# CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY REPORT 2013





Corporate Social Responsibility and Sustainability Report 2013

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MESSAGE FROM THE CHAIRMAN AND CEO

# Message from the Chairman and CEO



#### Sustainable operations, innovation and growth Dear friends,

Welcome to the Public Power Corporation S.A.'s 4th Corporate Social Responsibility & Sustainability Report.

The main objective of PPC's programme of reform that has

been implemented over recent years has been to ensure that the Corporation is run and grows in a sustainable fashion, offering customers comprehensive, innovative, high-quality services and products; giving employees an excellent working environment; creating mutually beneficial relationships for suppliers and partners; generating added financial value for shareholders; respecting and protecting the environment and promoting economic growth and social prosperity for society as a whole. PPC's business is moving towards, achieving those goals, meaning that its business skill has made it a leader in the electricity sector in Greece and one of Europe's largest companies.

Although there has been a general climate of recession over recent years and Greece has had to ensure harsh trials and periods of adjustment, PPC has been making a decisive contribution towards the recovery of Greece and a return to growth, supporting both businesses and the very fabric of society. By supporting the national energy strategy, we have implemented truly noteworthy initiatives to stimulate growth in Greece and to promote developments in the energy sector in Europe.

We are making new investments in production worth close to  $\in$  1 billion a year. All of these are being implemented in the Greek regions, thereby generating added value for local communities. Tangible examples of this are the new natural gas plant at Aliveri, the new Hilarion hydroelectric power plant and the new natural gas plant at Megalopolis. A contract was recently signed to build a new lignite-fuelled power plant, Ptolemaida V, whose contractual value is  $\in$  1.4 billion approximately. It is one of the largest production-related investments ever made in Greece and will incorporate Best Available Techniques ensuring environmental performance ratings that meet the very strictest requirements of European and national law. Another improvement that is of major importance for society as a whole is the signing of the contract for the Cyclades Islands interconnection.

PPC has also made pay cuts and other spending cuts which are unprecedented in the European electricity market, which also happen to be higher than the cuts made by any other body in Greece. This has resulted in major reductions in operating costs and increased productivity.

None of these important developments would have been possible without our employees. We attach great importance to our personnel, by implementing programmes on health and continuous improvements in occupational safety. We strive to create even better conditions and also ensure that employees nourish and develop their skills, by offering them continuous training and development for professional and personal growth.

In the environmental protection sector, PPC acknowledges the impact on nature from generating electricity and implements an environmental strategy that is in line with Greece's and the European Union's energy policy to 2020, and with statutory reforms to combat climate change and safeguard the environment. The Corporation examines and implements initiatives and action plans that go well beyond legislative requirements, thereby proving just how committed to the environment it is. PPC is making concerted efforts to reduce its environmental footprint by modernising its plants by building new, state-of-the-art units; by improving the environmental rating of older units; by increasing the percentage of renewable energy sources used and by rehabilitating areas affected by lignite mining. We also attach great importance to reducing natural resource consumption and to proper waste management. The integrated strategy the Corporation has put in place generates specific, measurable results for all environmental aspects of its operations: lower CO<sub>2</sub> emissions, a drastic reduction in conventional air pollutants and solid and liquid waste, a reduction in greenhouse gases, energy savings and more efficient use of raw materials, mass recycling and increased environmental awareness among staff.

PPC's contribution to local communities is intimately bound up with its business operations. To that end, the projects it implements are primarily aimed at local communities where the PPC has facilities, but are also aimed at society as a whole.

Our interest in and concern for local communities is continuing and ongoing. We have created and maintained jobs. We are supporting local businesses and economic activity and helping local suppliers and partners, and are improving the quality of life with infrastructure works and are also encouraging cultural and sporting activities.

Our achievements so far have stimulated us to commit to dynamically continuing our policy of reform, to help PPC make a real contribution to a robust, environmentally-sustainable type of electricity market, which will be one of the most important (if not the most important) pillars of growth for the Greek economy. PPC will also continue to implement policies designed to constantly improve its services to customers and to support local communities and society as a whole in Greece, our homeland.

I hope you enjoy reading this report.

Arthouros Zervos

# 2. About the Report

The 2013 Corporate Social Responsibility and Sustainability Report covers the period 1.1.2013 to 31.12.2013 and is PPC's fourth sustainability report.

#### **Scope and Boundary**

The Report refers to the activities of the parent Corporation, namely the Public Power Corporation S.A. (hereinafter "PPC" or the "Corporation"") in Greece. Data relating to subsidiaries, possible joint ventures, suppliers or third parties have not been included in the Report.

Where data has been revised, the reasons for such revisions are indicated.

#### **Defining Content**

The Report seeks to present the PPC performance on Corporate Social Responsibility (CSR) and sustainability issues, based on the following three values: Economy – Society – Environment. It addresses all the Corporation's stakeholder groups, such as its customers, its shareholders and investors, its partners, its employees, institutional and public bodies, local communities, and so on.

The Report has been prepared in accordance with the Global Reporting Initiative guidelines (GRI - version G3.1).

The process for defining the report's content was based on the GRI G3.1 guidelines, and the principles of inclusiveness, materiality, sustainability and completeness, and the related GRI Technical Protocols for Indicators are included. Moreover, the GRI - Electric Utilities Sector Supplement, the principles of the AccountAbility AA1000 standard on inclusiveness, materiality and response, the ISO 26000 standard, stakeholders' expectations and the characteristics of Greek society were taken into consideration.

The topics collected were prioritised based on the impact they have on the Corporation and its stakeholders. That impact was derived from the process of Defining PPC Sustainable Development Materiality Issues and stakeholder engagement (as described in sections 4.3 and 4.4 of the Report).

Finally, the completeness of the topics was assessed and the content of the Report was determined.

#### **Drafting this Report**

The Corporate Social Responsibility Section is responsible for coordinating the process of data collection for this Report. The Report Steering Committee may also participate in the process. The role of the Committee that consists of Management executives is to facilitate workflows where the CSR Section fails to resolve issues.

The CSR Section follows the steps of the Sustainability Report Data Collection process that have been adopted, using electronic data collection form and a quantitative data calculation and integration tool. The CSR Team, made up of employees from the General Divisions and Independent Sections, plays an active role in collecting data for the Report.

New updated data collection forms were used to collect the data required for this Report, to improve the Report preparation process and to increase the quantity of information disclosed.

The CSR Section groups the necessary data by information source and coordinates the CSR Team members as they gather the relevant information. The data collected are approved by the relevant Directors and sent to the CSR Section. The Section evaluates the data and may request clarifications, modifications or additional information where necessary. After the quantitative indicators are calculated, the data are consolidated (where required), and then the Report is drafted. The final draft of the Report is checked and approved by the Corporation's senior management.

The method of processing raw numerical data to cover composite indicators is described in the respective sections of the Report. Please note that there have been no changes to the data measurement and processing methods compared to previous reports. Where there are differences this is clearly indicated in the relevant section.

### **Data Sources**

The data and the information presented in this Report have been collected and processed from the databases held at PPC headquarters and by its individual Divisions, with the support of different computer systems, applications, archives and established processes. In cases where it was impossible to collect homogeneous data from all PPC activities to allow general, comprehensive results to be produced, the Report presents selected data with clear reference to the operational unit involved.

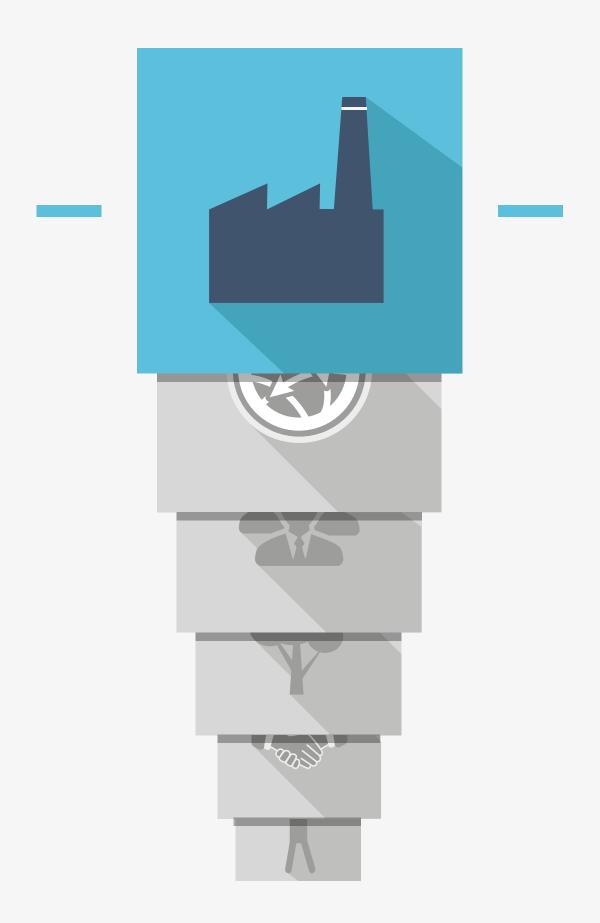
#### **External Assurance**

The Report was submitted for external assurance to an independent assurance provider, in accordance with the International Assurance Standard 3000 (ISAE 3000).

# Tell us what you think

We value what readers think about this Report and we therefore welcome your remarks, questions, queries, clarifications and/or suggestions for improvement.

Please forward your comments to: Corporate Social Responsibility Section Strategy Department Public Power Corporation S.A. 29, Halkokondyli St., Athens GR-10432 Tel.: 210 5218629, Fax: 210 5218626 E-mail: e.sarikaki@dei.com.gr, www.dei.gr



# 3. PPC Corporate Profile

## **3.1 Activities**

The Public Power Corporation S.A., "PPC" or the "Corporation", trading as "PPC S.A.", is the largest electricity generation and supply company in Greece. PPC has its own lignite mines, and electricity generation and distribution facilities. It is one of the largest industrial enterprises in terms of fixed assets, and is the leading public utility in the electricity sector in Greece.

The Corporation's headquarters are located at 30 Halkokondyli Street, Athens, Greece, GR-10432.

PPC's main objective is to engage in commercial and industrial activity in the energy sector in both Greece and abroad. Just some of its main activities include designing, supervising, constructing, operating as well as maintaining and running power plants. In addition, the Corporation's activities include supplying and selling electricity, mining, generating and supplying energy raw materials, and assigning such work to third parties under contract. The Corporation's objectives also include setting up other companies, participating in joint ventures, and acquiring shares in other companies, whether Greek or foreign and participating in businesses in general that have objectives related to those outlined above, or activities which are directly or indirectly associated with the PPC's objectives, or which seek to utilise the PPC's moveable or immoveable assets and to capitalise on its resources.

In 2011, the Transmission business moved to Independent Power Transmission Operator S.A. (IPTO) and in 2012 the Distribution business was transferred to Hellenic Electricity Distribution Network Operator S.A. (HEDNO). After the spin-off, PPC retained ownership of the property and the assets of the Distribution Network and the Network of Non-Interconnected Islands.

Law 4001/2011 states that HEDNO is responsible for suitably running, maintaining and developing the Distribution Network in light of private economy considerations, and therefore is responsible for ensuring that electricity reaches homes and businesses nationwide without interruption. That same law states that there is one single operator for all networks nationwide (HEDNO) apart from isolated micro-networks which can have their own operator. All network assets remain the property of PPC, apart from the Athens Airport internal network (which is owned and managed by the Airport itself).

As the owner of the network, PPC must ensure that the resources needed to develop the network in line with the

# PPC (the parent company) in figures

Turnover:	€ 5,918.6 mill.
No. of employees:	10,804
Installed capacity:	12,800 MW
Net energy output:	37,190 GWh
Investments:	€ 601.9 mill.
No. of mines:	9 (5 administrative units)
No. of steam electric plants:	16
No. of hydroelectric plants:	15
Stand-alone and	
local power plants:	32
No. of connections:	7,385,302
No. of branches:	134

plans prepared by HEDNO are available. The law also ensures that PPC's financial rights, as network owner, are safeguarded. Among other things it stipulates that PPC lays down the general limits on HEDNO's borrowing and also approves its annual budget.

Today the Corporation is organised and operates in sectors as follows:

#### Mines

PPC's mining activities are managed by the Mines Division. The mission of the Mines Division is to explore, extract, manage and market lignite and other solid energy raw materials and to use the proceeds of its activities, to contribute to the energy security and economic development of the country, while respecting the environment and man.

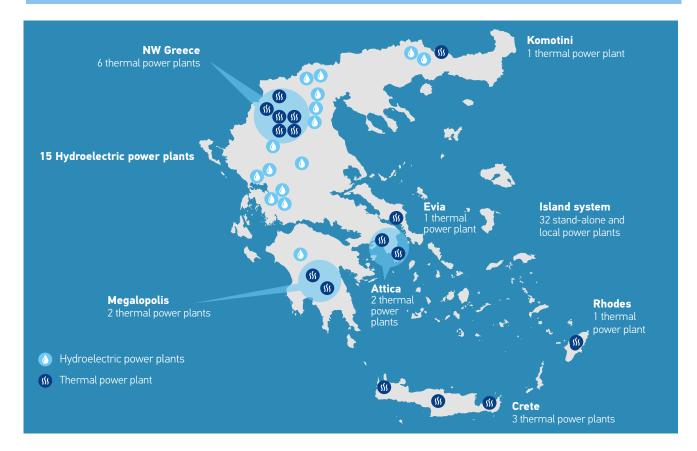
The low cost of lignite mining, its stable and readily controllable price and the fact that there is stability and security in fuel supply, make lignite a fuel of strategic importance for the Corporation. Moreover, the lignite extraction process creates thousands of jobs for the residents of the Greek regions, especially in areas where the Corporation operates.

#### Generation

The PPC Generation Division is responsible for power generation. Its main task is to develop the generating capacity of thermal power plants and large hydroelectric power plants (HPP) belonging to PPC and to ensure the optimal running of those facilities, while complying with environmental requirements.

In Central Greece most of the Corporation's generation capacity is concentrated in the north of the country close to large lignite mines, which are the main source of fuel. On the Aegean islands, which are not connected to the National Transmission Network, our stand-alone power stations are fuelled by oil. In addition, demand on certain islands is met by Renewable Energy Sources (RES). To maintain its position in the deregulated energy market, PPC's Generation Division has made certain strategically important decisions. These include:

- Construction of new power plants that incorporate cutting-edge technologies and optimal techniques.
- The phasing out of old, inefficient power plants.
- Speeding up completion of hydroelectric projects.
- Upgrading stand-alone and local power plants on the non-interconnected islands.
- Reducing CO<sub>2</sub> emissions.



### Geographical distribution of power plants

# The distribution of power plants with a total installed capacity of 12,800 MW by primary energy source as of 31.12.2013 (RES excluded) is shown in the table below:

Primary energy source	Installed ca 2017	apacity in I (in MW)	Installed ca 2012	pacity in (in MW)	Installed ca 2013	pacity in (in MW)
Lignite	5,165*	(41%)	4,930	(40%)	4,930	(39%)
Natural gas	1,966	(15%)	1,966	(16%)	2,394	(19%)
Oil	2,510	(20%)	2,470	(20%)	2,458	(19%)
Hydroelectric	3,018	(24%)	3,018	(24%)	3,018	(24%)
Total	12,659		12,384		12,800	

\*Lignite-fired Units I & II of the Megalopolis I Steam Electric Plant are included, each with a capacity of 125 MW; both Units went permanently offline on 30.9.2011. The increase in installed capacity for natural gas in 2013 was due to the new natural gas plant, Aliveri V, coming online.

The distribution of power plants in terms of net power output (37,190 GWh) per category of energy source is shown in the table below

Primary energy source	Net power 2011	output in (in GWh)	Net power 2012	output in (in GWh)	Net power 2013	output in (in GWh)
Lignite	27,570	(67%)	27,555	(69%)	23,231	(62%)
Natural gas	5,226	(13%)	3,767	(9%)	3,943	(11%)
Oil	4,770	(11%)	4,790	(12%)	4,376	(12%)
Hydroelectric	3,676	(9%)	3,892	(10%)	5,640	(15%)
Total	41,242		40,004		37,190	

The increase in power generated by hydroelectric energy was due to the fact that 2013 was a good year from a hydrological viewpoint.

The availability rates and average performance rates of PPC facilities are shown in the table below: The efficiency rate is affected by the dispatching of the plants and by the exploitation rate.

	20	011	20	012	20	13
Facilities	Availability (%)*	Average Efficiency (%)**	Availability (%)*	Average Efficiency (%)**	Availability (%)*	Average Efficiency (%)**
Interconnected System						
Lignite plants	78.76	30.90	78.91	30.13	76.94	29.83
Diesel plants	80.18	32.71	99.77	35.94	80.40	-
Natural gas plants	85.21	47.47	83.19	46.69	90.97	49.71
Total	80.57	32.74	82.03	31.49	81.19	31.66
Crete						
Diesel plants (fuel oil)	87.05	34.66	88.80	34.19	89.31	34.02
Diesel plants (diesel)	84.02	32.86	85.37	33.81	80.31	32.63
Total	85.36	34.22	86.85	34.10	84.20	33.71
Rhodes						
Diesel plants (fuel oil)	88.75	36.28	88.72	36.00	84.49	35.69
Diesel plants (diesel)	85.26	27.60	94.68	30.17	92.76	28.57
Total	87.40	34.59	91.83	34.97	88.80	34.24

PPC CORPORATE PROFILE

	20	11	20	012	20	13
Facilities	Availability (%)*	Average Efficiency (%)**	Availability (%)*	Average Efficiency (%)**	Availability (%)*	Average Efficiency (%)**
Other non-intercon	nected islands					
Diesel plants	87.80	40.65	87.12	40.68	84.98	40.49

\* Average availability is cited. The calculation in each instance refers to the weighted average availability of all plants using a specific type of fuel. Likewise, "total" relates to the weighted average availability of all PPC thermal plants.

\*\* Past Reports presented average efficiency, meaning average efficiency was computed on the basis of the efficiency rate relative to energy output. To provide stakeholders with better information, from 2013 onwards net efficiency will be given, i.e. average efficiency will be calculated based on efficiency rate relative to the energy output. To ensure comparability, this table has been updated with the relevant data for past years as well. The calculation relates to the weighted average annual efficiencies for all plants using a specific fuel. Likewise, "total" relates to the weighted average efficiency of all PPC thermal plants.

