultaneously increasing their motivation in this area. To encourage health and safety, personal development and training in the workplace, various initiatives were undertaken based on four fundamental axes of a healthy active life.

#### Principles of healthy and active life



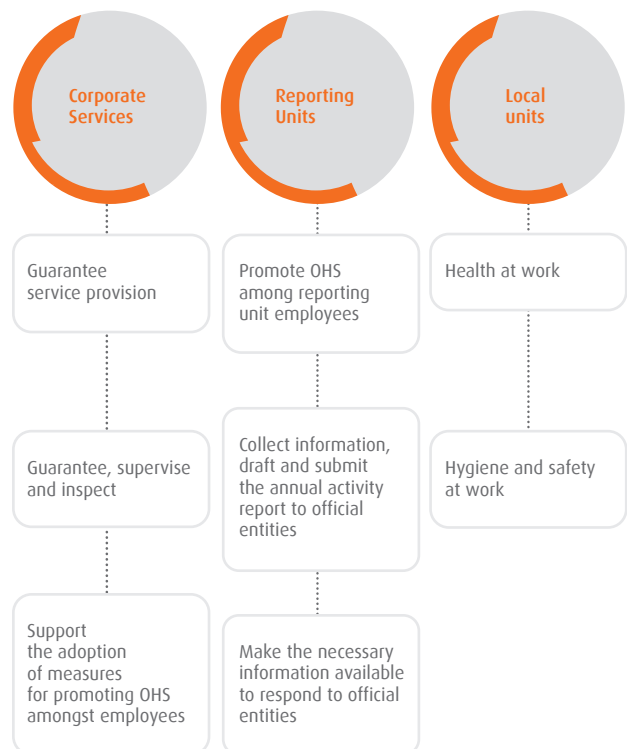
In this programme, Galp Energia had the collaboration of several leading partners, namely Danone, Sumol+Compal, Nestlé, Gertal, Workwell and Central de Cervejas. The initiatives undertaken over the year covered specific aspects in the area of health, to raise awareness and change attitudes and behaviours. In this way Galp Energia aims not only to motivate its employees to adopt a healthier lifestyle, but also to promote their health and well-being outside the Company, by engaging in an active lifestyle based on a daily balance of the four cornerstones.

## Organisational Model for Occupational Health and Safety (OHS) services

In order to prevent accidents and promote appropriate working conditions, as provided for in the Employment Code and Official Regulations for Promoting OHS, Galp Energia controls service management and organises OHS activities via a network of over 40 technical officers spread throughout the various Group companies.

The Organisation of OHS services is divided into three axes: corporate service competencies, reporting unit competencies and local unit competencies.

#### Organisational OHS services



This structure was organised in accordance with Law No. 102/2009, of 10<sup>th</sup> September.





# Human capital

## Human capital development

The achievement of Galp Energia's strategic objectives depends fundamentally on the management of its human capital, by developing the competencies of its employees and guaranteeing their professional progress.

In 2013 an integrated structure for talent management was developed, as a way of managing and guiding careers and exploiting technical, management and leadership profiles. The following programmes should be highlighted as contributions towards integrated management and development of talent throughout the value chain.

### Employee development programmes



## Performance management system

The performance management system is an essential component for aligning the role of every employee with Galp Energia's strategy, objectives and values.

### Performance evaluation system

#### Evaluation by objectives

Objective: measure the contribution of the employee to the Company, awarding current results and encouraging future performance.

#### Evaluation by competencies

Objective: align and develop the employee's competencies, in order to consolidate the competencies acquired and encourage future development.

In 2013, the performance evaluation process covered about 97% of the Company's employees, of which about 87.3% of the 750 senior staff were assessed according to the 360° methodology. Additionally, in this performance evaluation process, the 360° methodology was extended to all the middle managers. According to the 360° methodology, employees are evaluated on their behavioural and technical competencies by their superiors, their peers and via self-evaluation. In the case of direct employees, these only assess their superiors on behavioural competencies.

## Mobility

As part of mobility and the process of accelerating the development of junior ranks, rotation of staff between countries has been encouraged, in an attempt to capitalise on secondment agreements with operators and partners in some projects in which Galp Energia is also involved.

## E&P and Distribution in Africa

As part of the challenges inherent to business and the countries in which E&P and Marketing operations are being carried out, HR management played a leading role in 2013.

At E&P level, the year 2013 saw an increase in full-time staff of 38%, with employees from 11 different countries and the full implementation of the career plan for technical officers. This marked growth implied a greater effort at cultural integration and induction, supported by the recent review of corporate values.

Equally of note was the development agreement on technical competencies between Galp Energia and the National Hydrocarbon Company of Mozambique, as a result of which Galp Energia accepted eight trainees for a year.

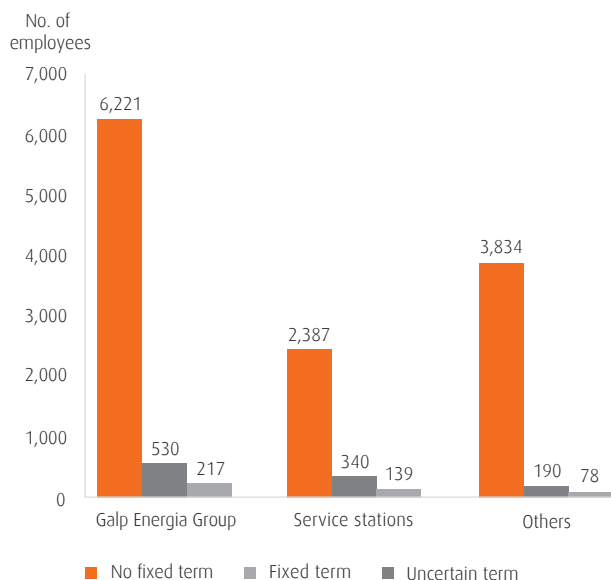
As regards Marketing Africa, the building of logistics facilities in Mozambique meant adapting the local structure with expatriated skills suitable for carrying through the project. In terms of human resources policies, this was a year for consolidating corporate practices and adapting them to local legal and cultural requirements.

## Performance

### Type of contract

Galp Energia encourages permanent employee contracts, which account for 89% of all its employees. As regards the type of employment, around 98% of employees work on a full-time basis.

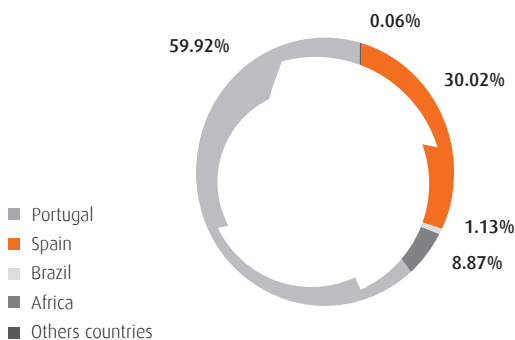
No. of employees in 2013



## Diversity of employees

The diversity of Galp Energia's employees has been deeply affected by the consolidation of existing businesses, namely E&P. Overall, there is a continuing trend for an increasing number of employees outside Portugal.

Geographical distribution of employees in 2013



As regards the gender distribution of Galp Energia's employees, there is a predominance of male employees due to the ongoing prevalence of activities in refining and in Africa. However, compared to the previous year, the percentage of female employees has increased. Around 50% of Galp Energia's employees fall into the age range of 30 to 44 years.

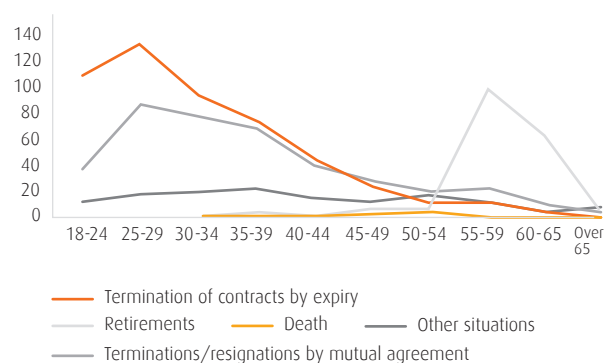
Galp Energia employees

Professional categories	Total	18-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-65	+65	Female	Male
Executive/top management	62	0	0	0	2	11	13	12	13	11	0	4	58
Middle/general management	214	0	0	3	34	30	54	50	33	10	0	49	165
First line management/ supervisors	474	0	2	18	94	90	91	75	68	33	3	161	313
Specialists groups	1,765	18	176	215	314	298	246	249	177	70	2	619	1,146
Other employees	4,453	167	509	847	853	653	516	432	325	146	5	1,876	2,577
<b>Total</b>	<b>6,968</b>	<b>185</b>	<b>687</b>	<b>1,083</b>	<b>1,297</b>	<b>1,082</b>	<b>920</b>	<b>818</b>	<b>616</b>	<b>270</b>	<b>10</b>	<b>2,709</b>	<b>4,259</b>

## Employee turnover

In 2013, 1,184 employees left which corresponded to a turnover rate of 17%: around 7% for women and about 10% for men. The overall value of the turnover rate is greatly influenced by the staff of the service areas, which represent about 11% of this total value.

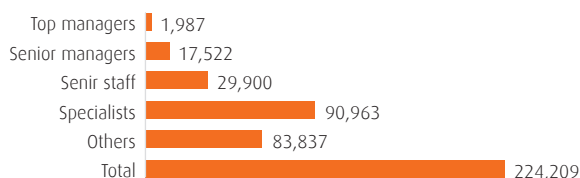
Distribution of leavings by reason of leaving and by age group



## General training

In 2013, there were 224,209 hours of training, which correspond to about 31.8 hours per employee.

### Total



E-learning was also done in areas such as management of investment projects, behaviour management and technical competencies in exploration, production and refining.

### Annual training initiatives

		2013	Accumulated value
Conhecer +	Total no. of hours	16,182	19,446*
	No. of participants	328	
OPEX Programme	Total no. of hours	11,058	13,008*
	No. of participants	588	
Conferences Theme Tuesdays	Total no. of hours	2,956	26,212**
	No. of participants	1,478	
Training in Quality, Health and Safety	No. hours of training	48,348	
	Participation of no. employees	8,903	

\* Accumulated from 2012. \*\* Accumulated from 2007.

2013 was marked by the extension to senior managers other than top managers of the 360° evaluation, and a percentage increase in the number of employees assessed based on their goals.

### Remuneration and performance evaluation

	2012	2013
Percentage of variable remuneration dependent on individual performance	65%	<b>65%</b>
Percentage of variable remuneration dependent on shared objectives	35%	<b>35%</b>
<b>Performance evaluation indicators for the whole Company</b>		
Percentage of employees evaluated by objectives	92.0%	<b>96.0%</b>
Percentage of employees with 360° evaluation	9.2%	<b>12.8%</b>

## Remuneration and performance evaluation

The financial impact of the human resources policy continued to be measured in 2013. This impact is determined based on a human capital investment formula (ROI) designed by PriceWaterhouseCoopers, in the European Human Capital Effectiveness Report.

ROI is based on the ratio of total operating income minus non personnel related operating costs and personnel operating costs.

### ROI of Galp Energia human capital

	2012	2013
Total operating income (€m)	18,644	<b>19,764</b>
Total operating cost (€m)	18,086	<b>19,363</b>
• HR operating costs (€m)	321	<b>347</b>
• Non-HR operating costs (€m)	17,765	<b>19,016</b>
ROI Galp Energia human capital	2.74	<b>2.16</b>

The fall in Human Capital ROI is due to a higher percentage rise in non-HR Operating Costs as against Operating Income.

## Organisational climate

Recognizing the importance of the diagnosis and monitoring of the organisational climate as a management tool for human resources, in 2013 Galp Energia performed a new climate survey.

The participation rate increased considerably (by 10.25%) in relation to the previous year. In overall terms, the survey showed a decrease in satisfaction concerning the factors under assessment, partly as result of the ongoing restructuring and the effect of the economic crisis on the perception of employees. The survey permitted the identification of the main causes and of improvement measures to be adopted, culminating in the definition of a commitment introduced in the sustainability plan under "Human Capital".

### Organisational climate survey – Factors assessed

	2012 (*)	2013 (*)	Variation 2013 vs 2012
Clarity	4.34	4.33	(0.2%)
Staff commitment	4.54	4.52	(0.5%)
Flexibility	4.26	4.22	(1.0%)
Training	3.75	3.76	0.3%
Remuneration	3.95	3.94	(0.2%)
Responsability	4.33	4.30	(0.7%)
Stringency levels	4.58	4.58	(0.1%)
Response rates	43.95%	54.20%	10.25%

(\*) Results = average from all responses.





# Commitment to the community

Recognising the importance of the subject, especially in the current socio-economic situation, Galp Energia has defined a corporate social and philanthropic responsibility strategy aligned with its mission, values and strategy.

Thus, the Company intends to maximise the use of available resources by the clear identification of priorities, objectives and expected benefits in a transparent and accountable manner.

The Galp Energia corporate social responsibility and philanthropic strategy has the following priorities:

- education;
- health and safety;
- environment.