#### Supply

The Supply Division is responsible for electricity sales to consumers in every category, and its mission is to act as an Electricity Supplier on behalf of PPC. The Supply Division aims to maintain PPC's leading position in the deregulated market by developing an appropriate commercial and billing policy, focusing primarily on providing customers with reliable services and establishing a long-lasting and frank communication with them.

The deregulated market has laid down a new operating framework, which coupled with competition has resulted in new conditions and placed new demands on PPC. The Supply Division has responded positively to this deregulation of the electricity market with fair competition and lack of distortions, and has given practical support to all measures required. In this context, the role of the Supply Division is two-fold:

- It ensures sufficient energy to meet the needs of PPC's customers in the best possible way through participation in the wholesale market as a supplier.
- It provides top quality services to customers at the most competitive prices possible as a supplier and it actively ensures fair competition in terms of energy supply and sales.

The table below sets out the categories of PPC customer accounts/connections, and the relevant number of connections in each category. Out of a total of 7,392,722 connections, 77% are household connections and 17% are commercial.

Medium and low voltage connections	No. of connections in 2011	No. of connections in 2012	No. of connections in 2013
Residential	5,692,123	5,719,758	5,715,102
Agricultural	207,394	208,130	208,130
Commercial	1,199,957	1,251,059	1,250,109
Industrial	54,549	61,078	60,773
Public lighting (roads & squares)	96,327	96,989	98,827
Public authorities	51,298	51,527	52,263
Traction	86	95	98
Total	7,301,734	7,388,636	7,385,302

In addition to low and medium voltage customers, in 2013, PPC also served 45 high voltage clients (70 connections).

# 3.2 Shareholder Structure

PPC S.A.'s share capital stands at € 1,067,200,000 divided into 232 million ordinary shares with a nominal value of € 4.60 each.

Shareholder structure (31.12.2013)	%
Greek State*	51.12%
IKA-ETAM / TAP – PPC Fund and TAYTEKO/TEAPAP-PPC Fund (ex OAP / PPC Pension Fund)	3.81%
General public & institutional investors**	45.07%
Total	100.00%

\* The Greek State directly or indirectly controls 51.12% of the ordinary shares in PPC S.A. via the Hellenic Republic Asset Development Fund (HRADF). In September 2012, HRADF became the Greek State's proxy, with the right to exercise the voting rights in the 39,440,000 ordinary shares with voting rights (i.e. 17% of the outstanding share capital of the Corporation) at its absolute discretion in the most appropriate manner and without taking instructions from the shareholder, the Greek State. However the voting rights of the Greek State in PPC were not actually transferred to HRADF. This power of attorney remains in effect for 36 months from the date on which the relevant contract was signed, unless the Corporation's assets are developed, and therefore the goals for which the power of attorney were granted, are achieved earlier. On 8.4.2014 the Interministerial Committee for Restructuring & Privatisation decided to transfer the said 39,440,000 shares in PPC owned by the Greek State to HRADF without consideration in accordance with the provisions of Law 3986/2011. The transfer took place on 11.4.2014 as part of an over-the-counter transaction. After this transfer, the power of attorney referred to above ceased to have any effect.

\*\*This includes the "Silchester International Investors LLP" holding of 32,034,558 shares (13.8% of PPC voting rights) as of 8.12.2011, in its role as manager of investments of its following clients: Silchester International Investors International Value Equity Trust, Silchester International Investors International Value Equity Taxable Trust, Silchester International Investors International Value Equity Group Trust, Silchester International Investors Tobacco Free International Value Equity Trust and The Calleva Trust.

PPC is not aware of any shareholders other than the "Greek State", "Silchester International Investors LLP" and the "IKA-ETAM/TAP- PPC Fund" and "TAYTEKO / TEAPAP-PPC Fund" taken collectively, which directly hold 3% or more of its share capital.

# **3.3 Holdings in Subsidiaries**

The following table presents the companies that were wholly owned by PPC on 31.12.2013.

Subsidiary	Description
PPC Renewables S.A.	Renewable energy sources (RES)
HEDNO S.A. (formerly PPC Rhodes S.A.)	Management, development, operation and maintenance of the Hellenic Electricity Distribution Network (HEDN)
IPTO S.A. (ex PPC Tel- ecommunications S.A.)	Management, development, operation and maintenance of the Hellenic Independent Power Transmission System (HIPTS) and its interconnections
PPC FINANCE PLC	General trading company

# 3.4 Corporate Governance Framework

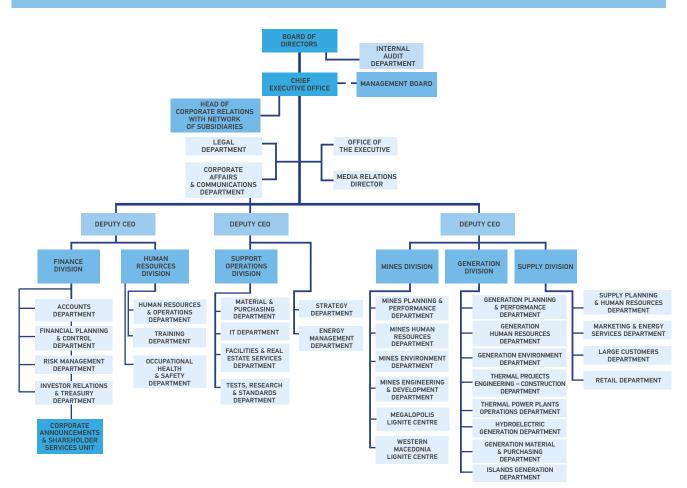
For PPC S.A. complying with corporate governance principles is a key commitment and priority. Since the Corporation aims to ensure that it is optimally organised, managed and run, that there are increased levels of transparency in its relations with shareholders and generally that the Corporation's interests are safeguarded, it has adopted and implements a Code of Corporate Governance. This Code provides a framework of principles and procedures which the Corporate Governance System of the Corporation follows as regards management, shareholders, internal audits and risk management.

The Code of Corporate Governance is available on the PPC website (please visit www.dei.gr).

# **3.5 Administrative Organisation**

In 2013 a third Deputy CEO was appointed along with an External Relations Manager to handle the Corporation's network of subsidiaries.

#### **PPC Organisational chart**



### 3.6 Governance Structure

The Corporation's General Meeting of Shareholders is the highest-ranking management body and has the right to take decisions on any issue affecting the Corporation. The Greek State is the majority shareholder of the Corporation and exercises the rights conferred by the Articles of Association and the relevant provisions on societes anonymes.

The Greek State attends the General Meeting and is represented by the Minister of Finance or his legal representative. Furthermore, the supervising Minister or his legal representative may attend the General Meeting without voting rights.

Apart from the General Meeting of Shareholders, the Corporation's governance bodies include:

- The Board of Directors
- The CEO
- The Management Board

Summary information is provided below about the governance bodies and the procedures that applied on 31.12.2013. Note though that the PPC General Meeting of Shareholders decided to make certain amendments to the Company's Articles of Association on 20.6.2014. More information about the changes to the Articles of Association can be found on PPC's website in the Shareholder Relations section. Detailed information about the governance bodies is available in the 2013 Annual Report.

#### **The Board of Directors**

The Board of Directors (BoD) is PPC's highest-ranking management body. The BoD lays down the Corporation's strategy and its development policy, while also overseeing and reviewing management of its assets. On a proposal from the CEO, the BoD approves:

- The Strategic Plan that outlines the strategic goals for achieving the Corporation's objectives.
- The Corporation's Business Plan for the next 3 to 5 years,

that provides further details about the objectives set in the Strategic Plan for each year.

- The methods for implementing the Strategic Plan and the Business Plan for each year.
- The Corporation's annual budget.

The Board of Directors consists of 11 members who are elected as follows:

- 6 members, including the CEO, are elected by the PPC General Meeting, in which the minority shareholders cannot participate. The Board of Directors then elects the Chairman and Vice Chairman from among those members.
- 2 members representing the PPC employees are selected during elections run by the returning board appointed by the PPC's most representative employee trade union.
- 2 members to represent minority shareholders are elected by a Special Meeting of the Corporation's shareholders.
- 1 member who comes from organisations in sectors related to PPC's activities is appointed by the Economic and Social Committee of Greece.

On 31.12.2013, the BoD consisted of 1 woman and 10 men. 2 members were between 30-50 years old and 9 were over 50 years old.

Name	Post	Executive Member	Non- executive member	Independent	Audit Committee	Remuneration Committee	CSR Supervision
Arthouros Zervos	Chairman & CEO	$\checkmark$	-	-	-	-	-
Konstantinos Dologlou	Vice Chairman	$\checkmark$	-	-	-	-	-
Urania Ekaterinari	Member	$\checkmark$	-	-	-	-	-
Panayiotis Alexakis	Member representing minority shareholders	-	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Harilaos Vasilogeorgis	Member	-	$\checkmark$		-	-	-
Nikolaos Vernikos	Member	-	$\checkmark$			$\checkmark$	-
Konstantinos Zontanos	Member	-	$\checkmark$				-
Pavlos Thomoglou	Member representing minority shareholders	-	$\checkmark$	$\checkmark$	-	-	-
Pantelis Karaleftheris	Member – Employee representative	-	$\checkmark$	-	-	-	-
Filippos Tavris	Member – Economic & Social Committee Representative	-		$\checkmark$	-	-	$\checkmark$
Nikolaos Fotopoulos	Member – Employee representative	-	$\checkmark$	-	-	-	-

#### CEO

The PPC's CEO is elected by the General Meeting of the Shareholders and has a 3-year term in office.

- He is the PPC's Chief Executive Officer.
- He supervises all divisions and departments and manages their operations.
- He decides on how the Corporation is to be organised, within the context laid down by the Articles of Association and the relevant decisions of the Board of Directors.
- He takes the necessary decisions in light of the provisions governing how the PPC operates, approved programmes and budgets, as well as the Strategic Plan and the Business Plan.
- He represents the Corporation within the limits of his powers as specified by the Articles of Association and the relevant decisions of the Board of Directors.

#### Management Board

The Management Board is composed of the CEO, who chairs it, the Deputy CEOs, if any, and the General Managers. The Management Board meetings may also be attended by the Corporation Legal Advisor, at the CEO's discretion.

The Management Board operates in accordance with the decisions of the Board of Directors, the Articles of Association and the Company's bylaws, ensuring the necessary degree of collective responsibility when handling PPC administrative and operational issues, and consistency in its own operations.

#### **Board of Directors Committees**

The Board of Directors has set up the Audit Committee and the Remuneration Committee, in implementation of the current legislation on corporate governance and in order to ensure the best corporate governance practices.

The Audit Committee consists of at least 2 non-executive members and 1 independent, non-executive member of the Board of Directors. The members of the Audit Committee are appointed by the General Meeting and their powers and duties are as follows:

- To monitor the financial reporting process.
- To monitor effective operation of the internal audit and the risk management systems and to also monitor proper running of the Internal Audit Department.
- To monitor mandatory audits of the separate and consolidated financial statements.
- To review and follow up issues relating to the selection and continued objectiveness and independence of the certified auditors, especially in relation to other services provided by them to PPC and its subsidiaries.
- To monitor how the Corporation's budget is being implemented (BoD Decision No. 128/17.7.2013).

The Corporation's Remuneration Committee consists of 3 non-executive members of the Board of Directors, and at least 2 are independent. The Remuneration Committee is responsible for examining and submitting proposals to the BoD to set any remuneration and pay for Board members, as well as for the Corporation's senior executives, in this case with the involvement of the CEO.

The Corporation is subject to specific laws and provisions applicable to corporations operating in the wider public sector. As long as the Greek State is the main shareholder and holds 51% of the share capital, PPC will continue to be considered to be a Greek public sector corporation in relation to various sectors of its operations. Consequently, its operations will continue to be subject to the laws and provisions applicable to companies in the Greek public sector which affect certain of its procedures.

Laws 3833/2010, 3845/2010 and 4092/2012 have recently been enacted and their combined effect is to reduce the fees of members of collective management bodies and members of boards of directors of public corporations by 50% per meeting. Moreover, the pay of such executives cannot under any circumstances exceed the pay cap specified in those laws.

Consequently, pay for BoD members is clearly set and the Remuneration Committee cannot, in effect, exercise its powers. The fact that pay and remuneration has been set directly by law in effect means that the Committee's powers are inoperative to a very significant degree.

#### **3.7 Conflicts of Interest**

In order to avoid conflicts of interest, PPC implements a series of procedures which ensure that conflicts between the

interests of members of the Board of Directors, of executives and other employees and the Corporation are avoided.

More information on how conflicts of interest are avoided is included in the 2013 Annual Report.

#### 3.8 Audits

PPC has an Internal Audit Department that reports directly to the Board of Directors and is supervised by the Board of Directors' Audit Committee. The Internal Audit Department's mission is to ensure that all PPC business risks are audited in the same way.

In 2013, 28 Units within the Corporation were audited relating to administrative or financial compliance or special issues. No corruption-related audits took place.

The Internal Audit Department has informed the Corporation's Board of Directors about the need to adopt a comprehensive Anti-Fraud Framework and to use data analytics to address the risk of fraud given that the Internal Audit Department is responsible, inter alia, for checking the degree to which the Corporation is exposed to a risk of fraud and for reviewing existing methods to identify and prevent fraud. The Audit Committee agrees to pilot implementation of an Anti-Fraud Framework.

During 2013 the Inspector General for the Public Administration sent the Internal Audit Department 12 complaints relating to PPC along with a request to investigate these matters and report back to him. 11 of those complaints were sent to the relevant Corporation departments to be actioned and 1 was investigated by the Internal Audit Department itself which has also sent a reply.

#### 3.9 Risk and Crisis Management

The Corporation has defined "risk" as a group of uncertain and unpredictable situations that could affect its overall operations, its business transactions, its financial performance, implementation of its strategy and achievement of its objectives. The 2012 Annual Report listed the main risks that have been identified, including the risks relating to the provision of Public Utility Services, implementation of the provisions of the Memorandum on Economic and Financial Policy, the planned privatisation and restructuring of PPC, the availability of lignite reserves, laws and regulations relating to the health and safety of workers, and so on. The Financial Report also lists risks which have been identified, related to climate change and to  $CO_2$  trading rights, hydrological conditions, laws and regulations concerning the environment, and natural disasters.

Although the Corporation's organisational chart states that there should be a Risk Management Department, it has not yet been staffed because of the restrictions of new recruitments. So far management executives have been involved on a case-by-case basis in the process of risk identification and initial assessment. This has allowed them to make recommendations to the BoD and resulted in specific risk management procedures and policies being developed and approved. The Corporation cannot guarantee that these procedures and policies offer full protection against the risks it faces.

Apart from the above, PPC has developed and implemented a Sustainable Development Materiality Issues Process to allow it to identify and prioritise its business impacts/risks based on the triptych of principles fundamental to CSR (namely, economy, society and environment). This process is analysed in more detail below.

#### The Santorini Affair – August 2013

In 2013 PPC had to address a major crisis which took place at 12 noon on Tuesday 13 August when power went out all over the island of Santorini. This very serious problem was caused by a sudden breakdown in one of the power generators resulting in a fire at the facilities of the Santorini Power Plant, resulting in a total blackout on the island.

The crisis was successfully managed within the shortest possible time, primarily thanks to the extensive experience of PPC and HEDNO's staff and because of their ability to resolve extremely complex technical problems. The Ministry of Environment, Energy & Climate Change, representing the State and other competent ministries, public agencies, etc., acted as lead coordinator, making it easier for PPC's technicians to do their work and rapidly transport a large number of generators to Santorini from other regions of the country.

The main steps taken to manage the crisis, which involved a whole series of economic, social, technical and other problems, because of Santorini's nature as a highly popular international tourist destination, are outlined below:

- Two crisis resolution centres were set up (the first at the power plant and the other at PPC's headquarters) to allow PPC to address the matter and plan how to repair the damage safely for technicians and consumers with the least possible social cost.
- A large number of generators were dispatched to Santorini immediately in cooperation with the Ministry of Defence, the Ministry of Environment, Energy & Climate Change, the Coast Guard, the Hellenic Navy and the General Secretariat for Civil Protection, and other agencies using merchant vessels and ferries.
- A large number of experienced technicians and staff from other islands and the mainland were sent to Santorini to bolster the number of staff working at the plant and on the grid round the clock to ensure a rapid, smooth re-establishment of the power supply.
- The coordination centre located at the plant was in constant contact with the Municipality of Santorini and other local bodies to keep residents and tourist businesses constantly briefed about the progress of work to restore power and about how they could use electricity more rationally.
- PR for the crisis were effectively managed at national level by issuing press releases, holding press conferences (attended by the Ministers of Tourism and the

Interior and the Chairman of PPC, on Santorini itself), and the press were constantly provided with clarifications. HEDNO also managed PR in a similar manner.

- Available power (residual overall demand) was equally allocated between networks to reduce the inconvenience to the public as much as possible and to allow them to cover their basic needs, even if only for a few hours at a time. Power was allocated in line with instructions from the Municipality of Santorini to cover emergency services (health services, water supply pumps, ATMs, major cultural events that were already planned, etc.) as a matter of priority.
- There was round-the-clock cooperation between PPC and HEDNO staff to achieve the necessary balance between increasing power output from the generators to match increasing demand, to avoid a new blackout.
- Work was scheduled for PPC and HEDNO staff round the clock to reduce the amount of time without power to a minimum and to take all measures necessary to safeguard the lives of employees and ensure the safety of mechanical, electrical and other facilities on the Santorini power grid.
- Overall enough generators were transported to Santorini so that they and the backup station could generate a total output of 45 MW within a short time period to fully meet peak demand while still ensuring a satisfactory number of backup generators were available.

As PPC continued to work with the local community after the incident, the Corporation and the Municipality of Santorini jointly announced that a MoU would be signed to include the island in PPC's CSR programme. More information about the MoU is available in section 8.2.