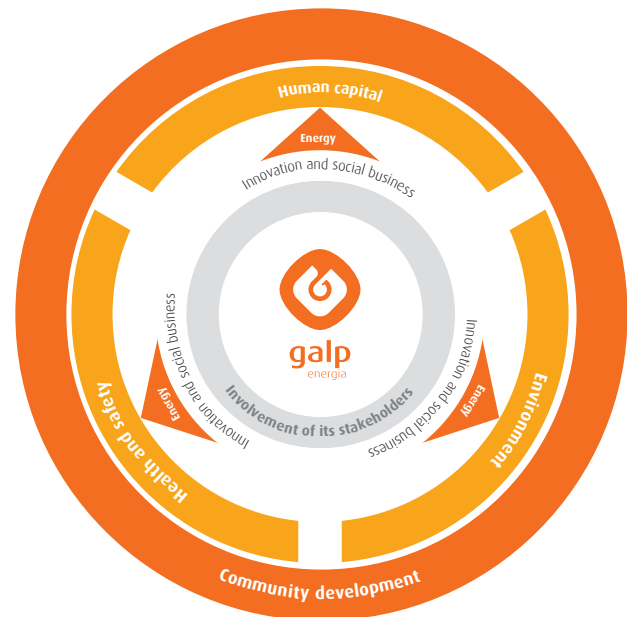
This strategy is based on creating value for all stakeholders, in particular for local communities in all geographical locations where the Company operates, including through the promotion of education, respect for human rights and fundamental labour rights, health, safety, environmental liability, anti-corruption and cultural heritage. The strategy's implementation is supported by corporate responsibility and communication policies and the corporate volunteer program (Galp Voluntária).

## Social investments

Galp Energia makes voluntary contributions as part of its social activities in the various countries where it operates. Through social investment, communities benefit from tools that allow them to develop in various sectors, including health, education and the environment. The Company uses the London Benchmarking Group methodology to report on social investment undertaken and to evaluate the impact of their contributions.

The contributions made to philanthropic initiatives and social responsibility, in 2013, amounted to €9,229,136, including management costs.

## Community involvement strategy



## Motivation

	€	%
Charitable donations	1,132,939	13
Investment in the community	7,650,586	85
Commercial initiatives	188,972	2
<b>Total</b>	<b>8,972,497</b>	<b>100</b>

## Focus/Subject

	€	%
Education and young people	2,264,475	25
Health	1,824,847	20
Economic development	886,971	10
Environment	1,616,963	18
Art and culture	740,418	8
Social well-being	1,602,314	18
Emergency assistance	-	0
Other	36,509	1
<b>Total</b>	<b>8,972,497</b>	<b>100</b>



## Corporate volunteering initiatives at Galp Energia

## ENVIRONMENT

- The Ecoética programme in partnership with AMIC – nature conservation and the reduction of negative impacts caused by forest fires.
- Missão UP | United for the Planet.
- Movimento ECO – spread of key messages related to forest fire prevention.
- Paper for Food: “1 tonne of used paper = €100 of food” – donation of 7.6 t of paper to the Banco Alimentar (Food Bank).
- Reconstruction of four new homes for families in need by collaboration with GIRO (an institution for building, restoring and repairing homes based on a sustainable housing policy).



## HUMAN CAPITAL

- “Vocações de Futuro II” in partnership with the EPIS Association – monitoring and guidance of children attending 3<sup>rd</sup> cycle (12-15 years) at risk of school failure.
- “Voluntariado de Competências” – action to support the training of retired Company employees.
- Promoting internships by Galp Voluntária.
- Support to a reception centre for young people in Cape Verde.
- Support for the Social Innovation Bank programme.
- Collaboration on the social welfare project “1 pulseira, 1 mensagem” – Initiative for financial support of Mexican child education.

## HEALTH AND SAFETY

- Support for flood victims in Mozambique – donating two tons of food.
- Advantageous payment terms for large families in Spain.
- Promotion of the initiative “Learn more about gas safety” in Swaziland.
- Support to combat female genital mutilation by donating items to the Organisation Mundo Cooperante.
- Collaboration with the Red Cross.
- Support for the Casa Emanuel Association in Guinea-Bissau.
- Partnership with Operation Red Nose – IPSS providing free service in hospitals.
- Participation, via Galp Voluntária, in the fight against cancer.
- Support for the programme to fight against infectious/contagious diseases (HIV/AIDS) in Guinea-Bissau – awareness campaign.



## Performance indicators

	2012 (*)	2013	KPI 2014
Projects developed	235	535	540
Hours of corporate volunteering	3,140	3,669	4,144
Number of volunteers	493	259	302
Organisations involved	186	232	235

(\*) Correction to the breakdown of figure for 2012 due to changes in methodology.

For more information see:

<http://www.galpennergia.com/EN/sustainability/Investment-in-the-community/Paginas/Investment-in-the-community.aspx>

Approximately 745,000 people directly or indirectly benefited from Galp Voluntária's activity since its beginning.



## Projects 2013

In developing its projects, Galp Energia seeks to follow the best practices in the relationship with local communities, ensuring a continuous dialogue and their well-being.

### Management process of impacts in the community



## Biofuels Brazil

In 2013, over 245 family units signed up to the family farming project for the production of palm.

Currently, around 2,400 hectares of palms which are part of the project (almost 10%) are managed by small family units (7 to 10 hectares), as follows:

### Family farms of palm production

	Family production units	Total planted (hectares)
Tailândia	214	2,102
Tomé-Açu	31	302

For 2014, it is expected that, in the municipality of Tailândia (Brazil), 450 hectares will be planted by approximately 45 family units.

Family farming is supported in Brazil by the National Programme for Boosting Family Farming. Depending on socio-economic background and the type of activity, the programme provides very favourable financial terms to family farming in the form of investment credit (with grace periods adjusted to the growing cycle of the palm) or defrayed credit to fund production expenses, having the support of a company anchor, in case the BBB.

Additionally, the BBB lends free technical assistance to family farms, running training programmes, providing technical support and monitoring. Family farmers are guided towards the adoption of good practices and the preservation and conservation of the environment.

These types of activities incorporated families previously marginalised by extractivism into a productive, sustainable agricultural activity, thereby helping the socio-economic development of a depressed region.

### Arrangement of research with the Brazilian Agricultural Research Corporation (Embrapa)

*Validation of intercropping technology between the lines of oil palm during the pre-production phase in the Municipality of Tailândia, Pará State.*

BBB agreed a research protocol with Embrapa, an entity that seeks to spread and facilitate sustainable agricultural technologies to family farming through the Technology Transfer Project for Sustainable Production in the Legal Amazon. Among other activities, the project develops initiatives for the cultivation of oil palm, especially directed at the family farmer with the aim of presenting it as a sustainable productive alternative.

## Mozambique

### Use of renewable energies by rural populations

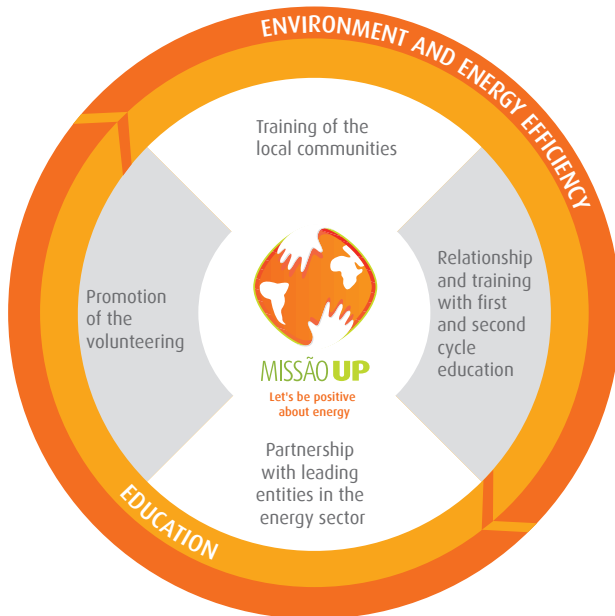
In 2013, interaction was agreed between MoçamGalp/Galpúbuzi and Agribusiness Development in Mozambique (ADM), a non-governmental Organisation funded by Nippon Biodiesel Fuel under the seed/oil trade, with the aim of promoting the use of renewable energy by rural populations in remote areas without access to main electricity. It was also agreed to exchange experiences and know-how in the field of farming and production of JCL and its promotion and industrialisation at the community level.

### Acquisition of JCL seed production in the family sector

The acquisition of JCL seed production in 2013 reached 10.8 t, covering a total of 108 farming families.

## Missão UP | United for the Planet

Missão UP is an educational project, in existence since 2010, which forms part of the Galp Energia strategy to promote efficiency in energy consumption and sustainable mobility.



Check the Missão UP website.

## Galp Energia Solidária

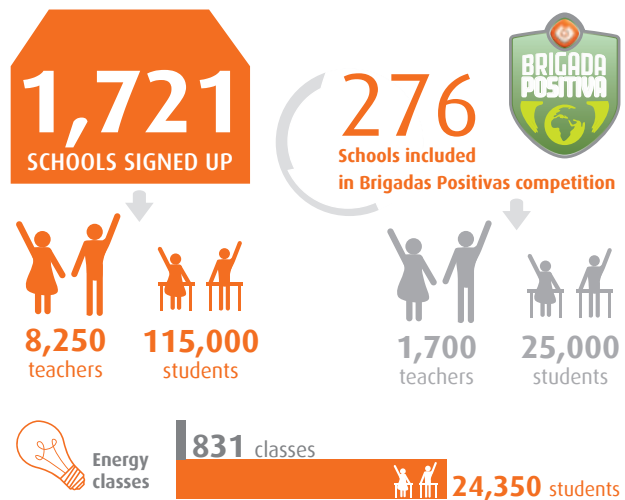
In the context of severe economic and social crisis, likely to precipitate and aggravate the conditions of deprivation felt by thousands, Galp Energia signed a protocol with the National Confederation of Welfare Institutions, with the Union of Portuguese Church Charities and the Union of Portuguese Mutual Aid groups, which aims to provide a specific proposal under the "Energia Solidária" capable of providing special conditions of access for institutions to its products and services.

Annually, the real value of what Galp Energia delivers to the Portuguese social economy through direct purchase discounts on their products will be determined on an annual basis, thus quantifying the company's social KPI.

As the Galp Energia group is the only Portuguese group with the ability to provide an integrated offer of fuels, electricity and natural gas, and being aware of the role it plays in the community, this protocol results as an integrated and sustained response to the crisis.

This initiative will involve an estimated number of more than 4,000 entities and should have an indirect impact on nearly two million Portuguese.

## Missão UP 3<sup>rd</sup> edition's performance



## Alliance for Road Safety and Prevention

In 2013, Galp Energia continued the Alliance for Road Safety and Prevention project (APR - Aliança para a Prevenção Rodoviária), a multi-stakeholder project started in 2012, whose mission is to mobilise the business world and society to combat road accidents. This initiative has been developed in conjunction with several partners and aims to strengthen the Company's commitment to Portuguese society in terms of road safety and accident prevention.

After completion of the diagnostic steps, the involvement of stakeholders and the preparation of a study into the attitudes and declared behaviours of the Portuguese regarding road accidents, in 2013 the project focused the consolidation and preparation of the APR action plan, based on two major axes: business and civil society. The involvement of new stakeholders should also be noted, including Galp Energia customers from the transport, industrial, contractor and lubricant sectors. The plan will be implemented during 2014, and an impact evaluation strategy will be laid down.

## Galp Energia Foundation

In July 2013 the Galp Energia Foundation obtained Public Utility status. By issuing its public utility statement, the Portuguese Government confirms that the Galp Energia Foundation's purposes are of general social interest in the pursuit of its mission and goals, acknowledging the value and pertinence of its activities.

Created by Galp Energia in January 2009, the Galp Energia Foundation is a private non-profit entity dedicated to patronage aimed at strengthening and promoting the Group's involvement in developing society, energy, the environment and culture.

More information is available at:

<http://www.galpenergia.com/EN/agalpenergia/Fundacao-Galp-Energia/Paginas/Home.aspx>

10



# Dialogue with stakeholders



## Stakeholders network

Approximately **41,000 registered suppliers**.

**€44,5 m invested** in social projects since 2007.

Shareholder base of about **350 investors from 30 countries**.

**707 mboe** 3P.<sup>1</sup>

**3,923 mboe** of 3C contingent resources.<sup>1</sup>

**2,495 mboe** mean unrisks resources exploration.<sup>1</sup>

An amount of **€2,418 m** was paid in taxes on oil products.

**€9,881 m** of market capitalization.

About **12,700 news pieces** on Galp Energia.



**€67.7 m invested** in innovation and R&D since 2007.

**Around 1.3 m** customers for natural gas.

**1,435 service stations** around the world.  
**70 service station** with **Auto LPG**, in Portugal.

**86 periodic meetings** with trade unions and employee committees.

**6,968 employees** in 13 countries.

<sup>1</sup> Reserves on a net entitlement basis. Contingent and exploration resources on a working interest basis.



## Stakeholder feedback

Galp Energia has a formal corporate process for stakeholder feedback on sustainability issues since 2010. This procedure identifies and prioritises stakeholders and key topics in accordance with AA1000 criteria.

When ranking stakeholder relevance, the criteria of influence, dependency and responsibility are considered. When selecting key topics, the criteria of their relationship to commitments or policies, financial effects and legal compliance, effects on image, identification by similar companies and general relevance are considered. These criteria are validated and applied through internal interviews with the Company's senior management, benchmarking and industry publications and reports.