# **3.10 Key Financial Information**

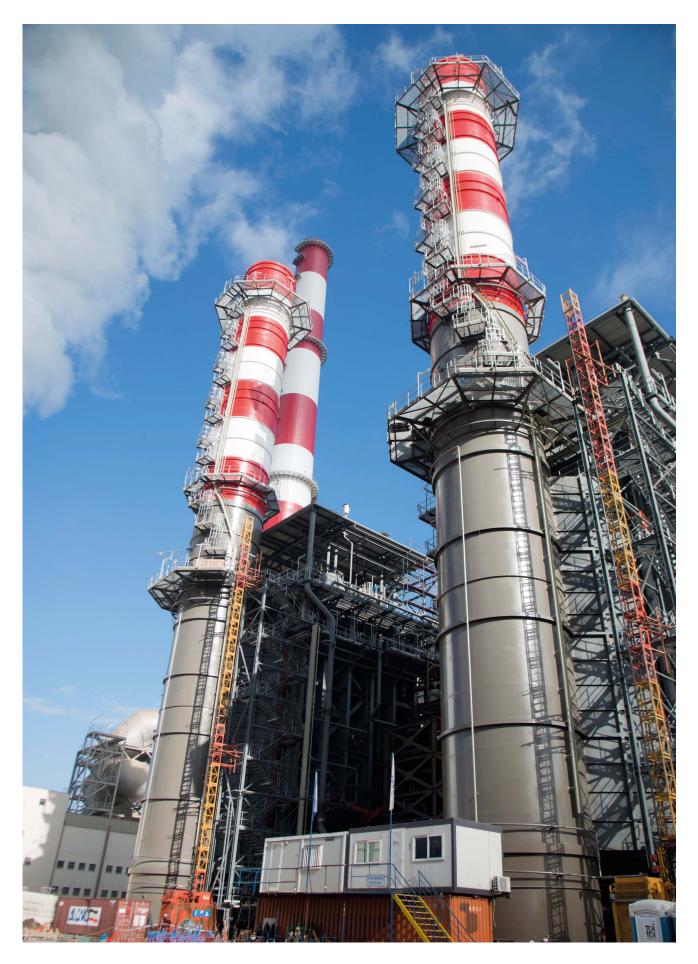
The turnover in 2013 amounted to  $\in$  5,918.6 million compared to  $\in$  5,887.9 million in 2012, an increase of  $\in$  30.7 million (+0.5%). Earnings before interest, taxes, depreciation and amortisation (EBITDA) amounted to  $\in$  638.9 million in 2013 compared to  $\in$  817.6 million in 2012, down by 21.9%, while the Corporation reported net losses of  $\in$  324.3 million compared to net profits of  $\in$  22.4 million in 2012. The carried balance of grants on 31.12.2013 was  $\in$  285.3 million.

The total PPC investments amounted to  $\in 601.9$  million and were distributed as follows:  $\in 184.8$  million on Mining (excluding  $\in 3.5$  million for the cost of environmental rehabilitation),  $\in 154.2$  million on Generation,  $\in 254.6$  million on the Distribution Network,  $\in 2.7$  million on Supply and  $\in 5.6$ million to the Management Divisions. PPC's investments in 2013 were down  $\in 115.3$  million compared to investments in 2012 (representing a drop of 16.1%).

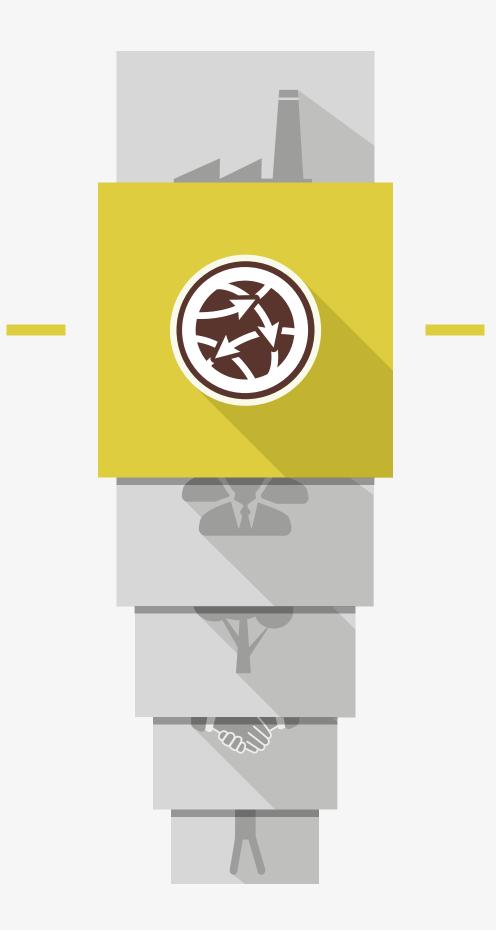
Financial value and social product (in € '000)	2011	2012	2013
Turnover	5,180,332	5,887,911	5,918,652
Financial income	43,346	76,343	76,085
Direct financial value generated	5,223,678	5,964,254	5,994,737
Salaries and employee benefits including employer social security contri- butions*	763,634	398,022	393,328
Financial expenses	201,394	245,905	238,844
Income tax, other taxes, duties and provision for surtaxes	48,466	70,611	36,311
Donations and sponsorship	890	1,068	1,351
Operating cost balance	4,459,926	5,248,425	5,426,440
Financial value allocated	5,474,310	5,969,292	6,096,274

\*Payrolling costs in 2013 included a figure relating to employees employed by the IKA-ETAM Fund, ETEA Fund, TAYTEKO Fund and the National Healthcare Services Provider (EOPYY) in line with the provisions of Law 4147/2013. Payrolling costs for 2012 have been adjusted to reflect the amended IAS 19 "Employee benefits". It does not include staff salaries that are embedded in the tangible assets and the cost of lignite mining.

It should be noted that the 2011 financial data does not include Transmission operations since the sector which is now IPTO S.A. was spun off, but does include Distribution operations. The 2012 data does not include Distribution operations since that sector was successfully spun off during that year and HEDNO was set up. All PPC's published financial data is available in the 2013 Annual Report.



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# 4. Sustainable Development

The purpose of this section is to concisely present the PPC approach to sustainable development. Sustainable development is bound up with how the Corporation operates, its activities, its financial performance, as well as its interaction with the environment and society. All sections of the Report cover the different aspects of sustainable development at PPC, and provide more information on each individual topic.

### 4.1 Management Approach

Although PPC no longer enjoys the monopoly it used to as the only fully vertically-integrated electricity generation company in Greece, it continues to monitor the needs of the entire country and key issues such as electricity demand, across its entire range of operations to ensure a secure energy supply for the mainland and the Greek islands. PPC is the Supplier of Last Resort and the Universal Service Supplier, and is poised to deal with problems in how the System and Grid and in how the electricity market overall operate.

The Corporation ensures that:

- Its staff are fully trained and briefed so that the Corporation's assets can be used to achieve its mission, and are utilised and maintained to the greatest degree possible, and that best operating and power generation methods are used.
- It capitalises on technological developments across the entire range of its activities to improve its staff's and equipment's output and performance.
- It utilises the best scientific, professional and business tools to correctly and securely estimate the amount of electricity needed to supply Greece's needs, while also suitably planning new investments to improve existing infrastructure, to safeguard energy supplies in Greece.
- It examines all rational views and opinions so that an appropriate statutory framework is put in place within Greece and the EU, to allow markets to operate fairly with all market players participating on equal terms, without barriers.

• It effectively defends its own interests, to generate added value for shareholders and to overcome obstacles that emerge, thereby allowing it to provide a reliable product and services consumers can trust.

#### The cost of power generated from lignite

The international firm Booz was commissioned by PPC to carry out a survey comparing the cost of generating power from lignite in various European countries. It compared the cost of power generated from lignite across all of Europe and in Turkey in 2012 to determine key cost factors and the differences in different lignite systems in Europe.

The survey showed that the cost of generating power using domestic lignite is quite competitive compared to the cost of power generated from imported fossil fuels whose prices are affected by conditions on international commodities markets. Of course, the issue of maintaining energy security remains of vital importance.

The main conclusion this survey draws is that lignite is being utilised in Greece in a particularly efficient manner, compared to other countries, although power generation costs are unavoidably affected by the low heat output of Greek lignite. This conclusion ties in well with the findings of Booz's survey conducted the previous year which found a very large drop in the potential margin for improvements in competitiveness. Compared to a figure of € 557 million in 2006, PPC's margin for improvement dropped to just € 124 million, compared to the best practices used by European companies engaged in similar activities.

For more information about this survey please visit the Corporation's website (http://www.dei.gr).

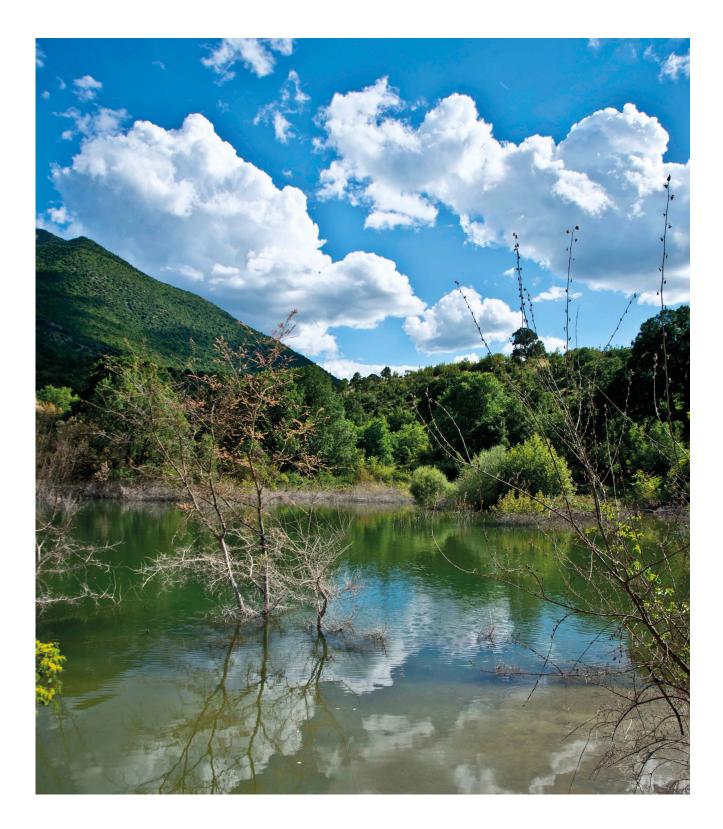
#### Ptolemaida V Lignite Plant

In 2013 the foundations for Greece's largest energy investment were laid, in the form of the new  $\notin$  1.4 billion Ptolemaida V Lignite Plant. The German Exports Insurance Agency has provided guarantees to insure a  $\notin$  700 million syndicated loan, that will allow the investment to go ahead. Until recently, financing like this had seemed impossible, but this move is a sure "vote of confidence" in the Greek economy.



#### Sustainable Development Policy

Management is interested in strengthening its commitment to sustainability and in April 2014 released PPC's Sustainable Development Policy which was also sent to all the Corporation's employees. The policy is available to all PPC stakeholders on the Corporation's website: www.dei.gr.



#### Sustainable Development Policy

PPC's strategic goal is to ensure that in can operate and grow in a sustainable fashion while, at the same time, satisfying the demands of all stakeholders in a balanced way, providing integrated, innovative, high quality services and products to its customers, providing an excellent working environment to its employees, developing mutually beneficially relations with suppliers and associates, generating added value for shareholders, respecting and protecting the environment, as well as promoting economic growth and social prosperity for society.

To achieve its strategic goal, PPC is committed to making constant efforts to improve its economic, environmental and social performance.

To that end, PPC is aiming at long-term enhancement of its financial value, through good corporate governance, ensuring that its officers act transparently in all procedures they follow and all steps they take. The Corporation's Management is involved in identifying risks and material issues relevant to sustainable development to ensure that they can be effectively and in time, while the Strategy Department is responsible for the planning, coordinating, monitoring and publishing what the Corporation does in relation to sustainable development.

PPC's environmental strategy is fully in line with EU and Greek goals on energy policy for 2020 (the goals for 2020 are 20% of power generated from RES, 20% energy savings and a 20% reduction in greenhouse gas emissions), statutory interventions on climate change and environmental protection. To implement its strategy, the Corporation has drawn up and updated an Environmental Business Plan. Those units responsible for managing the environment are responsible for implementing this. To achieve continuous improvements in its environmental performance, PPC has put in place Environmental Management Systems and has obtained certification for its facilities.

PPC implements responsible HRM practices and ensures that a modern, equal opportunities workplace is provided. PPC is committed to safeguarding its employees' health and safety by implementing Occupational Health and Safety Management Systems, and by running relevant training courses.

PPC makes every effort to prevent and fight corruption not only in its own operations, but also when selecting suppliers and partners. It also supports human rights and is clearly opposed to forced, compulsory and child labour, as well as all forms of discrimination.

PPC responsibly provides its quality services to the country's consumers, ensuring high levels of customer service, implementing practices that aim to optimise the overall benefit for its customers.

For the Corporation, offering something back to local communities is intimately bound up with its business activity. To this end, PPC has implemented important programmes aimed not only at the local communities in which it operates but also at society as a whole. Its significant social contribution includes various sets of measures in the fields of sport, culture, health and education.

In line with this policy, taking a well-rounded approach to how PPC operates contributes not only to responsible management of environmental and social issues but also enhances the Corporation's financial value.

> Arthouros Zervos Chairman & CEO

#### Challenges and strategic priorities

Major changes designed to improve competition are currently taking place, including the plan to restructure PPC, and the new regulatory framework which will govern the deregulated electricity market. These changes will significantly affect how the Corporation operates.

In this new competitive environment, PPC's strategic priorities are to:

- Maintain its leading role in the deregulated electricity market.
- Put forward and complete its strategic investment plan by building and commissioning new cutting-edge, more environmentally-friendly power plants, by replacing old, costly, polluting plants and by improving environmental performance ratings. Bringing new plants on line will also allow the Corporation to more efficiently utilise resources, significantly improve operational efficiencies and profit margins, thereby generating the maximum possible value for the Corporation.
- Focus more on customers, rationalise tariffs and remove existing distortions in the electricity market.
- Expand into foreign markets and other business activities, primarily by developing partnerships.
- Encourage investments in RES to increase their place in the PPC energy mix.
- Diversify its sources of financing, while also reducing borrowing costs.

Given the major improvement in the Corporation's productivity achieved thus far, its long-term viability and growth cannot rest solely on in-house moves to further optimise operating profits; instead a new rational regulatory framework needs to be in place to guarantee fair competition, by immediately removing distortions in the energy market that entail costs for consumers and the economy for no reason.

It also requires further improvements in financial conditions, that the national economy recovers and that the Corporation is able to attract and retain experienced staff and skilled executives along the lines of similar European listed companies operating in competitive environments.

#### 4.2 Governance for Sustainable Development Issues

The PPC Board of Directors has appointed 2 of its members to be in charge of managing sustainable development issues. In addition, it has set up the CSR Section which is part of the Strategy Department. Its mission is to establish, develop and implement a CSR strategy that aims to meet the needs of stakeholders in a balanced manner, while highlighting the actions and practices that show the Corporation's social face. The fact that the CSR Section was placed under the Strategy Department and that BoD members have been assigned the task of supervising the CSR Section and submitting the annual Corporate Social Responsibility and Sustainability Report to the BoD, demonstrate that the Corporation takes CSR seriously.

#### 4.3 Defining Material Issues

PPC monitors international trends on how sustainable development is being managed and strives to improve its own performance, to ensure greater transparency in procedures and to ensure accountability. With that in mind, given that the revised GRI guidelines focus on identifying and assessing the issues which are material for each company, at the end of 2013 PPC's Management Team repeated the process of defining material issues. Using a structured questionnaire sent to stakeholders, the CSR Section asked them to assess / score which issues were material for PPC's viability in their view.

The objective of this exercise was to engage in real dialogue and identify the important issues that affect PPC and its stakeholders and also to increase the degree of transparency and accountability by publishing the results of this process.

#### Material issues identified by Management

PPC has developed a Sustainable Development Material Issues Identification Process based on the principles of operational risk management. This process first launched in 2011 was repeated in 2013 with the involvement of all General Managers, departmental heads, the Strategy Director and the head of CSR. All participants were asked to assess sustainable development issues arising from PPC operations, their impact and the likelihood of occurrence, taking into account existing practices (strategy, policies, procedures, measures and actions) to prevent, control and suppress them.

The issues identified in 2011 were used as a starting point, along with some additional issues which arose because of market developments or legislative changes.

These issues were then grouped together to allow them to be more effectively presented and managed. The grouped issues were then displayed in materiality heatmaps, showing the estimated impact / risks and likelihood of them occurring.

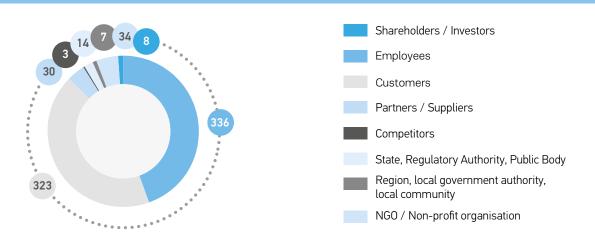
The maps, findings and conclusions and the dynamic tool for capturing and processing the results of this process were then used by the Corporation's Management Team to develop policy and take decisions.

#### Material issues identified by stakeholders

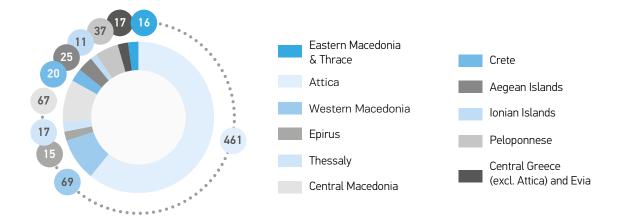
Company executives are in direct contact with stakeholder representatives allowing them to take their views into account when making decisions. However, since PPC recognises the added value that a more systematic acknowledgement and prioritisation of material issues by various stakeholder groups would have on assessing the results of the process outlined above, after PPC completed its own in-house procedure it developed an online questionnaire aimed at stakeholders. This was used to inform stakeholders about the groups of issues Management had identified and to ask them to provide their own assessment of their importance.

The response rate was impressive with the Corporation receiving 755 responses from all stakeholder groups from all regions of Greece.

#### PPC Stakeholders per group who filled out the materiality questionnaire



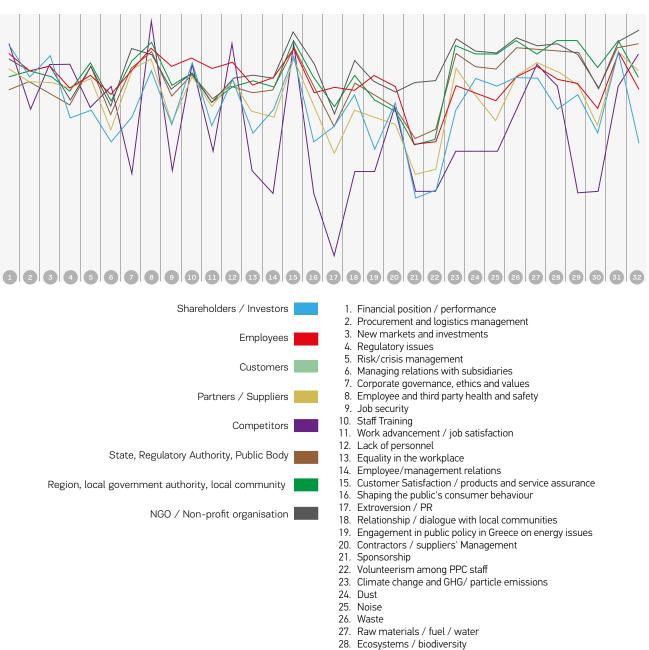
Geographical origin of PPC stakeholders who filled out the materiality questionnaire



The CSR Section then collated and processed the data resulting in the assessment / scoring of issues by PPC stakeholders by group, geographical region and overall.

Each stakeholder group evaluates PPC's material issues using its own criteria. For example, the Corporation's employees scored the issues of jobs, training and personnel development much higher than other stakeholder groups did. Customers scored customer satisfaction / product and service assurance, energy efficiency / new technologies and promotion of RES very high. NGOs / not-for-profit organisations identified sponsorship and volunteerism by Corporation staff as major issues compared to other stakeholder groups who consider these issues to be less important. In general terms though, the trends identified did not differ significantly.

Importance of PPC's sustainability material issues per group of stakeholders



- 29. Rehabilitation of degraded land
- 30. Visual / aesthetic nuisance
- 31. Energy efficiency / new technologies
- 32. RES development

SUSTAINABLE DEVELOPMENT

#### The material issues heatmap

The results of the PPC in-house process and the results generated by processing stakeholder questionnaires were then presented in a single material issues heatmap. The horizontal axis of this heatmap shows PPC Management's views (impact of each issue x the corresponding likelihood of it occurring) while the vertical axis shows the views of stakeholders.

The conclusions generated by this analysis of the material issues in PPC's sustainable development are summarised below:

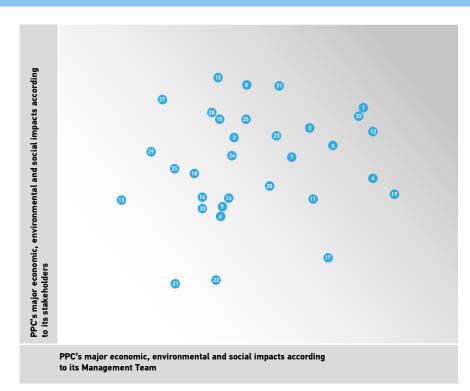
• Both PPC and Stakeholders agrees that the company's financial position, RES development and investments in

new markets are key issues affecting its sustainability.

- For the Corporation, material issues affecting its sustainability are that it be more actively involved in decisionmaking and how the state regulates the energy market, as well as risk management and the PPC's lack of staff.
- For stakeholders, major issues (apart from those related to customer satisfaction and product quality) had to do with the Corporation's environmental impact.

PPC is making concerted efforts to continuously improve how it organises and monitors sustainable development issues. The results of this materiality analysis are expected to be used to take important decisions about PPC's future and about the general outline of its CSR strategy.

#### PPC sustainability materiality issues



#### Economy

- 1. Financial position / performance
- 2. Procurement and logistics management
- 3. New markets and investments
- 4. Regulatory issues
- 5. Risk/crisis management
- 6. Managing relations with subsidiaries
- Society
- 7. Corporate governance, ethics and values
- 8. Employee and third party health and safety
- 9. Job security
- 10. Staff Training
- 11. Work advancement / job satisfaction
- 12. Lack of personnel
- 13. Equality in the workplace
- 14. Employee/management relations
- 15. Customer Satisfaction / products and service assurance
- 16. Shaping the public's consumer behaviour
- 17. Extroversion / PR
- 18. Relationship / dialogue with local communities
- 19. Engagement in public policy in Greece on energy issues
- 20. Contractors / suppliers' Management
- 21. Sponsorship
- 22. Volunteerism among PPC staff

#### Environment

23. Climate change and GHG/ particle

- emissions
- 24. Dust
- 25. Noise
- 26. Waste
- 27. Raw materials / fuel / water
- 28. Ecosystems / biodiversity
- 29. Rehabilitation of degraded land
- 30. Visual / aesthetic nuisance
- 31. Energy efficiency / new technologies
- 32. RES development

## 4.4 Stakeholders

It is particularly important for PPC to communicate and cooperate with its stakeholders. PPC has identified its stakeholder groups via a series of internal consultations, debates and working meetings between the PPC Management team and its executives. The main stakeholder groups are its employees, its customers, the State, the Regulatory Authorities and Public Bodies, shareholders and investors, Non-Governmental / non-profit organisations, regions, local authorities, local communities, as well as our partners, suppliers and competitors.

Just as it does every year, the Corporation continued to communicate at both national and local level with all stakeholders using means available to it. Stakeholder engagement is an integral part of PPC's daily work enabling it to understand the impact of our business activities and improve our performance by taking into account the advice, concerns, needs and recommendations of all parties affected by and affecting PPC. The fact that stakeholders were involved for the first time in a truly organised manner in the Corporation's materiality assessment procedure demonstrates in practical terms PPC's commitment to real stakeholder engagement. PPC recognises the major benefits for all sides that arise from the real communication and cooperation with various stakeholder groups.

While engaging with stakeholders to identify material issues, PPC used its online questionnaire to invite stakeholders to tell the Corporation how they learn about PPC's sustainability rating, to evaluate the 2012 Corporate Social Responsibility and Sustainability Report, to recommend things that could be improved and to rank the social issues they consider PPC should focus its sponsorship on. More than 230 responses concerning evaluation of the Report were received. The responses were examined by the CSR Section to improve this Report as well as PPC's future CSR actions and how they are communicated.

PPC participated this year again in the "BRAVO 2014 -Dialogue on Sustainable Development and Assessment of Responsible Entrepreneurship" initiative. Representatives of academic institutions, statutory bodies, non-profit organisations, the media, business organisations and associations, and consumers evaluated the contents of the 2012 Corporate Social Responsibility and Sustainability Report. The results of this evaluation process as well as comments and observations were analysed by the CSR Section to improve the content of this Report.

#### Employees

PPC Management maintains direct contact with its employees. Employees are represented through their trade unions, through their representatives on the Board of Directors and at General Meetings of Shareholders, and they also participate in level one and two boards and committees PPC has set up. Responding to the need for keeping employees properly briefed, Management is in direct contact with their trade unions to keep them briefed about changes in PPC's structure. Just some of the issues Management addresses through a series of actions and procedures are labour, health and safety at work, training and benefits. More details are provided in Section 5 of this Report.

#### Customers

The Supply Division is in constant contact with our customers through our branches, telephone lines, our website, customer satisfaction surveys, information material, direct mailing campaigns involving selected customers, and so on. The e-bill is a great example of a service that was developed after engaging in dialogue with customers. More information can be found in Section 7 of this Report.

#### The State, Regulatory Authorities and Public Bodies

PPC is in contact with the State, Regulatory Authorities and Public Bodies on a number of energy-related issues. Regulatory Affairs, which is part of the Corporation's Strategy Department, as well as the Marketing and Energy Services Department from the Supply Division are the sections primarily responsible for preparing position papers and representing PPC on regulatory framework issues of concern to the Corporation. PPC participates in committees and engages in consultations at both national and European level on environmental and market deregulation issues and about how the energy market operates. In 2013, as in previous years, PPC was actively involved with the Regulatory Authority for Energy (RAE) in finalising the text of the Non-Interconnected Islands Management Code, having participated in committees and consultations on the matter. The Code was finally approved by RAE in early 2014. The main PPC positions and activities on public policy issues are described in Section 8.1 of this Report.

#### **Shareholders and Investors**

The PPC Investor Relations and Financing Department coordinates communication with shareholders and investors. The official PPC website contains information about "Investor Relations" and all announcements and information often requested by a particular group of stakeholders are also posted there. In addition, meetings are held with existing shareholders and potential investors to brief them about the change in the Corporation's financial results or simply present the results (Q1, Q2, Q3 and annual financial results), conference calls are held with analysts, and there are also road shows within Greece and abroad. Shareholder and investor interest is focused on PPC performance, which is presented in more detail in the 2013 Annual Report and in this Report.

#### Non-Governmental/Non-Profit Organisations

Non-governmental/non-profit organisations mainly make inquiries to the Corporation about our environmental performance and request support for their activities. The steps we take to manage our environmental footprint are discussed in Section 6 of this Report. Requests for sponsorship are evaluated and approved at the local or central level. Just some of the sponsorship PPC provided in 2013 is presented in Section 8 of this Report.

#### **Regions, Local Authorities and Local Communities**

PPC executives continuously communicate with the Regions, local authorities and the local communities, either formally when specific requests are submitted or through consultations, or informally, via daily contact between our staff and representatives of the local communities and authorities. Responding to the concerns of the local communities, wherever possible we select employees and suppliers from the local communities we do business in, thereby bolstering the local economy. Section 8 of this Report presents offset projects resulting from the consultation procedure before the environmental terms and conditions for PPC projects are adopted, as well other actions to support local communities.

#### **Partners and Suppliers**

The Corporation collaborates with its suppliers and partners at local, national and international level to effectively carry out projects, promote "clean" energy and improve our products and services. Section 7.5 of this Report summarises our communication channels with our suppliers and our approach to transparent procurement procedures and contract awards.

#### Competitors

PPC strives to promote competition in the energy sector. Its participation in shaping public policy on this issue is proof of this. Attempting to promote sectoral issues and to strengthen cooperation on energy issues, PPC works with international energy companies and participates in consultations with relevant bodies, as well as with industry organisations and associations, such as the Hellenic Electricity Association-HELAS and EURELECTRIC.

# 4.5 Membership of Associations and Organisations

PPC actively participates in more than 40 national and international networks, associations, organisations and agencies to engage in constructive partnerships in the energy, industrial and business sectors and to promote corporate responsibility. Just some of these organisations are:



Hellenic Electricity Association (HELAS)



The Hellenic Institute of Entrepreneurialism and Sustainable Development



International Council on Large Electric Systems (CIGRE)



Electric Power Research Institute (EPRI)

**Global Sustain** 

Development (WBCSD)



Council for Sustainable Development at the Hellenic Federation of Industry (SEV)



Hellenic Network for Corporate Social Responsibility

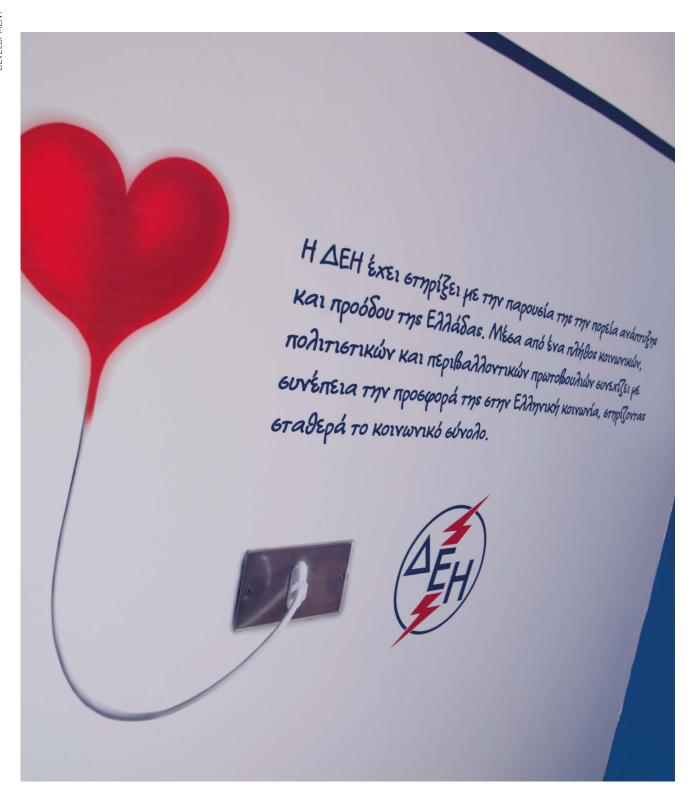


The Southeastern Europe Energy Institute

World Business Council for Sustainable

eurelectric

The Union of the Electricity Industry - EURELECTRIC 31



# 4.6 Awards - Distinctions

PPC received an award for the outstanding nature of its 2012 Corporate Social Responsibility and Sustainability Report. The Business Environmental Policy & Management Lab of the University of the Aegean evaluated the CSR reports published in 2012 by Greek businesses in a wide range of sectors of the economy and conferred the highest award on PPC. In early 2014 PPC also won the 3rd Business Award at the CSR Awards. The award was conferred after a vote taken in the MONEY - George Ouzounis Business Awards. These awards honoured listed companies for their business activities in 2013 in 15 different award categories.

# 4.7 Key CSR Performance Data

PPC's key financial, environmental and social performance data in 2012 and 2013 are presented in the table below. More information can be found in the relevant sections of this Report.

Economy	2012	2013
Turnover in € '000	5,887,911	5,918,652
Total Liabilities and Equity (€ '000)	14,996,074	14,773,794
Total liabilities (€ '000)	9,293,515 <sup>1</sup>	9,450,745
Total Equity (€ '000)	5,702,559 <sup>1</sup>	5,323,049
Domestic sales (GWh)	51,946	49,818
Financial income (€ '000)	76,343	76,085
Payroll cost including employee benefits and employer's social security contribution (€ '000) <sup>2</sup>	398,022	393,328
Dividend payments (€ '000)	35	5,821
Earnings (losses) before tax (€ '000)	50,152 <sup>3</sup>	(86,878)
Long-term borrowings (€ '000)	3,026,223	2,868,671
Short-term borrowings (€ '000)	1,580,456	1,633,854
Employees		
Total No. of employees	11,352	10,804
No. of employees with a collective labour agreement	11,346	10,790
Total No. of accidents	79	60
Total No. of fatal accidents	2	1
Fatal accident frequency rate	1.30	0.77
Accident frequency rate	2.68	1.99
Total No. of days of absence due to accidents	14,542	7,832
Accident severity rate	0.49	0.26
Total No. of days of absence from work	81,158	58,888
Absence rate	2.84%	2.21%
Environment		
Number of Power Plants (lignite centres, thermal power generation units, hydroelectric units, etc.) with certified Environmental Management Systems	18	18
CO <sub>2</sub> emissions from electricity generation (in thousands of tons)	47,598	41,337
Emission allowances (CO₂) (€ '000)	57,086	187,517
Surface area of PPC's facilities (hydroelectric facilities) in protected areas (km²)	65,30	65,30
Market and customers		
Installed capacity (MW)	12,384	12,800
Net energy output (in GWh)	40,004	37,190
No. of connections (low and medium voltage)	7,388,636	7,385,302
Market share in the domestic energy market <sup>4</sup>	98.5%	98.3%
Society		
Total amount of lignite levy payable to local communities (€ '000)	29,440	29,593

<sup>1</sup> Revised data to reflect adjustments made, as explained in note 36 to the Annual Financial Report for the period 1.1.2013-31.12.2013.

<sup>2</sup> Payrolling costs for 2013 include figures for employees engaged by the IKA-ETAM, ETEA and TAYTEKO Funds and by the National Healthcare Services Provider (EOPYY) in accordance with the provisions of Law 4147/2013. It does not include staff salaries that are embedded in the tangible assets and the cost of lignite mining.

<sup>3</sup> Adjusted amounts due to the amended IAS 19 Employee Benefits.

<sup>4</sup> Estimate of annual average taking into accounts sales by other suppliers.

SUSTAINABLE DEVELOPMENT

## 4.8 Commitments - Goals

The following tables show the goals set for 2013 and the degree to which they were accomplished, as well as our goals for 2014. The tables follow the structure of the Report.

#### Sustainable Development

Completed (see sections 4.3. and 4.4) Completed (see section 4.3)
Completed (see section 4.3)
Completed (see section 2)
Completed (see section 10.1)
-

Publish the Corporate Social Responsibility and Sustainability Report in line with the GRI G3.1 Application Level B+.

#### Employees

2013 Goals	Implementation
Negotiate a supplementary Collective Labour Agreement specific to the Corporation and rede- fine special benefits and the disciplinary control procedure.	Partially completed (see section 5.1)
Adopt employee mobility rules.	Completed (see section 5.1)
Draft a Written Occupational Risk Assessment for the three PPC lignite mines.	Partially completed (see section 5.6)
Obtain OHSAS 18001 certification for the Southern Field mine and the Megalopolis Lignite Centre Department.	Under way (see section 5.6)
Provide training on Policy Design for Emergency and Contingency Plans.	Partially completed (see section 5.6)
Develop a PPC policy to prohibit alcohol and addictive and toxic substances in the workplace.	Completed (see section 5.6)
Amend and update the Special Evaluation Regulation.	Under way (see section 5.3)

#### 2014 goals

Recruit 600 full-time staff to meet needs in the technical sector at mines and power plants, as well as experts to provide executive services (the relevant notices are expected to be published in September-October 2014).

Develop incentives for staff to move to "problematic" areas (the Greek islands).

Draft a Written Occupational Risk Assessment for two PPC lignite mines.