After mapping critical stakeholders and prioritising key topics, the feedback phase allows stakeholders to respond to a number of questions through in-person and telephone interviews, or by completing an electronic questionnaire. Afterwards, the results of the feedback process are analysed, and actions are laid out to help encourage more involvement with stakeholders, in line with their expectations.

For Galp Energia's purposes, a semi-annual sample group of stakeholders was considered adequate for the involvement and feedback process.

Following is a presentation of the results of the feedback process from 2010/2011 and from 2012/2013.

## Sustainability performance

### Overall assessment - evolution



### Vision and leadership - global evolution



### Environmental practices - global evolution



### Working practices - global evolution



### Economic performance - global evolution



## Relationship with suppliers, contractors and partners

Throughout the value chain, and in carrying out its operations and activities, Galp Energia manages its supplier and partner relationships in a responsible manner by defining policies and procedures to govern its actions.

The Company has a constant concern that these entities' actions comply with Galp Energia's requirements at a number of levels, namely from an economical, environmental and safety standpoint, together with proper ethics, conduct and the safeguarding of human rights.

Managing risks and opportunities throughout Galp Energia's value chain stems from a methodology employed in several different stages, namely in the process of selecting, qualifying and assessing the performance of suppliers and service providers. This methodology is based on an acknowledgement of the seriousness of the potential consequences arising from various known risks (image; business/client; operations; compliance; environmental impact; exposure to agents harmful to health; occurrences; damages or losses) and their likelihood of occurrence.

Galp Energia manages multidisciplinary risk in its supply chain through the following:

- assessing the Company's financial soundness during pre-qualification and purchasing processes, whenever so justified;
- monitoring information on the supplier's economic status;
- qualifying suppliers for services with HSE risk within risks tied to the purchasing process;
- auditing and evaluating services provided from an environmental standpoint;
- pre-qualification questionnaires, through the Achilles system, on social risks (mandatory for new suppliers).

The qualifications of Galp Energia's suppliers in terms of the environment, quality and safety (ISO 14001, ISO 9001 and OHSAS 18001) are summarised in the following table.

Supplier with certifications		
International standards	2012	2013
ISO 9001	1,393	1,501
ISO 14001	438	494
OSHAS 18001	293	331
Other certifications	9	10

## Audits

The supplier auditing process is essential in foreseeing and managing potential risks.

The reasons for choosing suppliers to be audited are many. Some of these include:

- need to expand knowledge on the supplier of a certain purchasing category or categories;
- questions with regard to a Company's response on the pre-qualification questionnaire, requiring confirmation;
- abrupt drop in the performance assessment of a supplier;
- supplier complaints for failing to meet technical specifications and contract requirements;
- the degree of risk of the contract in terms of HSE exceeds the HSE level of risk of the supplier, both for ongoing consultation processes and adjudications made but whose supplies are still ongoing;
- new suppliers for risk level IV services;
- significant volume of supplier's business.

In 2013, a program of external audits performed by an independent entity has begun in Galp Energia.

## Collaborative Purchasing Platform

With a view to using best market practices in its procurement and supply process, Galp Energia has deployed a Collaborative Purchasing Platform.

The purpose of this project is to employ a unique solution that refines and integrates the entire procurement process, connecting all of its stakeholders.

From a functional and applications standpoint, the project will focus on achieving the following goals:

- integrate the Group's entire procurement process and make it collaborative;
- manage the procurement process in a strategically and integrated way;
- promote continuous improvement and optimise the management of the Galp Energia – suppliers relationship;
- manage information in real time to support the decision-making process;
- streamline the procurement process;
- reduce the effort spent on the acquisition process by all stakeholders.

The Collaborative Purchasing Platform will be the primary tool in Galp Energia's supplier selection process, recording their performance in matters involving sustainability.

## Performance

### Relations with suppliers

Purchases by macro-class (€m)	450
- Services (€m)	340
- Goods/assets (€m)	90
- Unidentified (€m)	20
Suppliers used (no.)	4,000
- Services (no. of suppliers)	2,000
- Merchandise/goods (no. of suppliers)	800
- Unidentified (no. of suppliers)	1,200

### Distribution of suppliers by classification

Classification	Total suppliers
A+	151
A	185
B	36
B: 0 to 19%    A: 20 to 59%    A+: 60 to 100%	

## CASE STUDY – MONITORING THE ACTIVITIES OF FUEL HAULERS

Galp Energia monitors its value chain through proactive involvement in undertakings of higher risk in terms of operations and reputation. Such is the case of roadway fuel haulers.

In this area, the Company, in conjunction with APETRO, has an auditing plan in progress with haulers hired to distribute its fuels. The plan includes a total of around 280 vehicles and 360 drivers, corresponding to nearly 100% of the haulers hired by Galp Energia. Audits are conducted on a semi-annually basis.

The auditing plan comprises two phases:

- completion of an exhaustive questionnaire by the service provider to assess its practices of Company involvement and control of drivers (hiring, records, training, safety, etc.), equipment/vehicles, safety activities and emergency plans. These requirements are then audited by the auditing group under APETRO at the hauler's facilities;
- checking of driver procedures and operating requirements (vehicles and equipment) through inspection teams at Galp Energia's bases and product unloading operations at clients.

After the hauler's final evaluation, non-compliances and opportunities for improvement before the next audit are notified to the hauler.

In addition, all drivers attend mandatory training, the contents of which is validated by Galp Energia, on defensive driving, product handling and roll-overs.

Also within the scope of its work with APETRO, Galp Energia has signed a Heightened Road Safety Agreement with other associated companies to improve road transportation conditions for oil products, namely through initiatives with government entities to amend legislation and develop a shared support system in the event of road accidents.

## Relationship with scientific system Institute of Oil and Gas

The Institute of Oil and Gas (ISPG), Association for Research and Advanced Training in Oil and Gas, is a partnership between Galp Energia and Portugal's six largest universities, open to other institutions in the Portuguese-speaking world and to other regions.

The ISPG is an unprecedented initiative in the Portuguese science and technology system. Its main goals are to develop research projects, advanced training and unique areas of expertise in the oil and gas sector, and to help consolidate and develop knowledge and technology "in Portuguese" in the oil & gas sector, with the ability to compete on a global economic scale.

As such, the ISPG's activities will focus on creating value based on technology programmes and projects centred on the challenges faced by Galp Energia, primarily in oil and gas production operations and exploration.

To this end, the ISPG will develop a cooperation network with universities, research institutes, service providers and production companies between Portugal, Brazil and other countries to develop a shared multidisciplinary project portfolio in cutting-edge technology areas of interest to different sectors of this business.

The ISPG will work in the following areas of R&D and advanced training:

- Exploration & Production;
- Refining & Marketing;
- Gas & Power;
- Biofuels;
- Management of technology, innovation and sustainability;
- Training, qualification and enhancement of Human Resources.

## CASE STUDY - GALP 20-20-20 ELEVATOR PITCH

In the last quarter of 2013, Galp Energia sponsored the presentation of nearly two dozen applied research projects in the area of energy efficiency developed at companies by students from Universidade de Aveiro, Faculdade de Engenharia da Universidade do Porto and IST under Galp 20-20-20, the nation's largest academic scholarship programme in this area.

The challenge was simple: if you accidentally crossed paths with the CEO and Galp Energia director in an elevator, could you successfully sell them your energy efficiency project in two minutes? This was the amount of time each student had to present his or her efficiency project.

The projects were presented to the State Secretary for Science, Leonor Parreira, the CEO of Galp Energia, Manuel Ferreira De Oliveira, and the executive director in charge of innovation and ties to the academic world, Carlos Costa Pina. Representatives from venture capital and start-up incubators, along with a number of public bodies tied to innovation, education, the economy and energy efficiency, were also present.

The Galp 20-20-20 programme is an exemplary initiative on a national scale in the transfer of knowledge and innovation between the business and academic worlds. Launched in 2007, it has already placed scholarship holders in more than 130 Portuguese companies that thus benefited from innovative energy efficiency solutions developed by students from leading national universities. Each year, the programme awards 21 research scholarships of €3,000 to 21 students to develop these projects at 21 clients chosen by Galp Energia.

## ISPG/Heriot-Watt University partnership: doctorate and master's in oil engineering

One of the ISPG's first key initiatives was the knowledge partnership with Heriot-Watt University (HWU), a Scottish institution of higher education and a world benchmark in R&D and the training of highly qualified human capital for the oil and gas exploration and production industry.

In addition to the three Portuguese students with doctorates underway at HWU, the ISPG will launch a Master's in Oil Engineering in partnership with this university. The degree course will begin on 31<sup>st</sup> March 2014, and will comprise 21 students from Portugal, Brazil, China and Mozambique.

Oil engineering is an interdisciplinary field which applies engineering principles and quantitative methods in the exploration of oil and gas reserves located in the subsurface.

The master's degree course curriculum will be taught in English at the campus facilities of the Faculdade de Ciências da Universidade de Lisboa, in Portugal. The teaching staff comprises professors from HWU, who will be supported by professors from the ISPG's scientific and industrial members, namely Universidade de Lisboa (Faculdade de Ciências and Instituto Superior Técnico), Universidade Nova de Lisboa, Universidade de Coimbra, Universidade de Aveiro, Universidade do Porto, Universidade do Minho and Galp Energia.

In 2013, the ISPG obtained formal recognition in matters related to R&D from the Portuguese State (order no.16813/2013).



For more information see the ISPG website.

## The challenges of sustainable mobility and the scientific community

Since 2008 Galp Energia and the Transport, Energy and Environmental Research team of the Mechanical Engineering Institute have had a partnership aimed at developing sustainable mobility initiatives. One example is creating scenarios for developments in existing vehicles and their impact on energy consumption, together with partnerships with auto builders and initiatives promoting sustainable mobility with Galp Energia's clients.

Galp Energia has identified three initiatives for 2013: developing a methodology/algorithm for including CO<sub>2</sub> emission records in the Galp Frota platform; creating a best eco-mobility practices manual; and on-road assessments of light passenger vehicle performance.

## Relationship with customers

Galp Energia develops a continuous process of monitoring and tracking the expectations and needs of its customers to ensure the provision of appropriate products and services, and ensure their satisfaction. As a tool to review this satisfaction, the Company uses the European Customer Satisfaction Index (ECSI) methodology, a recognised system for measuring the quality of goods and services in the national market.

In the Portuguese energy market, the global brand awareness of Galp Energia reached 88% in 2013, thus maintaining the level reached in 2012. This result corresponds to the “spontaneous awareness” indicator, which records the number of times that Galp Energia is spontaneously appointed by interviewees.

As regards customer satisfaction indexes by sector, this information is presented in the following table.

### Customer satisfaction index

Average indices	Fuel	Bottled gas	Electricity	Natural gas (regulated market)	Natural gas (free market)	Natural gas + electricity (dual offer)
Image	7.71	8.10	7.93	7.60	7.84	7.78
Expectations	7.58	7.90	7.75	7.58	7.83	7.88
Perceived quality	8.16	8.11	8.04	7.68	7.93	7.78
Perceived value	6.44	6.23	6.74	6.18	6.57	6.30
Satisfaction	7.42	7.82	7.44	7.46	7.58	7.34
Complaints	7.03	7.05	7.46	7.24	7.19	7.09
Loyalty	6.56	6.85	7.03	6.82	6.94	7.12

Scale: 1 (weak) - 10 (strong). From 6 is considered satisfied customer.

## Labour Relations

### Committee on Occupational Health and Safety

This committee meets every two months to discuss matters relating to the promotion, prevention and monitoring of occupational health and safety, analysing accident indicators, accident reports, adequacy of standards and regulations, and within this framework, develop opinions, proposals and recommendations.

### Workers' Committees

In the Galp Energia Group companies where workers elect Workers' Committees to represent them before the respective Board of Directors, monthly meetings are held between representatives of the Board of Directors and workers' representatives to exchange information and analysis of day-to-day issues and situations of the Company deemed necessary to discuss and clarify.

### Meeting with Trade Unions

In companies covered by Union agreements, annual meetings are held between representatives of companies and representatives of trade union organizations for reviewing and negotiating possible changes to matters set out in the collective labour agreement.

## Relationship with investors

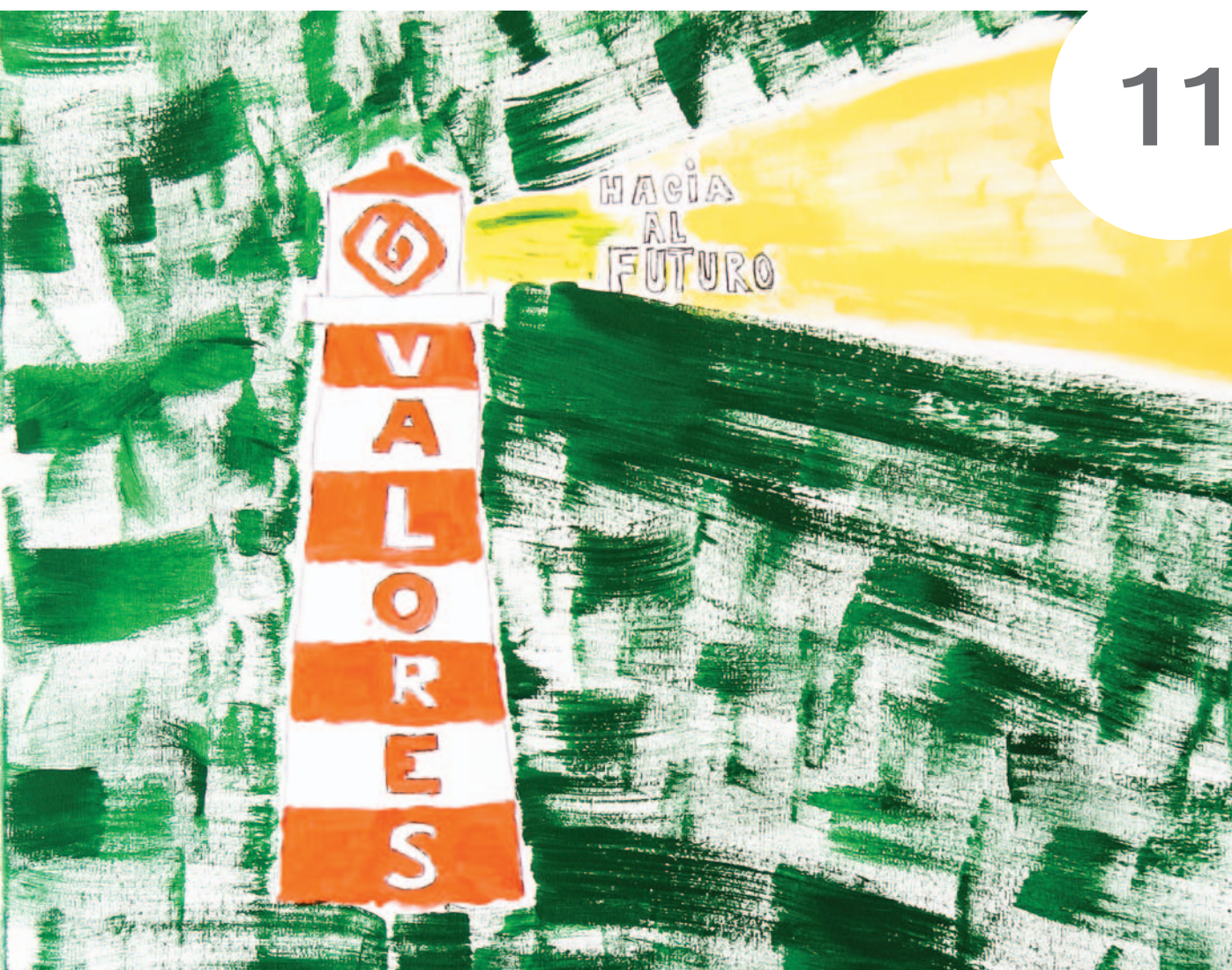
At the end of 2013, Galp Energia's shareholder base was geographically dispersed, including around 350 investors from 30 countries on four continents.

Galp Energia discloses relevant information on the Company's strategy and activities on a regular basis, while simultaneously taking the necessary action to promote knowledge and interaction with the financial community, namely market regulators, analysts and investors. In 2013 Galp Energia held around 500 meetings with Company investors, in Europe, North America and Asia

Note that members of the Company's Executive Committee attended 75% of these meetings.

In 2013, Galp Energia continued to organise the Capital Markets Day event, exclusively dedicated to financial analysts and investors. This extremely important event helps encourage interaction between the Company's management team and investors. Its purpose is to disclose the Company's updated strategic and financial plan.





# Appendices

- 11.1 Appendix I – Assurance letter
- 11.2 Appendix II – GRI table - Key sustainability indicators
- 11.3 Appendix III – Methodological notes
- 11.4 Appendix IV – Status of the list of commitments for the sustainability strategy published in the 2012 Sustainability Report
- 11.5 Appendix V – Other indicators
- 11.6 Appendix VI – Abbreviations, initials and acronyms

## 11.1 Appendix I – Assurance letter



To the board of Directors of  
Galp Energia, SGPS, S.A.

### Independent verification report of the Sustainability Report 2013

(Free translation from the original in Portuguese)

#### Introduction

In accordance with the request of Galp Energia, SGPS, S.A. (Galp Energia), we performed an independent verification of the “Sustainability Report 2013” (Report), regarding the performance indicators listed in the Scope below, included in the “GRI index” and presented in different sections of the Report. Independent verification was performed according to instructions and criteria established by Galp Energia, as referred in the Report, and according to the principles and extent described in the Scope below.

#### Responsibility

Galp Energia’s Board of Directors is responsible for all the information presented in the Report, as well as for the assessment criteria and for the systems and processes supporting information collection, consolidation, validation and reporting. Our responsibility is to conclude on the adequacy of the information, based upon our independent verification standards and agreed reference terms. We do not assume any responsibility over any purpose, people or organization.

#### Scope

Our procedures were planned and executed using the International Standard on Assurance Engagements 3000 (ISAE 3000) and having the Global Reporting Initiative, version 3 (GRI3) as reference, in order to obtain a moderate level of assurance on both the performance information reported and the underlying processes and systems. The extent of our procedures, consisting of inquiries, analytical tests and some substantive work, was less significant than in a full audit. Therefore, the level of assurance provided is also lower.

The verification of the management self declaration on the application level of the Global Reporting Initiative GRI3, based on GRI’s Reporting Framework Application Levels, consisted on the verification of consistency with the applicable requirements. Part of the information required by GRI3 is available on the “Annual Report and Accounts 2013” and the “Corporate Governance Report 2013”, documents that should be used to obtain a full understanding of the developed activities, the corporate governance and the Group’s performance.

The following procedures were performed:

- (i) Inquiries to management and senior officials responsible for areas under analysis, with the purpose of understanding how the information system is structured and their awareness of issues included in the Report;
- (ii) Identify the existence of internal management procedures leading to the implementation of economical, environmental and social policies;
- (iii) Testing the efficiency of process and systems in place for collection, consolidation, validation and reporting of the performance information previously mentioned;
- (iv) Confirming, through visits to sites, that operational units follow the instructions on collection, consolidation, validation and reporting of performance indicators;
- (v) Executing substantive procedures, on a sampling basis, in order to collect sufficient evidence to validate reported information;
- (vi) Comparing technical data related to greenhouse gas emissions and primary energy consumption validated by the independent assurer under the European Emission Trading Scheme;
- (vii) Comparing financial and economic data with those in the “Annual Report and Accounts 2013” audited by PwC, to appraise the external validation of the reported information;
- (viii) Comparing data related to refineries with previous data verified by PwC in the scope of the assurance of Sines and Matosinhos Data Books;
- (ix) Validation of the material themes included in the Report based on the materiality principle of standard AA1000APS and GRI3, through the comparison of the Report’s content with the content of peer companies’ Sustainable Reports;
- (x) Verifying the existence of data and information required to reach level A, self-declared by Galp Energia for applying the GRI3.

#### Independence

We develop our work in line with standard ISAE 3000 independence requirements, including compliance with PwC’s independence policies and code of ethics of the International Ethics Standards Board of Accountants (IESBA).

#### Conclusions

Based on our work described in this report, nothing has come to our attention that causes us to believe that internal control related to the collection, consolidation, validation and reporting of the performance information referred above is not effective, in all material respects.

Based on the assumptions described on the scope, we conclude that the Report includes the data and information required for level A, according to GRI3.

As external auditors of Galp Energia, our opinion about financial data is expressed in the “Annual Report and Accounts 2013”.

Lisbon, April 4, 2014

PricewaterhouseCoopers & Associados SROC, Lda.

Represented by:

António Joaquim Brochado Correia, ROC

PricewaterhouseCoopers & Associados - Sociedade de Revisores Oficiais de Contas, Lda.  
Sede: Palácio Sottomayor, Rua Sousa Martins, 1 - 3º, 1069-316 Lisboa, Portugal  
Tel +351 213 599 000, Fax +351 213 599 999, [www.pwc.com/pt](http://www.pwc.com/pt)

Matriculada na Conservatória do Registo Comercial sob o NUPC 506 628 752, Capital Social Euros 314.000

PricewaterhouseCoopers & Associados - Sociedade de Revisores Oficiais de Contas, Lda. pertence à rede de entidades que são membros da PricewaterhouseCoopers International Limited, cada uma das quais é uma entidade legal autónoma e independente. Inscrita na lista das Sociedades de Revisores Oficiais de Contas sob o nº 183 e na Comissão do Mercado de Valores Mobiliários sob o nº 9077



## 11.2 GRI table - Key sustainability indicators

1. Strategy and analysis		
1.1	Message from the chairman.	Chapter 02 - Page 10-12
1.2	Description of the main impacts, risks and opportunities.	Chapter 03 - Page 19-22 Chapter 04 - Page 26-27 Chapter 06 - Page 41-42 Appendix IV - Page 77-78
2. Organisation profile		
2.1	Name of organisation.	Chapter 01 - Page 7
2.2	Main brands, products and/or services.	Chapter 01 - Page 14-17
2.3	Operational structure of the organisation.	AR&A 2013 - Chapter 05 - Page 61
2.4	Location of the organisation's headquarters.	Chapter 01 - Page 7
2.5	Countries in which the organisation operates.	Chapter 01 - Page 14-15
2.6	Type and legal nature of the organisation.	AR&A 2013 - Chapter 05 - Page 60
2.7	Markets served.	Chapter 01 - Page 14-17
2.8	Size of the organisation.	Chapter 01 - Page 14-17
2.9	Significant changes made.	AR&A 2013 - Chapter 05 - Page 60-61
2.10	Awards/recognitions received.	Chapter 01 - Page 13
3. Parameters of the report		
<b>Profile of the report</b>		
3.1	Period to which the information refers.	2013
3.2	Date of the most recent report.	The previous report was from 2012.
3.3	Report cycle.	Annual
3.4	Contacts for issues related to the report or its content.	Chapter 01 - Page 7
<b>Scope and limits of the report</b>		
3.5	Process for defining the content of the report.	Chapter 01 - Page 7-8
3.6	Limits of the report.	Chapter 01 - Page 7-8
3.7	Other limitations of a specific scope.	Chapter 01 - Page 7-8
3.8	Basis for preparing a report regarding joint ventures, subsidiaries, leased facilities, subcontracted operations and other organisations that could significantly affect the comparability between periods and/or between organisations.	Chapter 01 - Page 7
3.9	Techniques for measuring data and the bases for calculations.	Appendix III - Methodological notes - Page 75-76
3.10	Explanation of the nature and consequences of any reformulation of information contained in previous reports.	Chapter 01 - Page 7
3.11	Significant changes compared with previous years.	Chapter 01 - Page 7
<b>GRI table of contents</b>		
3.12	Table which identifies the location of each element of the GRI report.	Appendix II - GRI table - Key sustainability indicators - Page 65-74
<b>Verification</b>		
3.13	Current existing policies and procedures for providing external checks on the report.	Chapter 01 - Page 7 Appendix I - page 64
4. Corporate governance, commitments and involvement		
4.1	Structure of governance.	AR&A 2013 - Chapter 05 - Page 61-63
4.2	Indication whether the chairman of the highest governing body is also an executive director (and his duties within the management of the organisation).	AR&A 2013 - Chapter 05 - Page 61-63
4.3	Declaration of the number of independent or non-executive members.	AR&A 2013 - Chapter 05 - Page 61-63
4.4	Mechanisms which allow shareholders and workers to make recommendations to the highest governing body.	CGR 2013 - Page 35 Chapter 04 - Page 25-26 Chapter 10 - Page 62

4.5	Relationship between remuneration of the members of the highest governing body, executive board and other executives and the performance of the organisation (including social and environmental performance).	AR&A 2013 - Chapter 05 - Page 64-65
4.6	Processes in effect at the highest governing body to ensure that conflicts of interest are avoided.	CGR 2013 - Page 36
4.7	Process to determine the qualifications and knowledge of the members of the highest governing body to define the strategy of the organisation for issues related to economic, environmental and social topics.	CGR 2013 - Page 12-16
4.8	Mission statements and values, codes of conduct and internal principles relevant to economic, environmental and social performance, as well as the status of their implementation.	<a href="http://www.galpennergia.com/EN/agalpennergia/ogrupa/Paginas/MissaoeValores.aspx">http://www.galpennergia.com/EN/agalpennergia/ogrupa/Paginas/MissaoeValores.aspx</a>
4.9	Procedures of the highest governing body to supervise the identification and management by the organisation of economic, environmental and social development, including relevant risks and opportunities, as well as the adherence or compliance with internationally agreed standards, codes of conduct and principles.	CGR 2013 - Page 20-21 Chapter 04 - Page 25-26
4.10	Processes for self-evaluation of the performance of the highest governing body, especially with respect to economic, environmental and social performance.	CGR 2013 - Page 20-21
<b>Commitments to external initiatives</b>		
4.11	Explanation of how the precautionary principle is treated by the organisation.	Chapter 04 - Page 26-27
4.12	Letters, principles or other initiatives developed externally of an economic, environmental and social nature which the organisation subscribes or endorses.	Chapter 04 - Page 26 Chapter 06 - Page 41 Chapter 09 - Page 52-54
4.13	Participation in associations (such as industry federations) and/or national/international defence organisms.	<a href="http://www.galpennergia.com/EN/sustainability/Involvement-with-stakeholders/Paginas/Suppliers-and-partners.aspx">http://www.galpennergia.com/EN/sustainability/Involvement-with-stakeholders/Paginas/Suppliers-and-partners.aspx</a>
<b>Participation of stakeholders</b>		
4.14	List of the organisation's main stakeholders.	Chapter 10 - Page 57
4.15	Basis for identifying and selecting stakeholders.	Chapter 10 - Page 58
4.16	Means of consulting stakeholders.	Chapter 10 - Page 57-62
4.17	Main issues and concerns raised by stakeholders as a result of the consultation, and how the Organisation responds to these issues and concerns.	Chapter 10 - Page 57-62

## An approach to management, objectives, performance, policies and contextualisation

Pages: 19-20, 25-27, 50, 77-78.