Comment on accidents that happened to staff of Mines and Power Plants Divisions in 2012-2013 and send the analysis to all business units to prevent similar incidents occurring again.

Complete training for authorised staff of contingency planning issues.

Publish an Occupational Physician Manual for the PPC Group as part of efforts to provide information and support about occupational medicine.

Brief staff and raise their awareness about checkups.

Obtain OHSAS 18001 certification for the Southern Field mine and the Megalopolis Lignite Centre Department.

Amend and update the Special Evaluation Regulation.

#### Environment

2013 Goals	Implementation
Obtain ISO 14001 certification for the Environmental Management System at the Megalopolis Lignite Centre.	Under way (see section 6.1)
Obtain ISO 14001 certification for the Environmental Management System at Unit V of the Aliveri Steam Electric Plant.	Under way (see section 6.1)
Begin the ISO 50001 certification process of the Energy Management System at Megalopolis Lignite Centre.	Completed (see section 6.1)
Complete the combined biomass and lignite combustion tests at the Kardia Steam Electric Plant.	Completed (see section 6.4)
Optimise the fuel management system at the Atherinolakkos and Rhodes Steam Electric Plants to generate further fuel savings.	Partially completed (see section 6.4)
Record energy consumption at PPC premises.	Partially completed (see section 6.3)
2014 Conta	

#### 2014 Goals

Obtain ISO 14001 certification for the Environmental Management System at the Megalopolis Lignite Centre. Obtain ISO 14001 certification for the Environmental Management System at Unit V of the Aliveri Steam Electric Plant. Obtain ISO 50001 certification for the Energy Management System at the Megalopolis Lignite Centre. Obtain ISO 14001 certification for the Environmental Management System at the Rhodes Steam Electric Plant. Complete pilot implementation of dry desulphurisation at Unit III at the Agios Dimitrios Plant.

#### **Market and customers**

2013 Goals	Implementation
Improve customer service at PPC facilities using uniform and recognisable customer-focused systems.	Under way (see section 7.2)
Implement the e-bill service for PPC employees as a pilot scheme.	Was not only limited to PPC employees, as had initially been planned. Instead e-bills were rolled out to all users (see sec- tion 7.1).
Start a telephone service to allow overdue bills to be settled.	Completed (see section 7.1)
Complete the study on the central management/grouping of customer complaints and requests.	Completed (see section 7.2)
Design an online tool to assess residential energy ratings.	Completed (see section 7.3)

#### 2014 Goals

Develop a full customer telephone service system by the end of 2014.

Develop a new look and feel for PPC branches to promote better customer service.

Improve the Supply Division's internal administrative functions.

Develop the e-bill taking into account market best practices so that the bill is eventually only available online.

Develop our brand by providing guarantees of origin to customers, confirming that a specific part of the energy consumed at home comes from RES.

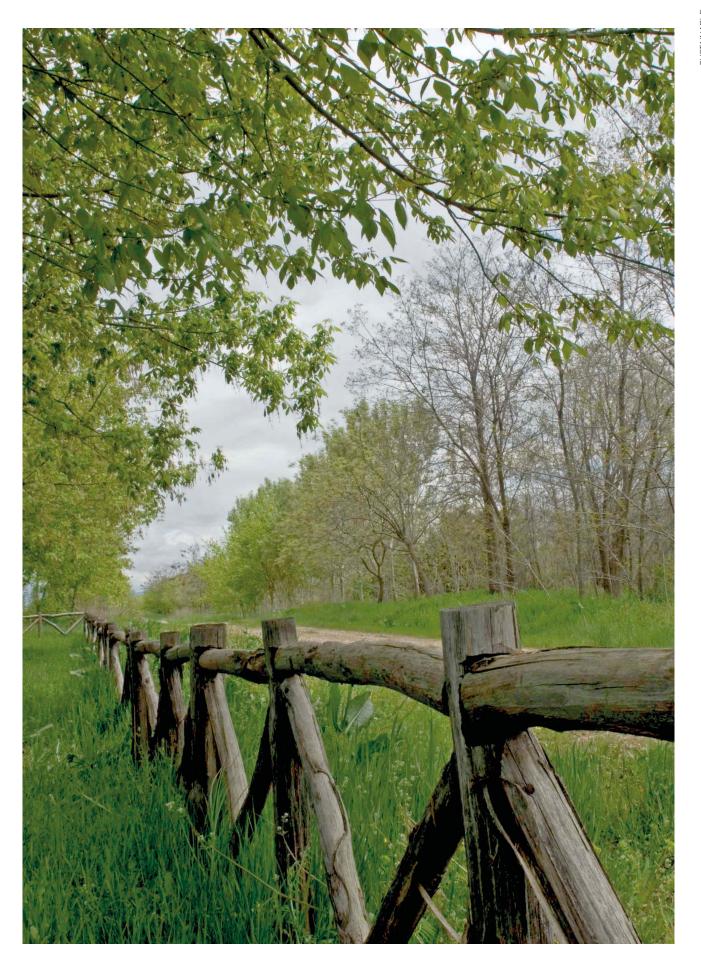
Adapt customer service procedures to reflect the New Supply Code.

#### **Contribution to Society**

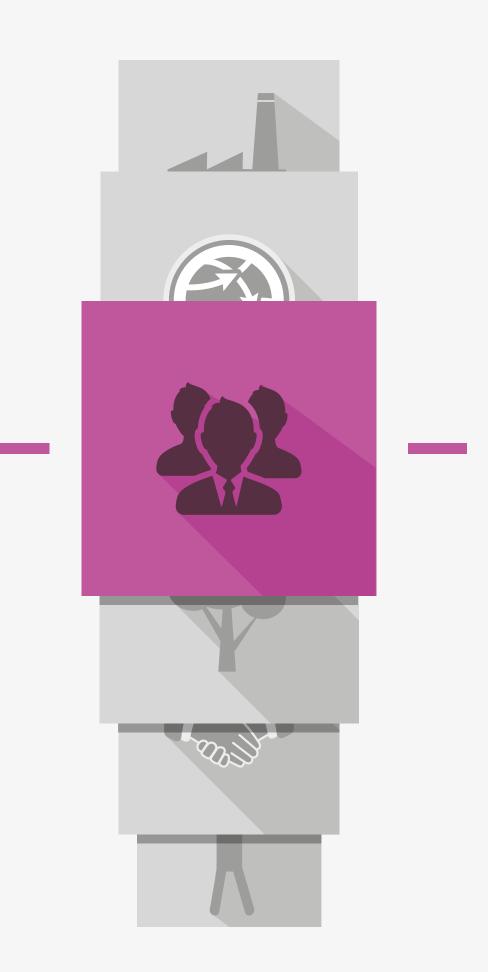
2013 Goals	Implementation
Continue working with non-profit organisations to implement actions focusing on children and women.	Completed (see section 8.3)
Continue programmes designed to develop and strengthen local communities.	Completed (see sections 8.2. and 8.3)
Add to the PPC Historical Archive.	Completed (see section 8.6)
Reopen the PPC Training Centre to train the unemployed in areas of specialisation the Corporation has specialised expertise in.	Completed (see section 8.6)
2014 Targets	
Continue working with non-profit organisations to implement actions focusing on children and women	ז.

Continue programmes designed to develop and strengthen local communities.

Implement training and youth career guidance measures in the Prefecture of Florina.



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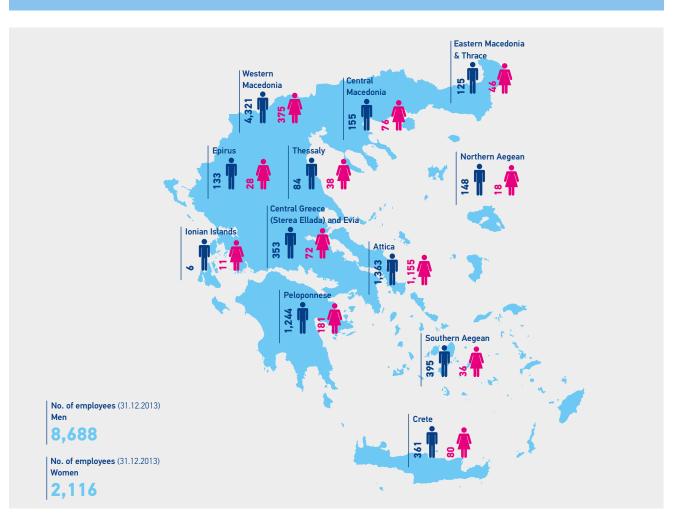
# 5. Employees

#### 5.1 Human Resources Data

On 31.12.2013, PPC had 10,804 full-time employees. Only 23% of the PPC employees work in the Attica region, given that the vast majority of them work in other Greek regions, mainly in the mining and generation sectors (in mines and power plants). Special rules apply to PPC about recruiting local staff. During the short-listing process the permanent residents of local municipalities and communities where the Corporation has power plants and mines receive preference. These "locality" rules do not apply to Company executives.

45 PPC employees have been seconded to posts outside the Corporation. In compliance with applicable legislation and with well-established PPC practice, the Corporation has seconded employees to the political offices of members of the government, parliamentary deputies, political parties, ministries, and so on. Of the 45 employees who have been seconded, 42 are still being paid by PPC and remain on its full-time staff, while 3 are being paid by the bodies they have been seconded to.

#### Geographical allocation of employees by gender



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#### Allocation of employees by Employee Category, Gender and Age

#### No. of employees (31.12.2013)

Employee category	No. of employees (31.12.2012)				Women				
		< 30 years old	31 - 50 years old	> 50 years old	< 30 years old	31 - 50 years old	> 50 years old	Total	
Executives	133	0	9	94	0	7	12	122	
Admin. / Finance employ- ees	2,225	5	400	359	10	1,152	291	2,217	
Technical-Technological employees	1,425	4	643	542	2	154	41	1,386	
Technical support em- ployees	6,820	76	4,357	1,697	4	182	42	6,358	
Workers	632	5	237	227	1	76	56	602	
Specialised staff	114	0	16	15	2	72	11	116	
Consultants	3	0	1	1	0	1	0	3	
Total	11,352	90	5,663	2,935	19	1,644	453	10,804	

#### Allocation of employees by employee category with a pension entitlement over the next five years

Employee category	Estimated number of employees accru- ing pension entitlement over the next 5 years	Estimated % of employees accruing pen- sion entitlement over the next 5 years
Executives	30	25%
Admin. / Finance employees	380	17%
Technical-Technological employees	280	20%
Technical support employees	1,930	30%
Workers	155	26%
Specialised staff	25	22%
Consultants	30	25%
Total	2,800	26%

The majority of workers (68%) are between 31 and 50 years old. It is estimated that 26% of them could become entitled to a pension over the next 5 years. Any forecast for the next 10 years would be very risky because of the general fluidity and uncertainty about the Corporation's future ownership regime and structure. Moreover, the frequent changes being made to pension rules could result in many more staff members retiring.

PPC is subject to rules and provisions applicable to corporations in the Greek public sector which affect specific procedures like new recruits. Management is aware that the high average age of staff and the limitations on recruitments are factors that could negatively impact on the Corporation's ability to carry on its business activities.

In 2013 the CEO issued decision No. 93/2013 adopting PPC staff mobility rules. The rules set out the framework, procedures and criteria for PPC staff moving to other posts to address the Corporation's needs that arise because other staff have left or because a business unit changes its functions, or because new activities commence.

PPC's staff are employed full-time. Of a total of 10,804 employees, 10,790 are employed on the basis of full-time employment contracts and are included in the Collective Labour Agreement signed on 13.6.2012, while 14 employees have temporary employment contracts. In 2013 PPC's Management received the results of the study conducted by the HR and Operations Division about redefining special benefits and changing the disciplinary rules. The study was prepared with the assistance of employee representatives and will be used in drafting the new collective labour agreement for the PPC. The Agreement has not yet been signed though.

Following a court ruling in 2013 the Corporation recruited 2 full-time staff (1 man aged under 30 from Western Mac-

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2013

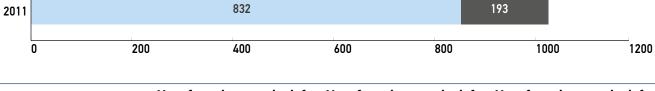
2012

edonia, and 1 aged between 30 and 50 from Attica). 1,810 seasonal staff were also recruited in 2013 to cover specific operational needs.

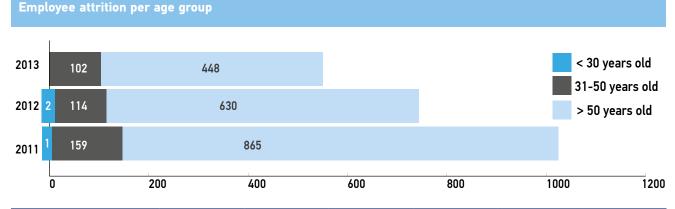
At the end of 2012 PPC had a staff of 11,352. One year later the PPC only employed 10,804 people (reflecting an attrition rate of 5%).

### Employee attrition per gender Men Women 508 42

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Gender	No. of employees in 2011	who left	No. of employe in 201		No. of employees who left in 2013		
Men	832	(81%)	645	(86%)	508	(92%)	
Women	193	(19%)	101	(14%)	42	(8%)	
Total	1,025		746		550		



Age	No. of employees	who left in 2011	No. of employees who left in 2012		No. of employees who left in 2013		
<30 years old	1	(0%)	2	(0%)	0	(0%)	
31 to 50 years old	159	(16%)	114	(15%)	102	(19%)	
> 50 years old	865	(84%)	630	(84%)	448	(81%)	
Total	1,025		746		550		

#### Employee attrition per region

Region	No. of employees who left in 2011	No. of employees who left in 2012	No. of employees who left in 2013
Eastern Macedonia & Thrace	22	9	4
Attica	298	129	73
Northern Aegean	19	11	7
Western Macedonia	325	368	347
Epirus	26	14	5
Thessaly	43	13	5
Ionian Islands	8	4	0
Central Macedonia	50	24	8
Crete	32	11	21
Southern Aegean	43	19	16
Peloponnese	101	109	46
Central Greece (Sterea Ellada) and Evia	51	35	18
Unknown region*	7	-	-
Total	1,025	746	550

\*The region involved has not been recorded.

#### Parental leave

Female employees may choose to take cumulative paid leave instead of the reduced daily working hours after the end of maternity leave as follows:

- Female employees who have one child may take 10 months off
- Female employees who have twins, triplets, etc. may take 14 months off
- Female employees who have large families (four or more children) may take 17 months off,

by solemnly declaring that:

- They are irrevocably committed to not voluntarily leaving the Corporation until the child becomes 5 or 6 years old, as appropriate.
- They are aware that the period of cumulative leave will not be counted towards their pension if they have not stuck to this commitment. If they do wish to retire and/or wish to leave PPC before the child becomes 5 or 6, they must pay the Corporation the amount of the remuneration paid during their cumulative leave that they received instead of opting for the reduced working hours plan.

Male employees may also take parental leave as follows:

- If their spouse is not alive, they have the same, full rights as mothers do: They can either benefit from reduced daily working hours, or take the corresponding cumulative leave, under the same conditions as stated above for female employees.
- If their spouse is also employed by PPC, they can take the reduced daily working hours (two hours per day until the child becomes 2 and one hour per day until the child becomes 5) instead of her.

• If their spouse works at another company, provided that she does not use the same parental leave, the father can enjoy the relevant benefits instead of her.

In 2013, 27 men and 204 women applied for and were granted parental leave. During the year, 25 men and 175 women returned to work after their leave ended. In 2013 no employee left service within 12 months of returning from parental leave. The Corporation has never so far terminated the employment contract of employees who return to work after cumulative maternity leave. If they wish, employees can leave PPC under the conditions set out in solemn declaration above.

#### **Trade Unions**

PPC supports freedom of association for its employees and gives trade union representatives time to perform their trade union duties. The PPC trade unions represent employees from different areas of specialisation and regions. The General Federation of PPC Electricity Sector Personnel (GENOP / PPC-CCDs), which includes 24 unions with 8,983 registered PPC employees, the Electricity Industry Workers' Federation that consists of three unions and has 182 registered employees and three more independent unions with which 372 employees are registered, all operate within the Corporation.

The fact that there is an Employment Trade Union Relations Sector within the HR & Operations Department, responsible for handling trade union-related issues, demonstrates Management's participative attitude towards employees.

#### 5.2 Training and Development

The PPC Training Department monitors, manages and evaluates the training needs of PPC employees, to develop

the Corporation's human capital and to achieve its strategic objectives. The systems used in the training field include analysing and identifying training needs, designing training courses, selecting trainees and instructors, running training courses, and evaluating training activities (the training cycle).

PPC has four training Centres, one in Attica (in Neo Faliro with 10 classrooms and 7 labs), one in the Peloponnese (in Megalopolis with 6 classrooms and 7 labs) and two in Western Macedonia (in Ptolemaida with 9 classrooms and 8 labs, and in Kardia with 11 classrooms, 12 labs and 1 simulator). There are also 4 classrooms at the headquarters of the Training Department in Athens.

PPC employees participate in training courses on technical and general topics, postgraduate courses, foreign language courses, lectures, conferences and seminars.

In 2013, PPC continued to provide training for guards/ security staff at its facilities. Of a total of 271 guards, 57 attended 1,140 hours of training on the "PPC full-time staff security services training course". The aim of the training was to allow security staff to participate in the private security staff certification exams in line with the relevant legislation (Law 3707/2008 and Joint Ministerial Decision No. 1016/109/183, Government Gazette 606/B/5.3.2012). Certificates are issued after passing written and oral exams run by the National Organisation for the Certification of Qualifications and Vocational Guidance and the Security Studies Centre of the Ministry of Citizen Protection.

At the same time, training courses designed to enhance the leadership skills and effectiveness of PPC executives also took place. In collaboration with the Investment Applications Laboratory of the National and Capodistrian University of Athens, we ran the following courses:

- Marketing for Services, attended by 20 executives.
- Finance and Risk Management in the Energy Sector, attended by 13 executives.