<http://www.galpennergia.com/EN/sustainability/Governance-model/Paginas/Governance-model.aspx>

### Aspect: economic performance

EC1	Direct economic value created and distributed (including revenue, operating costs, donations and other community investments, retained earnings, and payments to suppliers of capital and governments).	Appendix V - Page 79
EC2	Financial implications and other risks and opportunities for organisation activities, due to climate change.	Galp Energia has identified the financial implications and other risks and opportunities stemming from climate change. For more detailed information, please see Galp Energia's response to the 2012 Carbon Disclosure Project questionnaire, available at: <a href="https://www.cdp.net/Sites/2012/42/7042/Investor%20CDP%202012/Pages/DisclosureView.aspx">https://www.cdp.net/Sites/2012/42/7042/Investor%20CDP%202012/Pages/DisclosureView.aspx</a>
EC3	Coverage of obligations regarding the organisation's benefit plan.	AR&A 2013 - Page 137
EC4	Significant financial benefits received from the state.	Appendix V - Page 79

### Aspect: presence in the market

EC5	Variation in proportion between the lowest salary and the local minimum wage, in the main operating units.	The average proportion between the lowest salary at Galp Energia and the national minimum wage is 2.48. Scope: main Galp Energia operating units in Africa and Brazil.
EC6	Policy, practices and proportion of expenses to local suppliers.	Galp Energia has no policy applicable to local suppliers in operating units. The policy is the same in every region where it operates. Whenever possible, a single centralised contract is used for all companies and for all businesses.

	Total	Portugal	Spain	Germany	Brazil	France	Others
<b>Purchases by macro-class (m€)</b>	<b>450</b>	305.9	71.2	18.3	18.3	9.6	26.5



EC7 Procedures for local hiring and proportion of members of upper management recruited from the local community in key operating units.

Senior management employees					
Countries	Expatriated	Impatriated	Local	Total	% of senior jobs held by local individuals
Angola	3	0	1	4	25%
Brazil	4	0	11	15	73%
Cape Verde	0	0	46	46	100%
Spain	2	0	68	70	97%
Gambia	1	0	1	2	50%
Guiné-Bissau	1	0	4	5	80%
Holland	1	0	0	1	0%
Mozambique	7	0	5	12	42%
Portugal	0	16	574	590	97%
Swazilandia	1	0	2	3	67%
Switzerland	2	0	0	2	0%
<b>Total</b>	<b>22</b>	<b>16</b>	<b>712</b>	<b>750</b>	<b>95%</b>

#### Aspect: Indirect economic impacts

EC8	Development and impact of investments in infrastructures and services provided, essentially for public benefit through commercial commitment in genders or non-profits.	Chapter 09 - Page 52-55
EC9	Identification and description of significant indirect economic impacts, including the extension of the impacts.	Chapter 03 - Page 20 Chapter 09 - Page 52-55

### An approach to management, objectives, performance, policies and contextualisation

Pages: 19-23, 25-27, 41, 42, 50, 77, 78.

<http://www.galpenenergia.com/EN/sustainability/Safety-Health-Environment-Quality/Paginas/Safety-Health-Environment-Quality.aspx>

#### Aspect: materials

EN1	Consumption of raw materials.	Chapter 05 - Page 32
EN2	Materials used that are recycled waste from external sources.	Galp Energia does not use materials originating from recycling.

#### Aspect: energy

EN3	Direct consumption of energy, segmented by primary source.	Chapter 06 - Page 43 Chapter 05 - Page 31 Appendix IV - Page 80 (Appendix III - methodological notes)
EN4	Indirect consumption of energy, segmented by primary source.	Chapter 06 - Page 43 Appendix IV - Page 80 Galp Energia acquires electrical energy from Galp Power and from EDP. For more information on primary energy tied to electricity production per each supplier, please see the Energy Services Regulatory Entity (ERSE) website.
EN5	Energy saved due to improvements in conservation and efficiency.	Chapter 03 - Page 20-22 Chapter 05 - Page 32-34, 37-39
EN6	Initiatives to provide products and services with low energy consumption, or which use energy created by renewable resources, and the reduction in the need for energy resulting from these initiatives.	Chapter 03 - Page 20-22 Chapter 05 - Page 32-34, 36-39
EN7	Initiatives to reduce the indirect consumption of energy and the reduction achieved.	Chapter 03 - Page 20-22 Chapter 05 - Page 32-34, 37-39

#### Aspect: water

EN8	Consumption of water, segmented by source.	Chapter 06 - Page 43 Chapter 05 - Page 31 Appendix IV - Page 80
EN9	Sources of water that are significantly affected by water abstraction.	According to its knowledge to date, Galp Energia has no activities where water consumption significantly affects water sources.
EN10	Percentage and total volume of recycled and reused water.	The Matosinhos Refinery recycles water, recuperating 53% of the water processed at the Wastewater Treatment Plant (ETAR). The Sines Refinery also reuse water but at a lower volume. Considering the volume of recycled water at the refinery and Galp Energia's total consumption, we have a 10% recycling rate at Galp Energia, corresponding to 11% in R&M.



**Aspect: biodiversity**

EN11	Location and areas of lands belonging to the organisation, leased or managed by it, in protected areas rich in biodiversity, outside the protected areas.	Chapter 06 - Page 41
EN12	Significant impacts of the activities, products and services of the organisation on biodiversity in protected areas and in areas rich in biodiversity outside the protected areas.	Chapter 06 - Page 41
EN13	Protected or restored habitats.	In carrying out its activities, Galp Energia ensures the minimum possible amount of impact, and protects and/or restores any affected habitat whenever so recommended. To date, there is no record of any situation of this kind. Moreover, the following studies supporting these statements have been produced: a) Biodiversity Guide - INTEGRATION OF BIODIVERSITY IN ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS OF UPSTREAM PROJECTS; b) Study on LOCATION OF GALP ENERGIA FACILITIES - IDENTIFICATION OF BIODIVERSITY PROTECTION AND CONSERVATION AREAS; c) Preparation of case studies.
EN14	Strategies, existing measures and future plans for managing the impacts on biodiversity.	Chapter 06 - Page 41
EN15	Number of species on the IUCN Red List and on national conservation lists with habitats in areas affected by operations, listed by extinction risk level.	In the environmental impact studies done at refineries, no significant impacts were found to species on the IUCN red list.

**Aspect: emissions, effluents and waste**

EN16	Total emissions of greenhouse gases, direct and indirect, by energy source.	Chapter 05 - Page 31 Chapter 03 - Page 23 Appendix IV - Page 80 (Appendix III - methodological notes)
EN17	Other indirect emissions of relevant greenhouse gases, by weight.	Chapter 03 - Page 23 Appendix IV - Page 80
EN18	Initiatives to reduce the emissions of greenhouse gases and the reduction achieved.	Chapter 03 - Page 20-22 Chapter 05 - Page 32-39
EN19	Emissions of substances that destroy the ozone layer, by weight.	Galp Energia does not manufacture products that emit substances which are destructive to the ozone layer.
EN20	NO <sub>x</sub> , SO <sub>x</sub> and other significant atmospheric emissions.	Chapter 06 - Page 43 Appendix IV - Page 80
EN21	Total amount of wastewater classified by quality and destination.	Chapter 05 - Page 31 Chapter 06 - Page 43 Appendix IV - Page 80
EN22	Total quantity of waste by type and by treatment method.	Chapter 06 - Page 43 Appendix IV - Page 80
EN23	Number and total volume of significant spills.	In 2013, the number of accidents reported with loss of containment considered oil spills (*) numbered 28 occurrences, with a total volume of around 60 m <sup>3</sup> . Due to the primary and secondary containment measures as well as emergency interventions, most of these occurrences did not have an impact on the environment. However, even if there was no environmental impact, around 30 m <sup>3</sup> of oil was released to the environment, where remedial measures were taken to restore the initial quality state. For E&P - operated block activities, no losses of containment occurred in 2013.  (*) Reporting criteria: oil spills are defined as those exceeding 150 litres, excluding loss of gases; Reporting scope: Does not include E&P - non operated activities.
EN24	Weight of waste transported, imported, exported or treated considered dangerous under the terms of the Basel Convention - Appendices I, II, III and VIII, and percentage of waste loads transported individually.	Not applicable.
EN25	Identification, size, and value of the biodiversity of the water sources (and respective ecosystems or habitats) significantly effected by the discharge and by the drainage of water performed by the related organisation.	Water discharges are subject to licensing. Galp Energia assumes that compliance with discharge standards entails no impacts to biodiversity. Moreover, Galp Energia monitors underground waters and performs AQR, allowing it to conclude that no impacts have been caused to ecosystems (see 2009 sustainability report, page 87). Note: the preceding does not include Galp Internacional, since Galp Energia does not presently have information to affirm this. In 2014, Galp Energia will make efforts to monitor and report indicators tied to non-compliances in wastewater discharges and the relevant pollutant loads (kg or tonnes) of higher-impact discharges.

**Aspect: products and services**

EN26	Initiatives to mitigate the environmental impact of the organisation's products and services and the extent to which the impact can be mitigated.	Chapter 03 - Page 21-23 Chapter 06 - Page 41
EN27	Percentage recovered from products sold and their respective packaging.	The weight of declared packages in 2013 was 1,368 tonnes.

**Aspect: compliance**

EN28	Monetary value of significant fines and total number of non-monetary sanctions for failure to comply with environmental laws and regulations.	In 2013, five infraction proceedings were filed directly related to the environment. No amount has been paid.
------	---	---

**Aspect: transport**

EN29	Significant environmental impacts of the transport of products and other goods and materials used in the organisation's operations, as well as workers' transport.	Chapter 03 - Page 21-23
------	--	-------------------------

**Aspect: general**

EN30	Total costs and investments for environmental protection, by type.	The amounts reported annually as environment investments reflect the projects cycle. Its development, therefore, must be viewed in an integrated manner, constituting successive steps to consolidate plans investments. Protection and management of the environment (biodiversity, noise and landscape, environmental management system): € 5,181,468. Quality, air and climate protection: € 3,586,624. Soil and groundwater protection: € 2,615,283. Waste management: € 954,875. Water resources protection: € 7,172,925.
------	--	--

**An approach to management, objectives, performance, policies and contextualisation**

Pages: 19-20, 25-27, 50, 62, 77-78.

**Aspect: employment**

LA1	Total manpower by job type (full time or part time), type of work contract (full or part time) and by region.	Chapter 08 - Page 49
LA2	Job creation and turnover per age bracket, gender and region.	Chapter 08 - Page 49
LA3	Benefits for full-time employees, which are not attributed to temporary or part-time employees.	<b>Mandatory benefits/Conditions established in Labour Code:</b> <ul style="list-style-type: none"> <li>• job safety/prohibition of dismissal without just cause;</li> <li>• maximum working time;</li> <li>• minimum break periods;</li> <li>• paid holidays and respective allowance;</li> <li>• Christmas bonus;</li> <li>• minimum wage and overtime;</li> <li>• conditions for occasional employee assignment;</li> <li>• vocational training;</li> <li>• occupational health &amp; safety;</li> <li>• workplace accident insurance/rights to remedy for damages resulting from workplace accidents;</li> <li>• protection of parental leave;</li> <li>• protection against child labour;</li> <li>• student employee status;</li> <li>• equal treatment and non-discrimination;</li> <li>• protection from harassment;</li> <li>• respect for personal rights;</li> <li>• respect for rights to privacy in personal and family life.</li> </ul> <b>Awards and Variable Remuneration:</b> <ul style="list-style-type: none"> <li>• productivity bonus;</li> <li>• variable remuneration (performance management system).</li> </ul>

**Aspect: labour/management relations**

LA4	Percentage of employees covered by negotiation agreements.	The percentage of employees is 79.91%.
LA5	Minimum announcement period for changes in the operations of the reporting organisation, including whether it is specified in union agreements.	There is no minimum advance notice with regard to operating changes. Employees will be notified whenever changes do occur.

**Aspect: occupational health and safety**

LA6	Percentage of total manpower represented on health and safety committees, made up of managers and workers, who assist in monitoring and advising on occupational health and safety programmes.	The percentage of employees represented in hygiene, occupational health and safety committees is 37.99%.
LA7	Type of injuries, days lost, absenteeism rate, and number of work-related deaths.	Chapter 07 - Page 45 (Methodological notes in Appendix III).
LA8	Education, training, counselling, prevention and risk control programmes, to assist employees, their respective families, or members of the community, with regards to illness.	Chapter 03 - Page 20 Chapter 08 - Page 50 Chapter 09 - Page 52-53
LA9		For more information, see page 70 of the 2005-2006 Sustainability Report at <a href="http://www.galpennergia.com">www.galpennergia.com</a> .

**Aspect: training and education**

LA10 Number of hours of training.  
Number of participants.  
No. of hours of training per employee.  
Number of hours of training per employee.  
Average hours of training per professional category.