In 2013, a total of 77,931 man-hours of training were recorded, and the average training hours per participant were 13 hours. Of 6,045 participants, 4,619 were men and 1,426 women and the average training hours per participant were 12 hours and 15 hours respectively. Of all employees, the average length of training per employee was 7 hours, and 6  $\frac{1}{2}$  hours for men and 10 hours for women.

		<b>2011</b> <sup>1</sup>			2012 <sup>2</sup>			2013	
Employee category	Number of participants in training programmes	Total training man-hours	Average train- ing man-hours per participant	Number of participants in training programmes	Total training man-hours	Average train- ing man-hours per participant	Number of participants in training programmes	Total training man-hours	Average train- ing man-hours per participant
Executives	44	368	8.36	9	108	12.00	33	306	9.27
Admin. / Finance employ- ees	1,016	16,276	16.02	882	16,075	18.23	1,413	22,364	15.83
Technical-Technological employees	1,057	35,825	33.89	501	8,736	17.44	784	13,838	17.65
Technical support em- ployees	3,908	141,078	36.10	3,335	40,755	12.22	3,085	34,816	11.29
Workers	274	9,025	32.94	269	5,872	21.83	205	2,415	11.78
Specialised staff	3	63	21.00	7	57	8.14	143	934	6.53
Consultants	1	8	8.00	-	-	-	1	5	5.00
Unspecified category <sup>3</sup>	516	4,269	8.27	278	2,814	10.12	381	3,253	8.54
Total	6,819	206,912	30.34	5,281	74,417	14.09	6,045	77,931	12.89

<sup>1</sup> The training hours in 2011 included training courses attended by PPC staff and staff from IPTO, the spun-off subsidiary.

<sup>2</sup> The training hours in 2012 included training programmes attended by employees of the Distribution Division in early 2012, before the spin-off of HEDNO.

<sup>3</sup> The category the participant belongs to is unrecorded.

#### **5.3 Employee Performance Evaluation**

Employee evaluation programmes tend to have a positive impact on the operation of a company generally speaking, as employee good performance is rewarded and it encourages efforts to further improve performance. Right from the outset, PPC has had an employee evaluation system in place. Every year PPC runs an employee evaluation based on the Special Evaluation Regulation in force. In 2013, all full-time employees with an employment contract underwent evaluation and the process of amending and updating the Special Evaluation Regulation was launched.

## **5.4 Equal Opportunities and Respect for** Human Rights

The Corporation is constantly striving to develop an equal opportunities workplace where employees respect each other and where there is no discrimination. To date, no cases of discrimination have been recorded or reported.

Respect for human rights is an inviolable principle for PPC. We are against all types of forced or child labour. PPC fully complies with Greek legislation on child labour and implements procedures which preclude cases of child labour occurring. In 2013, as in the previous years, there were no cases of forced or child labour reported. In addition, no cases of the rights of indigenous populations being violated have been recorded. PPC fully respects human rights and implements the relevant national legislation. PPC does not discriminate on pay or on other issues such as the gender, age, race, colour, heritage, national or ethnic background of its employees.

#### **5.5 Additional Benefits**

In order to ensure that its employees enjoy a good professional life and decent personal life, the Corporation offers a wide range of additional benefits to employees, on top of their basic salary. Just some of these benefits are:

- Reduced electricity tariffs.
- Low-interest rate loans to purchase or repair a main residence.
- Assistance when employees face serious health problems.
- Special paid leave when employees face emergencies.
- Training (seminars, foreign language courses, post-high school training, postgraduate courses, etc.).
- The children of employees attend PPC's own kindergartens free of charge. Part of the cost of private kindergartens and campsites is covered by PPC.
- Mobile phones for staff, with free calls to other company staff members.
- Shuttle buses for employees when their place of work is located at a considerable distance from urban centres or towns.
- Canteens and food available at PPC restaurants at prices below retail prices.

- Commendations awarded to children of PPC employees who excelled in their secondary and tertiary education studies. Award ceremonies are held in Athens and in Northern Greece.
- Career guidance services are offered to the children of Corporation employees and retirees. In 2013, 73 children participated.

#### 5.6 Health & Safety

The PPC approach to the health and safety of its workers is in accordance with the PPC Group's policy on occupational health and safety and its accident prevention policy. In March 2012 the Occupational Health and Safety Department, which is responsible for managing these issues in PPC and is the In-House Protection and Prevention Service, obtained ELOT EN ISO 9001:2008 certification for the Quality Management System it operates. The system covers:

- The provision of Occupational Medicine services.
- The provision of Safety Technicians, coordination and support of their work.
- Inspections of the working environment in terms of health and safety.
- Risk assessment studies.
- Measures of hazardous agents.
- Preparation of specifications and technical evaluation of safe work and fire safety equipment.
- Support services relating to hazardous waste management.
- Recording and statistically analysing occupational accidents.
- Producing training material and support services on health and safety training.
- Designing and running emergency drills.
- Providing support on Contingency Planning and Civil Protection issues.

Moreover, since 2012 the Occupational Health and Safety Department has held a license as an External Protection and Prevention Service Provider with the ability to provide protection and prevention services to customers inside and outside the PPC Group.

3 written occupational risk assessments were prepared for units within the PPC Group in 2013, at the Megalopolis lignite mine, the Lesvos stand-alone power plant and at HEDNO facilities in the Volos area.

Annual audits of the Occupational H&S Management Systems were successfully carried out by independent bodies in line with the ELOT 1801 standard at the Komotini, Atherinolakkos, Meliti, Megalopolis II, Hania and Agios Dimitrios Steam Electric Plants. The Southern Field Mine and the Megalopolis Lignite Centre Department are currently in the process of OHSAS 18001/ELOT 1801 certification for their H&S Management Systems with the assistance of the Mines Division. They are expected to obtain certification in

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2014 and will be two of the largest industrial units in Greece to hold certification for this standard. In October 2013 a contract was signed to develop Occupational H&S Management Systems at a further 6 steam electric plants, namely Amynteo, Kardia, Aliveri, Lavrio, Megalopolis I, and Soroni on Rhodes.

The PPC Group's health and safety policy clearly refers to ongoing consultation with trade unions and employee representatives on occupational health and safety issues. Although there is no formal agreement governing the matter, the Occupational Health and Safety Department is, in fact, in constant communication with PPC employees.

#### Social Workers team

The Occupational Medicine Sector of the Occupational Health and Safety Department set up a team of social workers in December 2013. The team's duties include:

- Individual and family counselling for chronic situations and emergencies that entail unexpected, serious consequences for employees and their families.
- Assistance and aid in cases of occupational accidents or diseases affecting the physical or mental health of the victim or their family members.
- Close cooperation with the occupational physician where support and assistance are required in his opinion.
- Information and referrals to the competent bodies to secure other social or financial benefits available outside of PPC.
- Support of employees with no relatives or an unsuitable family situation who need social protection.
- Social surveys whenever PPC considers this necessary.
- Cooperation with psychologists, psychiatrists, mental health centres or addiction clinics if the occupational physicians consider this appropriate.

### Ban on alcohol, addictive and toxic substances in the workplace

The HR General Manager sent a letter to all company staff (No. DYAE/525/15.2.2013) containing guidelines about how to ban alcohol, addictive and toxic substances from the workplace.

PPC also participated in the European Workplace and Alcohol (EWA) programme to raise awareness among employees about safe alcohol consumption. The programme is being run in Greece by the Institute of Preventive Medicine, Environmental and Occupational Health (PROLEPSIS) in association with the Athens Medical School. As part of this the Occupational Health and Safety Department briefed staff at PPC's head offices. This was followed by 2 on-site briefings at the Megalopolis lignite mine and another 2 at the Megalopolis I and II steam electric plants.

#### Health and Safety Training

Health and Safety Training is an integral part of the basic and the special, technical training our employees receive. Training courses are held at PPC plants, where training courses are designed in partnership with the Occupational Physician, the Safety Technician and the Plant Manager, or take the form of training seminars held by the Training Department.

The training courses include the following subjects: health, medicine, occupational safety, first aid, and the safe use of work equipment and of the personal protective equipment. Furthermore, employees are informed about contagious diseases and participate in emergency drills in collaboration with local organisations, agencies of the General Secretariat for Civil Protection and in some cases the Armed Forces. In 2013 50% of our authorised staff attended training courses on contingency planning, and all courses about contingency planned which has been scheduled were held.

When training and briefing staff about health, medicine and occupational safety issues, the occupational physicians also provide information about serious illnesses.

		2011			2012			2013	
PPC units	Number of par- ticipants in train- ing programmes	Total training man-hours	Average training man-hours per participant	Number of par- ticipants in train- ing programmes	Total training man-hours	Average training man-hours per participant	Number of par- ticipants in train- ing programmes	Total training man-hours	Average training man-hours per participant
Mines Division	2,235	27,256	12.20	2,157	21,180	9.82	2,628	27,285	10.38
Generation Division	732	6,832	9.33	871	7,432	8.53	805	6,506	8.08
Transmission Division	60	525	8.75	-	-	-	-	-	-
Distribution Division	11	336	30.55	44	597	13.57	-	-	-
Supply Division	-	-	-	2	70	35.00	153	870	5.69
Finance Division	2	80	40.00	3	18	6.00	13	67	5.15
HR Division	87	870	10.00	12	80	6.67	277	1,734	6.26

		2011			2012			2013	
PPC units	Number of par- ticipants in train- ing programmes	Total training man-hours	Average training man-hours per participant	Number of par- ticipants in train- ing programmes	Total training man-hours	Average training man-hours per participant	Number of par- ticipants in train- ing programmes	Total training man-hours	Average training man-hours per participant
Support Operations Division	-	-	-	62	583	9.40	277	2,755	9.95
Other units	28	236	8.43	29	216	7.45	66	343	5.20
Total	5,281	36,135	14.09	3,180	30,176	9.49	4,219	39,560	9.38

Note: The data in the table above relate to training courses organised and run by the Training Department ("locally" implemented training conducted by the Divisions at PPC power plants is not included). In 2013, the male employees participated in 34,087 training hours, whereas female employees attended 5,473 hours of training.

#### Health and Safety Performance

2011	2012	2013
122	79	60
1	2	1
0.41	1.30	0.77
2.89	2.68	1.99
16,186	14,542	7,832
0.38	0.49	0.26
169,372	81,158	58,888
3.50%	2.84%	2.21%
	122 1 0.41 2.89 16,186 0.38 169,372	122         79           1         2           0.41         1.30           2.89         2.68           16,186         14,542           0.38         0.49           169,372         81,158

<sup>1</sup> The number of accidents and the respective ratios includes all accidents occurring during employment of the permanent and seasonal/temporary staff, which caused absence from work for more than 3 calendar days. Accidents occurring while travelling to and from work or cases of sickness, which are analysed separately (from a statistical viewpoint), are not included.

<sup>2</sup> The fatal accident indicator is calculated based on the number of accidents per 10,000 employees.

<sup>3</sup> The methodology taken into account to calculate the indicators is the "European statistics on accidents at work (ESAW) - Methodology - 2001 edition", which is also followed by the European Agency for Safety and Health at Work (EU-OSHA) and EURELECTRIC Calculation Method: Number of accidents per 10<sup>6</sup> hours of exposure to risk.

<sup>4</sup> The methodology taken into account to calculate the indicators is the "European statistics on accidents at work (ESAW) - Methodology - 2001 edition", which is also followed by the European Agency for Safety and Health at Work (EU-OSHA) and EURELECTRIC Calculation Method: Number of calendar days of absence from work per 10<sup>3</sup> hours of exposure to risk.

<sup>5</sup> The total number of absences from work and the respective absence rate relate to absence from work, registered as absence due to illness and sick leave.

	2011			012	2013		
Accidents	Number of non fatal accidents	Number of fatal accidents	Number of non fatal accidents	Number of fatal accidents	Number of non fatal accidents	Number of fatal accidents	
PPC employee accidents	121	1	77	2	59	1	
PPC contractor accidents <sup>1</sup>	23	3	5	0	3	0	
Third party accidents <sup>2</sup>	4	5	6	6	5	4	

<sup>1</sup> It is quite possible that some accidents may have gone unnoticed as a contractor may have failed to report them to the relevant authorities and consequently to PPC.

<sup>2</sup> These accidents mainly relate to electric shocks caused by involuntary contact with "live" parts of the network either during the construction of structures (buildings, advertising signs, etc.) or during the operation of lifting equipment. These are usually due to failure to keep the correct safety distances or even due to the failure (by private citizens) to request that specific parts of the network be disconnected.

9 incidents involving third parties were recorded in 2013. None involved visitors to PPC. Instead they related to accidents involving professionals or citizens who mistakenly came into contact with the power distribution grid managed by HEDNO. Of all non-fatal accidents, 2 resulted in serious injury and 3 minor, temporary injury.

		2	D11			201	12			201	3	
PPC units	No. of accidents	Accident frequency rate	No. of days absent due to accidents	Accident severity rate	No. of accidents	Accident frequency rate	No. of days absent due to accidents	Accident severity rate	No. of accidents	Accident frequency rate	No. of days absent due to accidents	Accident severity rate
Mines Division	49	5.66	1,116	0.13	43	4.83	13,235	1.49	31	3.57	6,836	0.79
Generation Division	27	2.18	684	0.05	25	2.15	1,039	0.09	26	2.19	940	0.08
Transmission Division	3	1.2	6,500	2.59	-	-	-	-	-	-	-	-
Distribution Division	39	3.19	7,576	0.62	7	1.67	134	0.03	-	-	_	-
Supply Division	1	0.48	210	0.1	0	0	0	0	1	0.01	10	0.01
Other divisions / headquarters	3	0.72	100	0.02	4	1.4	134	0.05	2	0.00	46	0.01

There was a drop in the number of accidents compared to last year. A total of 60 accidents occurred, and 2 of them involved women. Most accidents occur in the mines, and at generation facilities, due to the nature of the work.

The 1 fatal accident was the result of an earthworks vehicle overturning at a deposition site. Generally speaking, coordinated measures are taken to prevent and deal with worksite vehicle accidents such as regularly MOT-ing vehicles, testing driver skills using appropriate tests, and providing training.

#### **5.7 Internal Communication**

In addition to the steps mentioned above, PPC's Corporate Affairs and Communications Department also keeps employees well-informed about electricity, about how to use it safely, how to make energy savings and various other issues. The following measures were taken in 2013. These are just a taste of the sort of things PPC does in this field:

- Information is provided on the PPC intranet about energy savings, the safe use of energy and/or general health and safety at work issues.
- Staff are briefed each month about European energy market issues based on the EURELECTRIC information bulletins.
- A monthly energy market review is conducted as a mean of internally disseminating financial, statistical and other data relating to the energy sector.

- ELECTRON The World of Electricity is published weekly and emailed to all staff.
- Executives and staff receive weekly, monthly and special online briefings about:
  - Current statutory, regulatory and other issues at various levels (European Commission, European Parliament, etc.) of direct concern to European energy businesses.
  - Studies, reports and so on, about the state and prospects of energy and electricity companies.
  - Statistics relevant to the national or European electricity markets, such as generation or consumption trends.
  - Strategies and policies adopted by major European energy groups and international firms to best adapt to the new competitive environment, to deal with new energy challenges, to modernise their staff and offer customers better services.
- Notes and analyses are prepared about developments in the electricity market, institutional changes, developments with the competition in neighbouring countries in SE Europe.
- Comprehensive memos are drafted about talks given at colloquia, conferences, etc. in Greece about energy, energy technologies, environmental protection policies, etc. that are of interest to PPC executives and staff.
- Meetings are jointly organised with trade unions on the following topics:

- "Lignite Memories a Tribute to the Lignite Miners", a sports event with races for PPC employees, retirees and athletes from various parts of Greece.
- Friendly football matches are also held between employees of the PPC Group and other teams to promote volunteerism and encourage employees to engage in sport, and to pay tribute to old footballers from important teams who were also PPC employees.

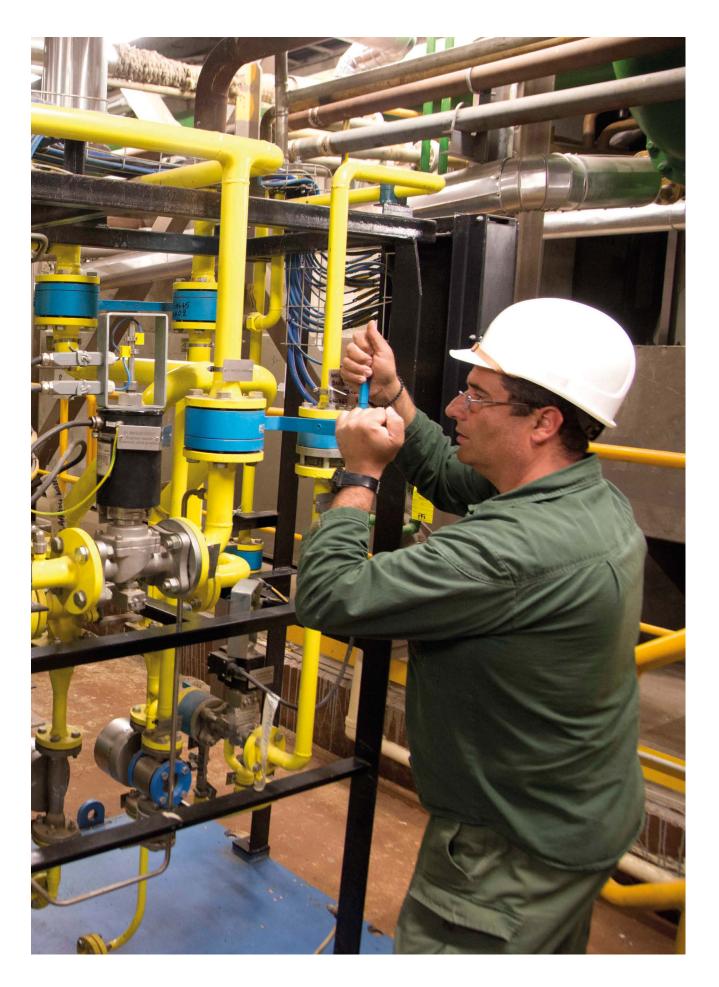
#### **5.8 Regulatory And Legislative** Compliance

Complying with the applicable legislation and other regulations lies at the very core of what PPC does, both in relation to HR issues, and in general in relation to all its activities. However, due to PPC's size and sheer scale of its operations, various critical issues do arise from time to time. In 2013, the following disciplinary penalties were imposed on 3 of the Corporation's employees:

- 2 employees were dismissed without compensation and
- 1 employee was suspended without pay.