Chapter 08 - Page 50

**Average hours**

Executive/Top Management	32.1
First Line Management/Supervisor	81.9
Middle/General Management	63.1
Other Employees	51.5
Specialist Groups	18.8

LA11 Programmes for managing skills and lifetime learning which support the employability of employees and assist them in managing career objectives.

Programme content for competency management	No. participations	Hours
Administrative and secretary	142	898
Environment	44	231
Environment, quality and safety	4,367	23,769
Supply and logistics	2	44
Conduct and leadership	1,187	11,884
Accounting and finance	118	2,530
Energy	394	1,164
Sales and marketing management	594	10,883
General management	930	32,413
Legal	34	488
Languages	605	47,619
Quality	236	1,327
Human resources	276	1,774
Meetings and outdoors	182	1,245
Health and safety	4,256	23,021
Seminars/conferences	1,356	5,429
Information systems	953	11,560
Technical	4,577	47,982

LA12 Percentage of employees who regularly receive performance and career development analyses.

The percentage of employees is 95.98%.

**Aspect: diversity**

LA13 Composition of management and the group responsible for corporate governance, proportion of men/women, age brackets, minorities and other indicators of diversity.

Chapter 08 - Page 49

LA14 Ratio between the average salary attributed to men, and the average salary attributed to women, in the same professional category.

**Salary**

Ratio of average RBA (Salary) (F/M) Executive Level	0.98
Ratio of average RBA (Salary) (F/M) Management Level	0.86
Ratio of average RBA (Salary) (F/M) Non-management Level	0.87

**Remuneration**

Ratio of average RBA (Remuneration) (F/M) Executive Level	0.95
Ratio of average RBA (Remuneration) (F/M) Management Level	0.89
Ratio of average RBA (Remuneration) (F/M) Non-management Level	0.86

**An approach to management, objectives, performance, policies and contextualisation**

Pages: 19-20; 25-27, 52, 77-78.

**Aspect: investment and procurement practices**

HR1 Percentage and total number of significant investment contracts which include clauses referring to human rights or which were submitted to evaluations pertaining to human rights.

Fulfilling its commitment assumed for 2012, beginning on this date, Galp Energia included a clause binding the counterparties, specifically partners, suppliers and others, to the provisions of the Galp Energia Group's code of ethics in its draft contracts. In the future, Galp Energia will try to determine the percentage and total number of investments including clauses in reference to human rights or submitted to assessment related to human rights.

HR2	Percentage of companies hired and critical suppliers which were submitted to evaluations referring to human rights and the measures taken.	In 2012, Galp Energia included a clause binding the counterparties, specifically partners, suppliers and others, to the provisions of the Galp Energia Group's code of ethics in its draft contracts. In the future, the percentage of contracted companies and critical suppliers submitted to assessments related to human rights and measures taken will be determined.
HR3	Total number of hours of training in policies and procedures regarding relevant aspects of human rights for the operations, including the percentage of employees who benefited from training.	Galp Energia has no specific employee training programme related to aspects of human rights. However, training for all employees, through the e-learning tool, on issues involving sustainability, the code of ethics, combating corruption and safeguarding human rights is planned by 2015.

**Aspect: non-discrimination**

HR4	Total number of discrimination cases and the measures taken.	No process with the described characteristics existed or was initiated in 2013.
-----	--	---

**Aspect: freedom of association and trade unions**

HR5	Operations identified in which the right to exercise freedom of association and collective bargaining could be significantly at risk and the measures taken to support this right.	None.
-----	--	-------

**Aspect: child labour**

HR6	Operations identified as having a significant risk of using child labour and the measures taken to contribute to abolishing child labour.	Fulfilling its commitment assumed for 2012, beginning on this date, Galp Energia included a clause binding the counterparties, specifically partners, suppliers and others, to the provisions of the Galp Energia Group's code of ethics in its draft contracts. In the future, Galp Energia will try to determine the percentage and total number of investments including clauses in reference to human rights or submitted to assessment related to human rights.
-----	---	--

**Aspect: forced and compulsory labour**

HR7	Operations identified as having a significant risk of the occurrence of forced labour comparable to slavery and the measures taken to contribute to its eradication.	Galp Energia does not believe that any risk of forced or slave labour exists in its business activities.
-----	--	--

**Aspect: practices and safety**

HR8	Percentage of safety personnel trained in policies and procedures regarding relevant aspects of human rights for the organisation's operations	Galp Energia has no specific employee training programme related to aspects of human rights. However, training for all employees, through the e-learning tool, on issues involving sustainability, the code of ethics, combating corruption and safeguarding human rights is planned by 2015.
-----	--	---

**Aspect: indigenous rights**

HR9	Total number of violations of the rights of indigenous populations, and actions taken.	No process with the described characteristics existed or was initiated in 2013.
-----	--	---

**An approach to management, objectives, performance, policies and contextualisation**

Pages: 19-20, 25-27, 50, 52, 77-78.

**Aspect: community**

S01	Nature, scope and effectiveness of any programmes and practices to evaluate and manage the impacts of operations on the communities, including entry, operation and exit.	Chapter 09 - Page 53-55.
-----	---	--------------------------

**Aspect: corruption**

S02	Percentage and total number of business units analysed regarding the risks associated with corruption.	No process with the described characteristics existed in 2013. Galp Energia furnishes all of its employees with the Anti-Corruption Policy and mechanisms of the Committee for Monitoring the Anti-Corruption Policy.
S03	Percentage of employees trained in the organisation's anti-corruption policies and procedures.	Chapter 04 - Page 25
S04	Activities in response to the occurrence of instances of corruption.	The Committee for Monitoring the Anti-Corruption Policy has still not monitored any case of proven corruption.

**Aspect: public policy**

S05	Positions regarding public policies and participation in preparing public policies and lobbies.	Zero.
S06	Total amount of financial contributions and contributions in kind for political parties, politicians or related institutions.	Zero.

**Aspect: unfair competition**

S07	Total number of legal actions for reasons of unfair competition, anti-trust, monopoly practices and respective results.	Zero.
-----	---	-------

**Aspect: compliance**

S08	Monetary value of significant fines and total number of non-monetary sanctions for failure to comply with laws and regulations.	18 administrative offences related to the breach of laws and regulations.
G4-S011	Número de reclamações sobre impactos na sociedade abordados e resolvidos através de mecanismos de reclamação formal.	16 claims brought and resolved at Consumer Conflict Arbitration Centres.

**An approach to management, objectives, performance, policies and contextualisation**

Pages: 19-20, 25-27, 52, 77-78.

**Aspect: consumer health and safety**

PR1	Phases of the life cycle of products and services in which the impacts on health and safety are evaluated aimed at improvement, and the percentage of products and services subject to these procedures.	With the entry into force of mechanisms for verifying the sustainability criteria handed down by Directive 2009/28/EC, both in Portugal and Spain, Galp Energia will continue its policy of incorporating fuels from renewable sources in the transportation sector, requiring suppliers to supply information on the sustainability of biofuels purchased. For more information, see page 84 of the 2010 Sustainability Report.
PR2	Total number of occurrences of non-compliance with legislation and voluntary codes related to the impacts of the products and services and consumer safety, by type of result	Zero.

**Aspect: labelling of products and services**

PR3	Type of information on the products and services requested by the procedures, and percentage of products and services subject to these requests for information.	Galp Energia provides information on the hazards associated with the products it sells, together with recommendations for their safe use, through Material Safety Data Sheets and labelling instructions prepared in accordance with legislation in force and subsequently placed on packages. An internal procedure exists governing the preparation, acquisition and internal and external dissemination of Material Safety Data Sheets and labelling instructions.
PR4	Number of occurrences of non-compliance with legislation and voluntary codes regarding information and labelling of products and services, by type.	One administrative offence related to product labelling received in 2013.
PR5	Practices related to customer satisfaction, including the results of research on the issue.	Chapter 10 - Page 62.

**Aspect: publicity**

PR6	Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorships.	All marketing communications, including advertising, promotions and sponsorships, use the legal framework of Decree Law no. 300/90 of 23 October.
PR7	Total number of occurrences of non-compliance with legislation and voluntary codes regarding advertising and marketing, including advertising, information and labelling of products and services, by type.	Six administrative offences related to advertising and marketing received in 2013.

**Aspect: customer privacy**

PR8	Total number of complaints recorded regarding violation of customer privacy.	Zero.
-----	--	-------

**Aspect: agreement**

PR9	Monetary value of (significant) fines for failure to comply with laws and regulations regarding supply and use of products and services.	34 administrative offences related to non-compliance with laws and regulations concerning the provision and use of products and services received in 2013.
-----	--	--

Aspect: Oil and Gas Sector Supplement		
OG1	Volume and type of estimated proved reserves and production.	Chapter 05 - Page 29
OG2	Total amount invested in renewable energy.	The total annual amount invested in renewable energies by Galp Energia was €50,446,000.
OG3	Total of renewable energy created, broken down by source.	Chapter 05 - Page 36, 37 and 39
OG4	Number and percentage of relevant operational units in which the risk of biodiversity has been evaluated and monitored.	Chapter 06 - Page 41
OG5	Volume of water produced.	Chapter 05 - Page 31
OG6	Volume of flared and vented hydrocarbons.	Chapter 05 - Page 31 Vented not available.
OG7	Amount of drilling residues and strategy for their disposal.	Operational blocks: no drilling in 2013. Non-operational blocks: this information could not be obtained.
OG8	Lead, benzene and sulphur content in fuels.	Galp Energia's refineries do not use added lead in fuels. Reducing the sulphur content in fuels requires the acquisition of crude oils with a lower sulphur content and/or the use of units that reduce the sulphur content in fuels. In 2012 construction of a hydrocracker was completed at the Sines Refinery to obtain diesel components with lower sulphur contents (project guarantee below 9 ppm. However, the hydrocracker is producing diesel components whose typical sulphur content is less than 1 ppm. This hydrocracker has a processing capacity of 43,000 barrels of vacuum gas oil per day. The refinery modification project entailed an investment of €1.4 billion. A new "Claus" sulphur recovery unit was also launched in 2012 at the Matosinhos Refinery. In all fuels, Galp Energia's specifications comply with applicable domestic limits for benzene and sulphur. In 2013 there were no changes to the domestic specifications for sulphur or benzene content in fuels. Galp Energia provides its customers with Material Safety Data Sheets for its products describing their primary physical and chemical characteristics, together with safety and environmental aspects such as: identification of hazards, first aid, fire-fighting measures, accidental leak measures; handling and storage, exposure controls/personal protection, toxicological information, ecological information, ecological information, transport information and exposure scenarios. Galp Energia notifies its customers of estimated CO <sub>2</sub> emissions associated with the consumption of fuel by showing this information in detailed invoicing. For fuels sold at gas stations, detailed invoicing is replaced by posting this information at the stations. Galp Energia's website has a wide range of information on the fuels it sells, including, in some cases, information on emissions, consumption and vehicle protection, when applicable.
OG9	Operations where indigenous communities are present or affected by the activities of the company and specific ongoing strategies.	Chapter 09 - Page 54
OG10	Number and description of significant conflicts with local communities and indigenous populations.	None.



OG11	Number of facilities that were dismantled and/or are in the process of being dismantled.	Galp Energia has a standard procedure – NPG-038 – which establishes the minimum HSE requirements applicable to decommissioning establishments/facilities in the Galp Energia Group, proposing structures for decommissioning plans and content to be developed by business/management units and Group companies, tailored to the characteristics and risk associated with the establishments/facilities.
	Reporting complaints related to the dismantling (community) or notifications from the government regarding the dismantling.	None.
OG12	Operations where relocations occurred and the number of families relocated and a description of how their lifestyles were affected in the process.	None.
OG13	Number of safety events in the process, by type of activity (refining, upstream, etc.)	Process Safety Accidents in 2013 (scope Iberia): Tier 1: 6 Tier 2: 16
OG14	Volume of biofuels produced and purchased which comply with sustainability criteria.	Galp Energia introduced in Portuguese and Spanish market 440,000 m <sup>3</sup> of biofuel. Both in Portugal and in Spain is still not mandatory compliance with the sustainability criteria for the production of biofuel. In Portugal it will be mandatory from July 2014.

## 11.3 Appendix III – Methodological notes

### Environmental performance – EN3 and EN16 methodology

Direct consumption of primary energy at the organisation, by energy source (fuel or type of energy).

Type of combustion	Fuels used
Stationary	Endogenous: Burning fuel waste, fuel gas Exogenous: NG, LPG, fuel oil, petrol, diesel
Mobile	Exogenous: Fuel oil, petrol, diesel

#### Definitions:

- Endogenous fuels: non-commercial fuels resulting from by-products of the industrial process.
- Exogenous fuels: commercial fuels not resulting from by-products of the industrial process.
- Stationary combustion: Burning of fuel to generate electricity, steam or heat in stationary equipment such as boilers, furnaces, etc.
- Mobile combustion: Burning of fuel by vehicles or other mobile equipment (e.g. forklifts).

Fuel type		Low Heat Value		Density		Emission factor NO <sub>x</sub>		Emission factor SO <sub>2</sub>		% S		Emission factor of particles	
		Value	Unit	Value	Unit	Value	Unit	Value	Unit	Value	Unit	Value	Unit
NG		38.46	GJ/(10 <sup>3</sup> Nm <sup>3</sup> )	-		48	g/GJ	-		0	%	0.8	g/GJ
Fuel oil / hydrocarbons		40.36	GJ/t	-		160	g/GJ	-		1.0	%	53	g/GJ
Fuel oil - shipping		40.36	GJ/t	-		79.3	kg/t	20	kg/t	-	%	6.2	kg/t
Petrol - passenger vehicles		44.8	GJ/t	0.745	kg/l	0.12	kg/GJ	0.002	kg/GJ		%	0.004	kg/GJ
Diesel	Stationary combustion equipment	43.3	GJ/t	0.84	kg/l	60	g/GJ	-		0.005	%	69.9	g/GJ
	Passenger vehicles	43.3	GJ/t	0.84	kg/l	0.262	kg/GJ	0.002	kg/GJ	-		0.019	kg/GJ
	Heavy vehicles / mobile equipment	43.3	GJ/t	0.84	kg/l	0.703	kg/GJ	0.002	kg/GJ	-		0.023	kg/GJ
	Shipping	43.33	GJ/t	-		78.5	kg/t	20	kg/t	0.1	%	1.5	kg/t
	Roadway - shipping	43.33	GJ/t	-		78.5	kg/t	0.2	kg/t	10	ppm	1.5	kg/t

Note: the constants application is not extensible in its entirety at Refineries and Cogenerations (e.g. establishing emissions are based on specific methodologies agreed with the competent authority).

#### References

Low Heat Value:

National Inventory of GHG published in 2008

[http://www.apambiente.pt/\\_zdata/DPAAC/CELE/tab\\_val\\_PCI\\_FE\\_FO.pdf](http://www.apambiente.pt/_zdata/DPAAC/CELE/tab_val_PCI_FE_FO.pdf)

Density:

“Energy Statistics Working Group Meeting” da Unece (United Nations Economic Commission for Europe), IEA/OECD.

Emission factor NO<sub>x</sub>/SO<sub>2</sub>/Particles and Sulfur content:

Portuguese Informative Inventory Report. IIR (Informative Inventory Report).

[http://www.apambiente.pt/\\_zdata/DPAAC/INERPA/IIR\\_20130515.pdf](http://www.apambiente.pt/_zdata/DPAAC/INERPA/IIR_20130515.pdf)

Emission factor NO<sub>x</sub>/SO<sub>2</sub>/Particles from shipping:

EMEP/EEA emission inventory guidebook 2013 (Pág.13)

<http://www.eea.europa.eu/publications/emep-eea-guidebook-2013>

**LA 7**

Absenteeism index: total days of absenteeism/average number of employees x 11 (months) x 22 (days)

**Carbon footprint (Page 23)**

**Direct emissions (A1)** – they can be directly controlled by the company and concern emissions from the consumption of fuel in company facilities: furnaces, heat or steam generators, fleet vehicles.

**Indirect emissions (A2)** – these emissions stem from the company's activity but use resources from a different organisation: use of electricity from the grid, or heat or steam produced in external facilities.

**Indirect emissions (A3)** – these emissions stem from fuel consumption in facilities not belonging to the company: rented vehicles, planes, waste incineration, logistics and services.

Galp Energia 2013 Carbon Footprint was prepared according to the methodological framework established by the Greenhouse Gas Protocol - Corporate Accounting and Reporting Standard, complemented by respective sector adaptation provided by the International Petroleum Industry Environmental Conservation Association (IPIECA) - Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Gas Industries.

Conversely to 2012, in 2013 caption "Use of Products" did not include sales to oil operators and exports nor NG trading volumes, since only the emissions associated to the consumption of Galp Energia products introduced in the market via sale to the end user are to be accounted for. This fact introduces an artificial variation in scope 3 (use of products).

**GSE performance (Page 39)**

Potential reduction of CO<sub>2</sub> (kg): Energy production in 2013 (kWh) x 0.144 (kgCO<sub>2</sub>/kWh).

Emission factor: <http://dre.pt/pdf2sdip/2013/12/234000003/0001300013.pdf>

## 11.4 Appendix IV - Status of the list of commitments for the sustainability strategy published in the 2012 Sustainability Report

Strategic priority	Initiative/action	Target	Status
Ethics, conduct and human rights	Complete the membership process to the UN Global Compact. (See chapter 04)	2013	Complete
	Provision of training on sustainability, the code of ethics, combating corruption and protecting human rights available for all employees through an e-learning tool. (See chapter 03)	2013–2015	According to plan
	Beginning of the project with the selection of the service provider.		
Human capital	Creation of an independent means of reporting violations to the code of ethics and other unacceptable behaviour, the creation of an independent investigative committee. (See chapter 04)	2013	Complete
	Extend the 360° appraisal system to all team-leading employees. (See chapter 08)		
	All work necessary for the assessment of competencies 2013 including 360° evaluation of all team leadership roles begun in 2013.	2014	Complete
	Continue work plan of defining and implementing human resource policies at various affiliates in Africa and operations in Brazil. (See chapter 08)	2013–2014	Partially complete
	Assess the satisfaction of Galp Espanha employees. (See chapter 08)	2014	Complete
Stakeholders/ Stakeholder involvement	Implementation completed. Early completion of the action.		
	Develop training initiatives with employees in Africa. (Ver cap. 03)	2013–2017	According to plan
Stakeholders/Client relationship	Continue the programme for raising awareness and publicising safety conditions with the community - APR project. (See chapter 09)	2013–2015	According to plan
	Implement Galp Energia brand repositioning reinforcing the topic of sustainability, which will involve getting input from stakeholders. (See chapter 03)	2013–2014	According to plan
	The repositioning of the Galp Energia brand is visible in the new advertising, which gives added emphasis to sustainability.		
	Appoint a customer Ombudsman to analyse and manage customer complaints.	2013	Complete
	Process completed. Nomination of the customer Ombudsman to perform the duties in 2014.		
	Create customer observatories (Company and private).		
	The "clients observatory" analyses structured information about clients of Galp Energia, in particular their perceptions, attitudes and expectations, as systematic information to support decision making. This includes two components: the regular quantitative studies and the ad-hoc studies, specifically designed to ascertain information supporting the development of value propositions.	2013	Complete
	Against a background of increasing energy costs and taking into account its impact on customers' budgets, develop offers with advantageous conditions, namely the Galp On service, a competitively priced tariff plan for the electricity and natural gas free market.	2013–2014	According to plan
	www.galpon.pt		
	Extend the process of assessing customer satisfaction in different areas (pilot project in Mozambique to start in 2013). (See chapter 03)	2013–2015	According to plan
Stakeholders/Community reach	Beginning of the preparation and planning of the project.		
	Assess social responsibility projects impact developed based on the London Benchmarking Group's methodology. (See chapter 09)	2013	Complete
	Define the critical financial Key Performance Indicators (KPI) related with social responsibility. (See chapter 09)	2014	According to plan
	Foster participation in volunteer programmes promoted by Galp Voluntária. (See chapter 09)	2013–2017	According to plan
	Develop and implement a social responsibility programme based Millennium Goals, that cover various regions where Galp Energia operates. (See chapter 03)		
	Lines of action are defined and a questionnaire designed to identify the priorities and the resources necessary to implement the initiatives is created.	2013–2015	According to plan
	Promote use of cleaner energy solutions with local communities in the various countries where Galp Energia operates. (See chapter 03)		
	In Swaziland there is an ongoing campaign to promote the use of LPG in place of firewood and charcoal.	2013–2017	According to plan
	Implement a social responsibility management system in Portugal and other countries (Spain, Brazil, Angola and Mozambique). (See chapter 03)	2015	According to plan
	The diagnostic report is drawn up.		
	Promote environmental education and social communication programmes aimed at communities in Brazil, located in the areas of direct influence of business undertakings. (See chapter 05)	2013	Complete
	Develop a plan for setting up a technology college in Mozambique. (See chapter 03)		
	The essential aspects of the installation plan by the working group within the consortium Area 4 in Mozambique were defined.	2013–2014	According to plan
Stakeholders/Relationship with suppliers and partners	Create a technical training programme in Exploration & Production (E&P) for Mozambicans. (See chapter 08)	2013–2014	According to plan
	Improve qualification process of suppliers by implementing new tools in the suppliers management platform. (See chapter 10)	2013–2015	According to plan
	Strengthen the audit process of key suppliers, ensuring compliance with sustainability requirements, namely EQS requirements and the code of ethics. (See chapter 10)	2013–2015	According to plan
	Review the procurement policy, reinforcing environmental and social concerns. (See chapter 04 and chapter 10)	2013–2015	According to plan

Strategic priority	Initiative/action	Target	Status
Health, safety and environment	Integrate environmental, quality and safety (EQS) objectives and goals when assessing employees performance. (See chapter 06)	2013	Complete
	Increase coverage of certifications following ISO standards, namely in the Matosinhos refinery and in the Gijon factory. (See chapter 04)	2013	Complete
	Implement the audit programme to the G+ System. (See chapter 06)	2013-2017	According to plan
	Promote training programmes and raise awareness to the G+ System, water, air, safety and health. (See chapter 08)	2013	Complete
Health, safety and environment / Minimising impacts	Ensure integration of the best techniques available in operational requirements and assessment of the impacts on new businesses. (See chapter 03)	2013	Complete
	Develop a corporate strategy for the sustainable management of soils within Galp Energia Group. (See chapter 06)	2013	Complete
	Prepare a guide on soil and underground water management, based on standard risk assessment methodologies and management of risks associated with soil and underground water contamination. (See chapter 06)	2013	Complete
Health, safety and environment / Minimising resource depletion	Develop and publish documents to complement the <i>Guia de Boas Práticas para a Gestão da Biodiversidade</i> (Guide to Good Practices for Biodiversity Management): select locations to operate and assess the impacts on biodiversity. (See chapter 06)	2013	Complete
	Implement campaigns to combat desertification/deforestation in Malawi, Mozambique, the Gambia and in Guinea-Bissau. (See chapter 03) In Swaziland there is an ongoing campaign to promote the use of LPG in place of firewood and charcoal.	2015	Complete
	Promotion of an efficient use of water in administrative and industrial activities (See chapter 05 and chapter 06) There is an ongoing programme designed to reduce water consumption.	2015	Complete
	Determine the water footprint in activities carried out in areas where water is scarce. Galp Energia decided to give priority to the completion of the determination of the water footprint of CLCM.	2013	Unfulfilled
	Develop a corporate strategy for sustainable management of Galp Energia Group's waste. (See chapter 06)	2013	Complete
	Develop 100R® certification project with Ponto Verde Serviços, and implement recommendations stemming from the diagnosis to maximise the recovery of urban-equivalent waste in administrative activities, promoting environmental awareness amongst employees (Torres Lisboa, R. Alecrim, CLC, lojas Tangerina). (See chapter 06)	2013	Complete
Health, safety and environment / Promoting safety	Develop a road safety plan for the transport of goods and products for Brazil and Mozambique (E&P and Biofuels). Completed the plan of road safety in Brazil (Biofuels).	2013-2015	According to plan
	Prepare a Galp Energia vetting manual and policy (maritime safety).	2013	Complete
	Develop awareness raising and prevention programmes on AIDS, malaria and tuberculosis for Africa's operations. (See chapter 03)	2013-2017	According to plan
	In 2013 an awareness campaign for the Prevention and Treatment of HIV/AIDS began together with Galp Energia Group companies in Guinea-Bissau.		
Climate change	Implement Galp Energia's strategy for climate change. (See chapter 03)	2013-2017	According to plan
	Increase importance of natural gas in Galp Energia's portfolio. (See chapter 10)	2013-2017	According to plan
Innovation	Implement the R&D strategic plan for exploration and production operations in Brazil. (See chapter 10)	2013-2017	According to plan
	Develop the Galp Energia refining R&D centre in partnership with universities. (See chapter 10)	2013	Complete
	Promote R&D projects in the strategic axis defined: energy efficiency, sustainable mobility and renewable energy, in alignment with the corporate strategy. (See chapter 10)	2013-2017	According to plan
Corporate Governance	Create a Corporate Governance Evaluation Committee. The assessment of the requirements and practices of Corporate Governance are undertaken by the Auditors and the direction of Legal Services.	2013	Complete
	Create directives on directors' equity holdings.	2013	Complete



## 11.5 Appendix V - Other indicators

Core economic indicators			
	2012	2013	Variation (%)
Sales and services provided (€m)	18,507	19,619	6%
Other operating income (€m)	137	144	5%
Costs of goods sold and other operating costs (€m)	16,228	17,223	6%
Supply and services (€m)	984	1,069	9%
HR operating costs (€m)	301	329	9%
Interest and similar expenses <sup>1</sup> (€m)	144	174	21%
Dividends <sup>1</sup> (€m)	270	221	(18%)
Taxes paid (€m)	2,118	2,588	22%
Income tax <sup>1</sup> (€m)	132	154	17%
Tax on oil products <sup>1,3</sup> (ISP) (€m)	1,969	2,418	23%
Other taxes (€m)	17	16	(6%)
Direct economic value generated (€m)	18,644	19,763	6%
Direct economic value distributed (€m)	18,085	19,195	6%
Cumulative or retained economic value (€m)	559	568	(1%)
Investment in the community (€m)	9.1	9.2	1%
RTD expenses <sup>2</sup> (€m)	9.7	7.6	(22%)
Significant financial benefits received from the state (€m)	1.8	0.8	(56%)
Average payment time to suppliers (days)	30	24	(20%)
Net earnings IFRS (€m)	343	189	(45%)
Replacement cost adjusted net earnings (€m)	360	310	(14%)
Investment (€m)	862	963	12%
Net assets (€m)	13,909	13,717	(1%)
Financial debt (€m)	1,697	2,173	28%
EBITDA IFRS (€m)	1,054	1,041	(1%)
Replacement cost adjusted EBITDA (€m)	1,032	1,141	11%
EBIT IFRS (€m)	559	401	(28%)
Replacement cost adjusted EBIT (€m)	602	590	(2%)
Investment and operating expenses in environment, quality and safety <sup>4</sup> (€m)	56	28	(50%)
Working interest production (kboepd)	24	25	4%
3P net entitlement reserves (mboe)	783	707	(10%)
Sales of refined products (mt)	16	17	6%
Sales of natural gas (millions of m <sup>3</sup> )	6,253	7,090	13%

<sup>1</sup> Results are reported as cash flow.