PPC also took legal action against several employees or employees of its contractors in 67 criminal cases. 28 cases have been put on the file after the defendants were acquitted or the cases were adjourned indefinitely. 39 cases are still under way.

In 2013 fines of  $\in$  44,000 imposed by the Labour Inspectorate and various social security providers were paid.



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# 6. Environment

#### 6.1 Environmental Management

Most electricity generation activities are regulated by strict laws, regulations and permits at global, European, national and local level. PPC manages many different energy sources and technologies with different environmental characteristics and challenges as part of its activities. It recognises that environmental performance is key to the sustainable development of enterprises and to improving their competitiveness.

To this end, given the wide range of PPC's activities, organisational units related to the environment have been established in all Divisions of the Corporation. These are:

- The Mines Environment Department in the Mines Division,
- The Generation Environment Department in the Generation Division, and
- The Environment Branch in the Strategy Department (executive services).

Furthermore, there are Environment Sections at the individual power generation units (at lignite centres and at power plants).

#### **Environmental Management Systems**

To ensure continuous improvements in its environmental performance, PPC has put in place Environmental Management Systems at its power generation facilities. PPC is in the process of gradually obtaining certification for these systems. To date, PPC has acquired ISO 14001:2004 certification for the Environmental Management Systems at the Western Macedonia Lignite Centre which accounts for around 83-84% of all PPC electricity generated from lignite, and at the following power plants that produce around 85% of the PPC generated electricity.

Lignite plants	Diesel plants	Natural gas plants	Hydroelectric stations
Agios Dimitrios	Atherinolakkos	Agios Georgios	Aliakmon
Amynteo-Filota	Hania	Arachthos	
Kardia			Acheloos
Megalopolis I	Ali	veri	Nestos
Megalopolis II	Keratea	Ladonas (HPP)	
Meliti			

The current Environmental Management System at the

Aliveri Steam Electric Plant was modified in 2013 to encompass Unit V. Annual audits were successfully completed on the other Environmental Management System resulting in ISO 14001:2004 compliance certification being retained for yet another year.

Moreover, the Megalopolis Lignite Centre not only has certifications for its Environmental Management System but is also in the process of obtaining certification for its Energy Management System in line with the ISO 50001 standard.

PPC runs various laboratories to help ensure compliance with the environmental terms and conditions under which its power plants operate, to support implementation of Environmental Management Systems and to enable it to comply with requirements that mandate environmental reporting to the competent authorities (such as annual reports in the context of the European Emissions Trading Scheme). These labs which operate at the PPC Testing, Inspection & Standards Centre:

- Analyse fuels, lubricants and water used by PPC in its engines.
- Carry out analysis on the water and solid waste PPC generates.
- Develop new photometric methods to measure additional environmental parameters such as ammonia, phenol, weak chlorine and cyanide compound levels in liquid waste.
- Calibrate measuring devices at PPC's plants.

In 2013 the Centre retains its official scope of accreditation as a testing and calibration lab and as a type B inspection body.

## **6.2 Consumption of Raw Materials, Fuels and Energy**

#### Use of materials and fuels

As a large electricity company, PPC both uses and consumes large quantities of raw materials and other items, both to generate electricity and to cover other needs. The main fossil fuel PPC uses to generate electricity is lignite. In effect this is the only fossil fuel Greece produces. Natural gas, though, plays a very important role in ensuring the Corporation's energy balance. The island power generation systems are based on the consumption of oil products (LFO and diesel) to generate electricity.

Raw materials	2011	2012	2013
Lignite-solid fossil fuels (tons)	60,036,926	61,910,675	54,291,901
Hard coal (tons)	34,337	2,083	756
LFO (tons)	915,639	932,461	856,041
Diesel (kilolitres)	356,354	342,032	314,203
Natural Gas (kNm³)	902,951	783,888	786,226
LNG (kNm <sup>3</sup> )	174,427	-	-
Biomass (tons)	-	-	3,530
Desulphurisation limestone (tons)	469,775	485,775	409,989
Lime (tons)			18,532
Lubricants and mineral oils with- out PCBs			
(tons)	4,250	4,660	4,837
(kilolitres)	1.5	0.8	2.4

In 2013, 21 tons of combustion improvers and quantities of lubricants and PCB-free oil (460 containers) were consumed in addition to the products listed in the table.

It should be noted that there are no longer any quantities of PCBs in PPC equipment, as the programme to completely remove them and decontaminate all equipment containing or contaminated by PCBs has been completed in line with the relevant provisions of law. Checks for PCBs that may potentially be present are carried out on all equipment decommissioned from the network, even when it is certain that there is no contamination whatsoever.

#### **Energy consumption**

When PPC consumes energy this is primarily related to electricity generation, to the running of the Corporation's buildings (for heating/cooling and electrical purposes) and to use of its vehicles (service and corporate vehicles).

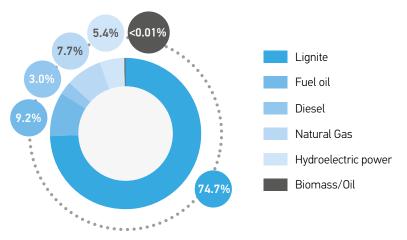
Total direct energy consumption (in primary energy terms) was 377.3 PJ in 2013 reflecting a 10% drop compared to

2012. This drop was primarily due to the approximately 5% fall in energy consumption compared to 2012 and to the increased use of hydroelectric plants in producing electricity compared to 2012. The most important change in the type of energy used in direct energy consumption was the drop in the amount of lignite used and the rise in hydroelectric followed by a rise in natural gas.

Consumption figures can be broken down as follows:

- Fuel use at thermal plants was 357.0 PJ (accounting for 95% of direct energy consumption). This figure includes consumption by the plants themselves (1.1 PJ) and consumption for district heating schemes (2.0 PJ).
- Electricity produced by PPC hydroelectric plants (around 5% of overall direct energy consumption).
- Fuel consumption for vehicles (0.04 TJ) and to heat buildings (0.006 TJ). Adding these two categories (which have been quantified for the first time), reveals that they account for 0.01% of overall direct energy consumption (in primary energy terms).
  - PPC runs a fleet of 1,833 vehicles including 1,041 with ordinary license plates and 359 off-road mobile vehicles, 153 of which are only used within the boundaries of the Corporation's premises and 180 vehicles with license plates issued with prefectural authorisation. Data is available about fuel consumption and vehicle usage for 64% of the vehicles with ordinary license plates. Those vehicles travelled 8.5 million km or 12,700 km per vehicle.
  - Fuel consumption data for buildings only relates to buildings in Attica (covering a surface area of 530,000 m<sup>2</sup>, which consist of offices, substations, storage areas and archives) which account for 27% of all PPC buildings (both rented and owned). 60% of the consumption figure relates to natural gas.

Indirect consumption (for electricity and district heating) has not been calculated in primary energy terms since the relevant consumption figures are already included in direct consumption (given that the relevant quantities are produced by the PPC itself). Direct primary energy consumption 2013



#### Direct consumption: 377,305 TJ

Note: Lignite consumption also includes coal which accounts for 0.01% of total direct consumption.

#### 6.3 Greenhouse Gas and Other Gas Emissions

Electricity generation is recognised as one of the main sources of greenhouse gas (GHG) and air pollutant emissions. According to the most recent national inventory of GHG emissions submitted to the Convention Secretariat for the United Nations Framework Convention on Climate Change by Greece for the 1990-2012 period, GHG emissions from conventional power plants in 2012 accounted for 46% of national emissions (without taking into account absorption from forests).

Recognising the environmental impacts of its activities, PPC has put in place and is implementing control and prevention programmes. These programmes are based on systematic monitoring of PPC activities and their impact on the environment.

#### **Greenhouse Gas Emissions**

GHG emissions of thermal power plants (which are the main source of PPC emissions) are monitored in line with

European Commission guidelines on plants participating in the European Union Emissions Trading Scheme (EU ETS) and with monitoring plans developed by PPC and approved by the Ministry of the Environment, Energy & Climate Change.

Emissions from the thermal power plants are considered to be direct emissions (Scope 1, to use the terminology of the GHG Protocol Initiative). Methane (CH<sub>4</sub>) emissions from the mining of lignite at PPC mines and fuel consumption at Corporation buildings and by vehicles are also included in the same category. Indirect emissions (Scope 2) from electricity consumption at PPC (self-consumption by power plants and electricity consumption at the Corporation's buildings and other facilities) are not included as they have already been included in the Corporation's direct emissions. Emissions from business flights were calculated as "Other indirect emissions" (Scope 3).

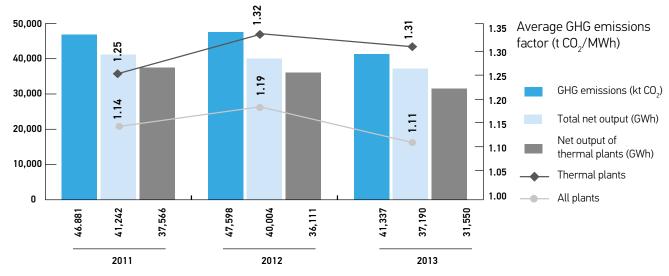
GHG e	emissions	Туре	2011	2012	2013
	Power Plants (kt CO <sub>2</sub> )	Scope 1	46,881	47,598	41,337
	Lignite (kt CO <sub>2</sub> )		40,706	41,990	36,108
By fuel	Fuel oil (kt CO <sub>2</sub> )		2,844	2,901	2,635
By f	Diesel (kt CO <sub>2</sub> )		852	811	763
	Natural gas (kt CO <sub>2</sub> )		2,199	1,612	1,600
	Desulphurisation (kt CO <sub>2</sub> )		204	211	180
Plants	not included in EU ETS system (kt CO <sub>2</sub> )		75	73	51
Lignite	Mining <sup>1</sup> (kt $CO_2$ eq)	Scope 1	1,199	1,302	1,144
Buildin	gs <sup>2</sup> (t CO <sub>2</sub> )	Scope 1	Not ca	lculated	361
Fuel fo	r vehicles <sup>2</sup> (t $CO_2$ )	Scope 1	Not ca	lculated	2,925
Flights		Scope 3	Not ca	lculated	301

Note: Other indirect emissions from electricity imported by PPC are not counted since detailed data about the power plants and/or power systems that provide imported electricity are required, and that data is not available.

<sup>1</sup> The emission factor from the national emissions inventory has been used.

<sup>2</sup> The emission factors proposed in the IPCC Guidelines (2006) were used to calculate emissions from fuel consumption at buildings and by vehicles. <sup>3</sup> Business flight emissions were calculated by allocating the flights to various categories (domestic, European and transatlantic flights). The emission

factors proposed by the GHG Protocol were used.



#### Net output (in GWh) and GHG emissions (in kt CO,) from generation plants

In 2013 average CO<sub>2</sub> emissions from thermal power plants dropped marginally by 0.6% compared to 2012. The average emissions factor for all plants improved by 6.6%. The thermal plant average emissions factor depends on the quality of the lignite mined and the percentage of natural gas used to generate electricity (net electricity production from gas-fired plants rose by 176 GWh compared to 2012). whereas the improvement in the overall average factor was affected to a large extent by the improved productivity of hydroelectric plants. In 2013 the amount of electricity generated by hydroelectric plants rose by 45% compared to 2012. This meant that the contribution hydroelectric plants made to net power generation in 2013 rose to 15% (compared to 10% in 2012). Overall, PPC has managed to reduce the CO<sub>2</sub> emissions factor for the whole power generation system from 1.3 t CO<sub>2</sub>/MWh in 1990 to 1.11 t CO<sub>2</sub>/MWh (which reflects a 15% drop overall). No regard was had to electricity generated from RES (except for PPC's hydroelectric plants) in calculating this factor.

#### **Air Pollutant Emissions**

As a result of burning conventional fuels to generate electricity at thermal power plants the air pollutants released into the atmosphere contribute to air pollution and cross-border pollution. The most important air pollutants are Sulphur Oxides (SO<sub>x</sub>), Nitrogen Oxides (NO<sub>x</sub>) and airborne particles.

In 2013, emissions of all air pollutants (apart from airborne particles) fell compared to 2012 while airborne particle emissions rose marginally by 0.6%. SO<sub>x</sub> and NO<sub>x</sub> emissions dropped by more than in 2012 (by 38% and 19% respectively). This drop was due to a fall in the amount of power generated in 2013 compared to 2012, to a change in the fuel mix used and to the desulphurisation plants being in operation for longer hours.

Pollutants	Emissions in 2011 (tons)	Emissions in 2012 (tons)	Emissions in 2013 (tons)
Sulphur oxides (SO <sub>x</sub> )	109,000	93,500	58,200
Nitrogen oxides (NO <sub>x</sub> )	79,000	69,300	56,200
Particle emissions (PM)	15,100	15,600	15,700
Lead (Pb)	1.22	1.23	1.12
Nickel (Ni)	27	26.8	24.48
Copper (Cu)	1.05	1.06	0.97
Chromium total [Cr(tot)]	2	2	1.85
Zinc (Zn)	8.2	8.23	7.53
Cadmium (Cd)	0.074	0.075	0.069
Mercury (Hg)	1.38	1.38	1.26
Arsenic (As)	0.7	0.71	0.65

Note: The figures in the table are those that PPC publishes in the European Pollutant Release and Transfer Register [E-PRTR, Regulation (EC) No 166/2006].

In order to control and reduce emissions of air pollutants, PPC implements a series of relevant measures and interventions:

- PPC operates a network of 35 stations that measure air quality and meteorological parameters in the wider areas around its power plants and mining sites. This network will be expanded should the need arise.
- Since October 2007, all diesel plants using fuel oil are supplied with low sulphur fuel oil (containing 1 wt% of sulphur).
- The fuel gas desulphurisation plant at Unit III at the Megalopolis Steam Electric Plant was fully commissioned on 17.5.2013 following final acceptance of the relevant works in the first half of 2012.
- Pursuant to Article 32 of Directive 2010/75/EU, Greece prepared a Transitional National Emissions Reduction Plan and submitted it to the European Commission for approval. This Plan relates to Units I-V of the Agios Dimitrios Steam Electric Plant, Units III and IV of the Kardia Steam Electric Plant, Unit III of the Megalopolis I Steam Electric Plant, Unit IV of the Megalopolis II Steam Electric Plant and Unit I of the Meliti I Steam Electric Plant. The Transitional National Emissions Reduction Plan was

approved by the European Commission on 26.11.2013. In December 2013 PPC filed an application to the Ministry of the Environment, Energy & Climate Change to make limited-scope changes to the Transitional National Emissions Reduction Plan. It also declared that it would make use of the limited-scope derogation for specific Units under Article 33 of the Directive. After the Ministry accepted those changes, the revised Transitional National Emissions Reduction Plan was resubmitted by Greece to the European Commission on 18.3.2014 for approval. The European Commission issued Decision C(2014)4533final/7.7.2014 approving the amended Plan. The Plan now includes the Agios Dimitrios, Meliti, and Megalopolis I and II Steam Electric Plants. The Amynteo and Kardia Steam Electric Plants are subject to a limitedscope derogation.

In the Plan, the Corporation has set out its policy and defined how it will operate its lignite plants over the time period specified, the actions and environmental projects which are required, and the timeframe for implementing them, coupled with the longer-term maintenance plans it has for those facilities.

	Completion target	
Unit	Reduce NO <sup>x</sup> emissions <200mg/Nm <sup>3</sup>	Reduce SO <sub>2</sub> emissions <200mg/Nm <sup>3</sup>
Agios Dimitrios I	Within the second half of 2015	Within the second half of 2015
Agios Dimitrios II	Within the first half of 2016	Within the first half of 2016
Agios Dimitrios III	Within the second half of 2016	Within the second half of 2014
Agios Dimitrios IV	Within the first half of 2016	Within the first half of 2016
Agios Dimitrios V	Within the first half of 2015	Within the second half of 2017
Megalopolis IV	Within the second half of 2015	-

- Pilot application of the method of dry desulphurisation continued at Unit III of the Agios Dimitrios Steam Electric Plant with good results.
- The preliminary study to reduce SO<sub>2</sub> emissions at the lignite power plants in Western Macedonia (in Units I-IV of the Agios Dimitrios Steam Electric Plant and Units I-II of the Amynteo Steam Electric Plant) was completed.
- The West Macedonia Lignite Centre is implementing two research projects designed to assess the contribution of mining (excavation, dumping, and material shipments) to emissions and to concentrations of PM10 airborne particles in the atmosphere of the area. The results of these projects were expected in 2013. However the delivery deadline was extended to repeat some measurements under different weather conditions. Consequently the final results will become available during 2014, and will be used to design, plan and implement measures to monitor and control airborne particles.
- In October 2013 PPC decided to:
  - Build dry desulphurisation plants at Units I-IV of the Agios Dimitrios Steam Electric Plant (after the tests on Unit III proved to be a success).

- To build a wet desulphurisation plant at Unit V of the Agios Dimitrios Steam Electric Plant.
- To build NO<sub>x</sub> emission reduction facilities worth a total of € 76 million: (a) by making extensive direct changes at Units I-IV of the Agios Dimitrios Steam Electric Plant (by changing the fuel preparation system, replacing burners, and changing how combustion gases are distributed within the boiler) and (b) by making lesser changes (without replacing the burners) at Unit V of the Agios Dimitrios Steam Electric Plant and at the Megalopolis II Steam Electric Plant.

As part of phase one, an international lowest bidder tender procedure was launched on 7.10.2013. This resulted in a contract for the project entitled "Upgrade of boiler at Unit V of the Agios Dimitrios Steam Electric Plant to reduce  $NO_x$  emissions by taking direct measures" being signed on 24.6.2014. In August 2014 a tender procedure was launched for the project entitled "Upgrade of boilers at Units I and II of the Agios Dimitrios Steam Electric Plant to reduce  $NO_x$ emissions by taking direct measures", whose budget is  $\notin$  29.5 million.