<sup>2</sup> Amounts related to previous year.

<sup>3</sup> The tax on oil products was not included in the calculation of the direct economic value generated and distributed because is a specific indicator of the activity of Galp Energia in Portugal.

<sup>4</sup> The amounts reported annually as environment investments reflect the projects cycle. Its development, therefore, must be viewed in an integrated manner, constituting successive steps to consolidate plans investments.

## Environmental performance

	2012	2013	Δ 2012-2013	Notes
<b>Direct energy consumption by primary sources (TJ) (scope 1)</b>	44,506	<b>48,919</b>	10%	
<b>Purchase of electric energy (TJ) (scope 2)</b>	944	<b>1,781</b>	89%	Change in purchasing electricity driven by Sines Refinery, which records 357% to 2012 due to commissioning of new units.
<b>Total energy consumption (scope 1 and 2) (TJ)</b>	45,450	<b>50,700</b>	12%	
<b>Total consumption of raw water (10<sup>3</sup> m<sup>3</sup>)</b>	9,370	<b>12,346</b>	32%	As compared to 2012, this trend was fuelled by an increase in water consumption at Sines refinery 8 by 35%). The rise in load of Hydrocracker and Hydrogen unit implies an increase in H <sub>2</sub> and industrial/cooling water consumption.
Public net and supplied by third parties	8,439	<b>10,544</b>		
Surface freshwater	135	<b>1,197</b>		
Underground water	699	<b>488</b>		
Saltwater	98	<b>113</b>		
<b>Total wastewater (10<sup>3</sup> m<sup>3</sup>)</b>	5,283	<b>5,691</b>	8%	The increase in effluents in relation to the previous year stems mainly from the fact of 2013 having recorded a high average monthly precipitation in the 1 <sup>st</sup> and 4 <sup>th</sup> quarters.
Aquatic environment		<b>1,407</b>		
Solo		<b>11</b>		
City collector		<b>459</b>		
Delivered to a specialized company		<b>3,788</b>		
<b>Waste produced (t)</b>	33,012	<b>20,631</b>	(38%)	In 2012 the refineries had a high waste production due to contracts related to new units.
Recovery	15,100	<b>7,453</b>		
Elimination	18,059	<b>13,111</b>		
<b>Hazardous waste (t)</b>	22,755	<b>14,465</b>	(36%)	
Recovery	8,931	<b>3,261</b>		
Elimination	13,828	<b>11,204</b>		
<b>Non-hazardous waste (t)</b>	10,400	<b>6,166</b>	(41%)	In 2013 the AT Oil business only reported the total waste produced, but it did not specify its destination. As result, the summing up per destination (valuation and elimination) does not match the total figure - 68 t, though the difference is not relevant. In the future the situation will be overcome as the reporting process will be improved.
Recovery	6,169	<b>4,191</b>		
Elimination	4,231	<b>1,907</b>		
<b>Emissions (t) (Galp Energia scope)</b>				
<b>CO<sub>2</sub></b>	3,349,807	<b>4,303,143</b>		In 2013, entered into stable operation the Plant III at Sines Refinery, as well as the cogeneration at Matosinhos Refinery.
<b>NO<sub>x</sub></b>	4,678	<b>2,145</b>		In 2013, the reporting methodology was changed and thus the values are not comparable.
<b>SO<sub>2</sub></b>	5,216	<b>7,508</b>		In 2013, the reporting methodology was changed and thus the values are not comparable.
<b>Particle</b>	463	<b>350</b>		In 2013, the reporting methodology was changed and thus the values are not comparable.
<b>Emissions (t) (third party scope)</b>				
<b>CO<sub>2</sub></b>	272,081	<b>396,413</b>		
<b>NO<sub>x</sub></b>		<b>1,505</b>		
<b>SO<sub>2</sub></b>		<b>352</b>		
<b>Particle</b>		<b>87</b>		

## 11.6 Appendix VI – Abbreviations, initials and acronyms

<p>€: Euro.</p> <p>€m: million euros.</p> <p>R\$: brazilian Real.</p> <p>\$/bbl: average sale price per barrel of oil.</p> <p>'000 or k: thousand.</p> <p>1P: proven reserves.</p> <p>2C: contingent resources.</p> <p>2P: proven and probable reserves.</p> <p>3C: contingent resources.</p> <p>3P: proven, probable and possible reserves.</p> <p>ABNT: Associação Brasileira de Normas Técnicas [Brazilian National Standards Organisation (Brazilian standardisation body, member of ISO)].</p> <p>ADAI: Associação para o Desenvolvimento da Aerodinâmica Industrial (Association for the Development of Industrial Aerodynamics).</p> <p>ADENE: Agência para a Energia (Portugal's agency for energy).</p> <p>ADM: Agronegócio para o Desenvolvimento de Moçambique (Agribusiness for the development of Mozambique).</p> <p>AAE: Association of Energy Engineers.</p> <p>AEM: Associação de Empresas Eminentes de Valores Cotados no Mercado (Association of listed companies).</p> <p>AMI: Assistência Médica Internacional (International medical assistance).</p> <p>ANP: Agência Nacional do Petróleo, Gás Natural e Biocombustíveis do Brasil (Brazilian National Agency of Petroleum, Natural Gas and Biofuels).</p> <p>AGU: Autonomous gas unit.</p> <p>APETRO: Associação Portuguesa de Empresas Petrolíferas (Portuguese oil company association).</p> <p>API: American Petroleum Industry.</p> <p>APR: Aliança para a Prevenção Rodoviária (Alliance for road safety and prevention).</p> <p>AR&amp;A: Annual Report and Accounts</p> <p>BBB: Belém Bioenergia Brasil, S.A.</p> <p>bcm: million cubic metres.</p> <p>boe: barrel of oil equivalent.</p> <p>BREFs: Best Available Techniques Reference Documents.</p> <p>CDLI: Carbon Disclosure Leadership Index.</p> <p>CDP: Carbon Disclosure Project.</p> <p>CEN: European Committee for Standardisation.</p> <p>CEO: Chief Executive Officer.</p> <p>CGR: Corporate Governance Report</p> <p>CLC: Companhia Logística de Combustíveis S.A. (Fuel logistics company).</p> <p>CLCM: Companhia Logística de Combustíveis Madeira S.A. (Madeira fuel logistics company).</p> <p>CO<sub>2</sub>: carbon dioxide.</p> <p>CONCAWE: European Association for Environment, Health and Safety in Refining and Distribution.</p> <p>COP: Communication on Progress.</p> <p>COSO: Committee of Sponsoring Organizations of the Treadway Commission.</p> <p>CWT: complexity weighted tonne.</p> <p>DII: declaration of industrial impact.</p> <p>EBIT: earnings before interest and taxes.</p> <p>EBITDA: earnings before interest, taxes, depreciation and amortisation.</p> <p>EC: European Commission.</p> <p>ECSI: European Customer Satisfaction Index.</p> <p>E&amp;P: Exploration &amp; Production.</p>	<p>EIA: Environmental Impact Assessment.</p> <p>EII: energy intensity index.</p> <p>EITI: Extractive Industries Transparency initiative.</p> <p>Embrapa: Empresa Brasileira de Pesquisa Agropecuária (Brazilian agricultural research corporation).</p> <p>EMPL: Europe Maghreb Pipeline.</p> <p>ENH: Empresa Nacional de Hidrocarbonetos de Moçambique (National hydrocarbon company of Mozambique).</p> <p>EU: European Union.</p> <p>EUROPIA: Representative of the European oil industries.</p> <p>EPIS: Empresários pela Inclusão Social (Entrepreneurs for Social Inclusion).</p> <p>EQS: Environment, Quality and Safety.</p> <p>ERSE: Entidade Reguladora ds Serviços Energéticos (Portuguese energy market regulator).</p> <p>EU ETS: European Union Emissions Trading Scheme.</p> <p>FAI: Fundo de Apoio à Inovação (Innovation incentives system).</p> <p>FAME: fatty acid methyl esters.</p> <p>Gcal: gigacalories.</p> <p>GGE: greenhouse gas emissions.</p> <p>GIRO: Grace Intervir Reformar e Organizar (Grace, intervene, reform and organise).</p> <p>Gj: gigajoule.</p> <p>GRACE: Grupo de Reflexão e Apoio à Cidadania Empresarial (Entrepreneurial citizenship support and reflection group).</p> <p>GRI: Global Reporting Initiative.</p> <p>GRF: gas receiving facilities.</p> <p>GSE: Galp Soluções de Energia (Galp Energia Solutions).</p> <p>GWh: Gigawatt hours.</p> <p>HR: human resources.</p> <p>HSE: Health, safety and environment.</p> <p>HWV: Heriot-Watt University.</p> <p>HVO: hydrotreated vegetable oil.</p> <p>IBAMA: Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian institute for the environment and natural resources).</p> <p>IDMEC: Instituto de Engenharia Mecânica do Instituto Superior Técnico.</p> <p>IFRS: International Financial Reporting Standards.</p> <p>IGEN: Fórum de empresas para a Igualdade de Género (Business forum for gender equality).</p> <p>IPIECA: International Petroleum Industry Environment Conservation Association.</p> <p>IPSS: Instituições Particulares de Solidariedade Social (Private social welfare institutions).</p> <p>IQNet: The International Certification Network.</p> <p>ISPG: Instituto de Petróleo e Gás (Institute of oil and gas).</p> <p>ISQ: Instituto de Soldadura e Qualidade (Soldering and quality institute).</p> <p>IST: Instituto Superior Técnico.</p> <p>ISO: International Organisation for Standardisation.</p> <p>ISP: Tax on oil products.</p> <p>IUCN: Internacional Union for Conservation of Nature.</p> <p>JCL: <i>Jatropha curcas</i> Linn.</p> <p>kbbl: million barrels of oil.</p> <p>kboepd: thousand barrels of oil equivalent per day.</p> <p>kbopd: thousand barrels of oil per day.</p> <p>kg: kilogram.</p> <p>km: kilometre.</p> <p>km<sup>2</sup>: square kilometre.</p> <p>KPI: key performance indicators.</p>
--	---

**KRI:** key resources indicator.

**LNG:** liquefied natural gas.

**LPG:** liquefied petroleum gas.

**m<sup>3</sup>:** cubic metres.

**mboe:** million barrels of oil equivalent per day.

**MICOA:** Ministério para a Coordenação de Ação Ambiental (Environmental action coordination ministry).

**millions of m<sup>3</sup>:** million cubic metres.

**mt:** million tonnes.

**MW:** megawatt.

**MWh:** megawatt per hour.

**NG:** natural gas.

**Nm<sup>3</sup>:** normal cubic meter.

**NP:** portuguese standard.

**NO<sub>x</sub>:** nitrogen oxide.

**OGP:** Oil & Producers.

**OHS:** occupational health and safety.

**OSCP:** Oil Spill Contingency Plan.

**OSHAS:** Occupational Health & Safety Advisory Services (british standard).

**ppm:** parts per million.

**R&D:** research and development.

**RBA:** annual basic remuneration.

**RCA:** replacement cost adjusted.

**RED:** renewable energy directive.

**ROI:** Return on investment.

**SO<sub>2</sub>:** sulphur oxide.

**System G+:** Health, safety and environment management system.

**t:** tonne.

**tCO<sub>2</sub>:** tons of carbon dioxide.

**tCO<sub>2</sub>e:** tonnes of carbon dioxide equivalent.

**toe:** tonne of oil equivalent.

**TJ:** terajoule.

**UC:** Universidade de Coimbra.

**UN:** United Nations/United Nations Organisation (UNO).

**USA:** United States of America.

#### EDITION



#### TEXT REVISION

**Isabel Sá da Bandeira**

#### UNICREDITED PHOTOGRAPHS THROUGHOUT THE REPORT

**Manuel Aguiar**

#### DESIGN AND CONCEPTION

**Plot Content Agency**

#### DEPOSIT COPY

**374405/14**



**Galp Energia, SGPS, S.A.**  
Public Company  
Corporate Strategy and  
Investor Relations Division

Rua Tomás da Fonseca, Torre C  
1600 – 209 Lisboa  
Tel.: +351 217 240 866  
Fax: +351 217 242 965  
e-mail: [investor.relations@galpenergia.com](mailto:investor.relations@galpenergia.com)  
[www.galpenergia.com](http://www.galpenergia.com)



Download the eletronic version of this document.