It should also be noted that the relevant authorities are systematically briefed about air pollutant emissions through

annual and quarterly reports about excessive emissions, wherever necessary, in line with the decisions approving the environmental terms and conditions. In the event of excessive emissions, or damage to pollution control equipment, and in other relevant cases, a report is submitted immediately, within 24 hours.

#### Ozone-depleting substances and fluorinated greenhouse gases

PPC's installed cooling capacity for its central air-conditioners at buildings in Attica is 2,960 RT (10.41 MW). The cooling fluids used at units are either categorised as ozone-depleting substances (ODS) or fluorinated greenhouse gases.

- 465 kg of ODS (R22) were used to top up existing facilities in 2013 (or 26.58 kg of CFC-11 equivalent).
- The fluorinated greenhouse gases used in air-conditioning facilities are R407C, R410 and M029. 340 kg, 25 kg and 23 kg were used respectively to top up air-conditioners. These quantities correspond to emission of 613 t CO<sub>2</sub> eq.

#### 6.4 Actions to Reduce Greenhouse Gas Emissions

PPC recognises the impact of climate change on all sectors of the economy, as well as its own responsibility as regards GHG emissions from its operations. Thus PPC has been investing over time to improve the energy efficiency of its thermal power plants, improving the characteristics of the energy mix for electricity generation and developing hydroelectric power plants and RES projects. As a result, there has been a decrease in the average  $CO_2$  emission factor of the PPC's electricity generation system over time.

#### **PPC** investment plan

As part of the PPC's strategic priorities, the Generation Division has undertaken to implement investment projects to replace obsolete power plants with new, environmentallyfriendly, cutting-edge, more efficient power plants. The following can be noted regarding the progress of the relevant investment projects in 2013:

- Unit V at the Aliveri Steam Electric Plant (a combined cycle unit, with a net installed capacity of 416.95 MW and nominal efficiency rating of 58.4%) was commissioned on 12.8.2013 and in February 2014 the unit was entered in the Register of Units and the Dispatchable Units Register held by IPTO.
- Civil engineer works are currently under way at the Megalopolis V combined cycle unit; a gas-fired plant with a new capacity of 811 MW. Electromechanical equipment has arrived and is now being installed. The unit is expected to become operational at the end of 2014.
- On 9.3.2013 a contract was signed for the design and build of a new steam electric plant at Ptolemaida (Unit V) with a gross capacity of 660 MW. This unit will be fuelled by powdered lignite and will be able to provide 140 MWth heat for district heating schemes. There are plants to

install a  $CO_2$  capture and compression system at this unit (which will replace the current Ptolemaida Steam Electric Plant) when  $CO_2$  capture technology is ready. At present, steps are being taken to obtain authorisation for this project.

In 2013 testing on the combined biomass/lignite combustion unit at the Kardia Steam Electric Plant was successfully completed. The fuel management systems at the Atherinolakkos and Rhodes Steam Electric Plants are currently being optimised (and a tender notice for the project is expected to be published soon).

In 2013 PPC continued to gradually wind down operations at Units III and IV at the Aliveri Steam Electric Plant (it is in fact only in operation when necessary to ensure system reliability or in cases where there are problems with the natural gas supply). Operations at the Units I and II at the Lavrio Steam Electric Plant and the LIPTOL Steam Electric Plant have also been wound down and now only meet the district heating requirements of nearby municipalities. Reducing the hours that these old units are in operation has impacted positively on Greece's GHG emissions and air pollutant levels.

More information about the PPC Investment Programme is included in the 2013 Annual Report (pages 34-38 and 186-195).

#### Renewable energy sources

Apart from developing low carbon technologies, the PPC Environmental Strategy also includes significant investments to increase the share of power generated by utilising Greece's hydrodynamic potential and by developing projects that use renewable energy sources (through PPC Renewables S.A., a PPC subsidiary, in collaboration with other private investors). This includes investments in wind parks, small hydroelectric power plants, solar parks, biomass plants and geothermal power plants.

The Corporation takes advantage of the fact that Greece is intensely mountainous and has built dams and created reservoirs to utilise the country's hydrodynamic potential to ensure that supply meets demand in each local catchment area. Today, PPC owns and operates 15 major hydroelectric plants in various regions of Greece.

The Sfikia and Thisavros Hydroelectric Plants on the Aliakmon and Nestos Rivers respectively are pumping plants. They store water in the reservoirs by pumping water back into them during low load periods, using low cost energy, and release it when there is demand, thereby helping to balance out peaks in the daily load curve, making it easier to cover higher demand for energy during specific hours of the day and also reducing production costs (by optimising the energy balance).

The following specific points should be borne in mind with regard to the development of hydroelectric plants (more information is also available in the 2013 Annual Report):

- Hilarion Hydroelectric Plant (with an installed capacity of 157 MW and estimated net output of 330 GWh). Work was completed on the substation and the area downstream of the dams. Both units are operational (Unit I came online on 3.7.2014 and Unit II on 7.6.2014) based on the schedule PPC submitted, which was approved by the National Grid.
- Metsovitiko Hydroelectric Power Plant (29 MW). Due to delays in the tender procedures, the project is now not expected to be in commercial operation until 2018.

#### **EU Emissions Trading Scheme**

The Emissions Trading Scheme (ETS) is one of the European Union's main tools for reducing GHGs emissions. ETS was launched in 2005 and the third phase of its operation started in 2013 (2013-2020). From 2013 onwards, all electricity companies are obliged to buy all rights necessary to cover their emissions arising from electricity generation (as opposed to free allocation that was in force from 2005 to 2012). More information on the regulatory framework governing ETS operation can be found on the websites of the Greek Ministry of the Environment, Energy & Climate Change (http://www.ypeka.gr/Default. aspx?tabid=456&language=el-GR) and the European Commission (http://ec.europa.eu/clima/policies/ets/index\_en.htm). Detailed data about the plants covered by the scheme in the European Union can be found in the European Transaction Log (http://ec.europa.eu/environment/ ets/).

The CO<sub>2</sub> emission allowances allocated to PPC for 2013 were 124,747 (for running the district heating schemes at the LIPTOL, Ptolemaida, Agios Dimitrios, Amynteo, Megalopolis I and Kardia Steam Electric Plants), and PPC delivered 41.3 million allowances. These allowances were acquired at a cost of € 187.5 million.

#### **Other initiatives**

In order to reduce the environmental footprint of its operations, and to play an active role in international endeavours to combat climate change (by limiting emissions and impacts and by adapting practices), PPC participates in a number of voluntary initiatives and research programmes and takes a series of relevant measures. Some examples of what it does in this area are shown below:

• PPC is involved in the CAPSOL research programme relating to Carbon Dioxide Capture and Storage (CCS). The research programme (which is a continuation of the CASTOR, CESAR and iCap programmes) seeks to develop new solvents and processes to efficiently and cost-effectively capture CO<sub>2</sub> after combustion. 12 organisations, companies and foundations from various European countries are involved in the programme and PPC, among other things, is participating in working groups, providing data about power plants and working on an integrated design. For more information visit http://www.capsol-project.eu/.

- Since March 2011, PPC has been participating in the 4-year GREEN e-motion programme (for more information, please visit http://www.greenemotion-project.eu), as part of its first pilot electrification project in Kozani, in cooperation with the Municipality of Kozani.
- The Corporation voluntarily participates in the European Union "Greenbuilding" programme, an energy upgrade and building certification programme. The programme is being implemented on a pilot basis only at the PPC buildings in Kallithea and Pagrati that house customer services, which will be the first certified energy-efficient buildings of the Corporation. In 2013 tender procedures to select contractors to make energy improvements to the PPC's privately-owned Supply Division building in Kallithea were completed.
- PPC continued its voluntary participation in the EURE-LECTRIC Energy Wisdom environmental programme. The Environment Branch of the Strategy Department participated in preparing the report for the 2012-2013 programme on improving energy efficiency, carbon emissions reduction and the 2050 challenges.
- PPC is leader of the EURELECTRIC Task Force Adaptation to Climate Change and is also involved in the European Commission's Adaptation Steering Group where it represents EURELECTRIC.
- PPC is a member of the World Business Council for Sustainable Development (WBCSD), the global exponent of businesses and their positions on sustainable development issues. In the WBCSD context, PPC participates in the Working Group for electricity companies (WG Electric Utility) on issues pertaining to energy efficiency and smart grids. PPC also participates in the working group (WG Water) on water management by electricity companies.

#### 6.5 Water Management

Developing Greece's hydrodynamic potential for electricity generation is one of PPC's most important activities, which contributes to reducing Greece's energy dependence and also reduces greenhouse and other gas emissions. To this end, dams are being built and reservoirs created. At the same time, PPC recognises the importance of water resources for sustainable development and, for this very reason is implementing a series of measures and preventive actions to protect and ensure integrated water management, in a responsible manner, with a view to maximising the overall social and environmental benefits. Furthermore, PPC attaches particular importance to systematically monitoring Greece's water resources and has put in place a model monitoring network, which includes:

- A highly reliable rain gauge and weather network with 179 measurement stations grouped mainly in mountainous areas of Greece, and
- A hydrometric network, with 39 stations measuring river flow.

The PPC hydrometric monitoring network is unique in Greece, as it can systematically collect comprehensive, reliable information to enable river flow to be evaluated on a continuous or a daily basis. In addition to being used to meet the needs of PPC and to ensure the safe design of public and private projects, the data collected is essential for Greece's compliance with the Directive 2000/60/EC, for preparing river basin management plans, for environmental impact studies and for the general monitoring of the quality of the aqueous environment.

It should be noted that in 2013 an open tender procedure was conducted to install 10 automatic telemetry stations measuring physico-chemical parameters that will be placed in different lakes nationwide. The contract will be awarded and the stations installed during 2014. The data collected will form a database for future studies that will be conducted as and when needed. At the same time, measurements are taken at all HPP reservoirs, and samples are sent to accredited laboratories and the results sent to the competent authorities.

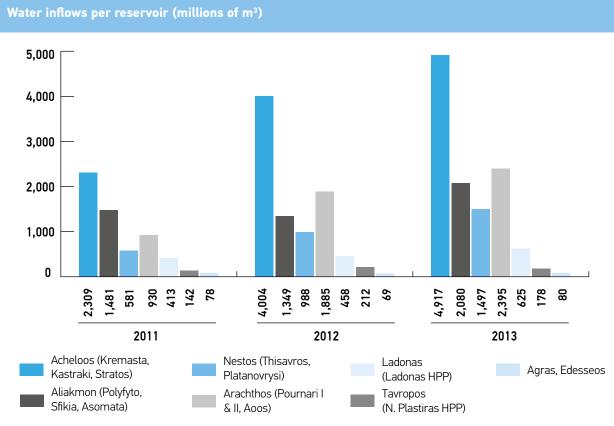
The water sources affected by the pumping carried out by the PPC (for thermal and hydro power plants) are presented in the following table, together with the protection status of each area (due to the high value of their biodiversity). Information about the NATURA 2000 European Ecological Network can be found on the Ministry of the Environment, Energy & Climate Change website (http://www.ypeka.gr/ Default.aspx?tabid=432&language=el-GR).

Water source name	Туре	Protection regime
Almyros, Hania*	Lake (outlet)	NATURA 2000
Acheloos (Kremasta, Kastraki, Stratos)	Reservoirs	None
Aliakmon (Polyfyto, Sfikia)	Reservoirs	None
Aliakmon (Asomata HPP)	Reservoir	NATURA 2000
Agras	Reservoir	NATURA 2000
Nestos (Thisavros, Platanovrysi)	Reservoirs	NATURA 2000
Arachthos (Pournari I and II)	Reservoirs	None
Aoos	Reservoir	NATURA 2000
Ladonas (Ladonas HPP)	Reservoir	None
Tavropos (Plastiras HPP)	Reservoir	NATURA 2000

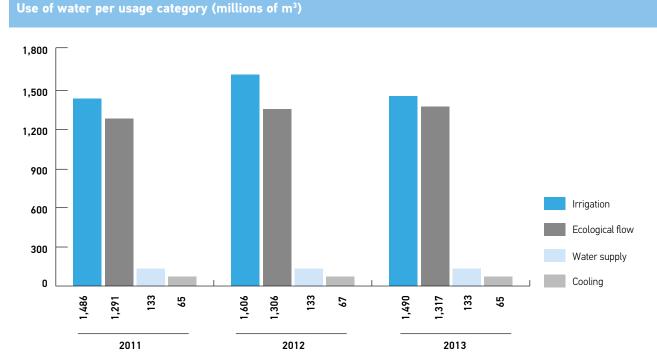
\* The Almyros, Hania water source is within PPC Renewables' jurisdiction. According to the contract between PPC and PPC Renewables, responsibility for operating the hydroelectric plant and monitoring the quality of water in the reservoir lies with the Hania Power Plant, in implementation of the Joint Ministerial Decision on the environmental terms and conditions for the plant.

#### Water management at Hydroelectric Plants

2013 was a year of average hydraulicity, but the water inflow to the reservoirs was significantly higher than in 2012.



Hydroelectric projects ensure flood protection and cover both the water supply and irrigation needs of adjacent areas. In addition, dams ensure a minimum continuous supply of water in the riverbed (ecological flow), even in times of severe drought, thereby contributing significantly to protecting and managing Greece's water resources.

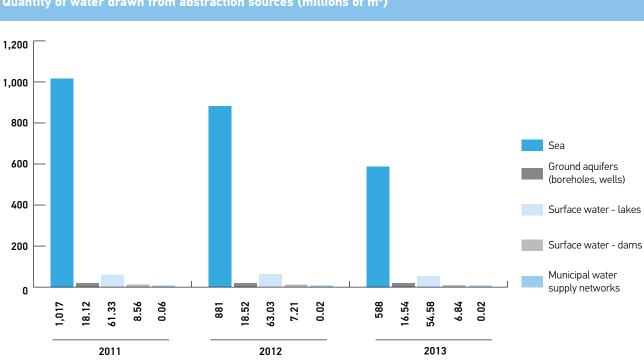


Note: The PPC reservoirs mostly provide water to Thessaloniki, Agrinio, and Karditsa, and many lakeside areas.

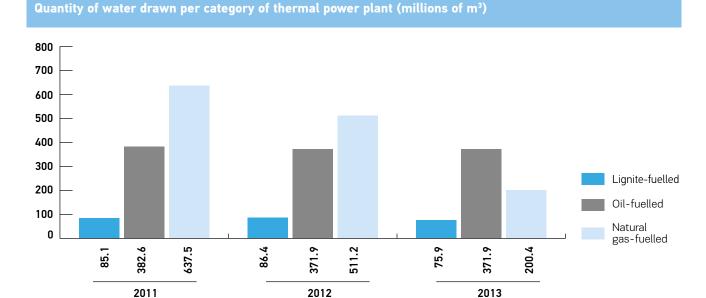
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#### Water management at Thermal Power Plants

Water is abstracted in the area around thermal power plant projects for various uses, such as for cooling the power generation towers.





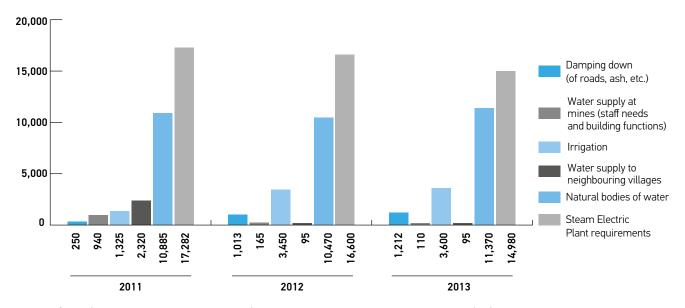


To ensure rational water management, PPC recycles and reuses significant quantities of water thereby reducing the total volume required to meet its needs. The relevant amounts of water recycled and reused at its power plants, are 20.4% for the lignite-fuelled plants and 0.3% for diesel plants. Please note that the estimated recycling rates above do not include the quantity of sea water used for cooling.

#### Water management at lignite mines

In areas where mining activity is carried on, pumped water is used to meet the needs of the mines (which is either groundwater to protect excavated areas from water ingress, or surface water from the drainage pumping stations located on the mine floors). Furthermore, depending on needs, in the context of existing established policy of good cooperation with local communities, water is made available to neighbouring municipalities to irrigate local crops or for other uses. At the same time, excess amounts of water are returned to natural bodies of water in the region, thereby improving the water balance and their overall quality, since the water is groundwater abstracted from boreholes. It should be noted that the Corporation makes a positive contribution to maintaining the Soulou artificial moat in the Ptolemaida areas, ensuring that it is sustainable and guaranteeing ecosystem balance.

#### Use of water per usage category (millions of m<sup>3</sup>)



Experts from the Corporation prepare mine drainage studies every year. In addition to containing data about the quantities of water pumped out during the previous year, these studies also show the hydrogeological conditions in the area around each mine as extraction work progresses, and an assessment of the impact of pumping activities on the aqueous environment in the area is made, and measures to limit that impact are made.

#### 6.6 Waste Management - Use Of By-Products

#### Solid and liquid waste

PPC production processes (power plants and mines) generate solid waste which the Corporation ensures is suitably managed in line with the provisions of the applicable legislation. The criteria here are protection of the environment and sustainable development. Waste management is based on PPC cooperating with alternative management system companies that have been approved by the National Recycling Organisation in line with the applicable legislation, and with collection companies that are licensed for each type of waste in relation to the transfer, management and reuse of waste in Greece and abroad.

PPC takes all necessary measures to minimise leakage and to ensure the safe collection of waste oils and liquid fuels in suitable tanks.

In 2013 hazardous waste 50.73 tons of asbestos and materials containing asbestos and 8.89 tons of hazardous liquid water were shipped, some even being shipped abroad because that was necessary. In addition to that, PPC also uses the alternative waste management schemes to dispose of 2,109.83 tons of petroleum product residues and 41.73 tons of batteries. ENVIRONMENT

Waste description	Quantity (tons)	Management method	
Material, Fuel, Purchasing And Transportation Department	t		
Metals (iron, steel, steel ropes, etc.)	5,869.498		
Different types of cables	47,445		
Surplus materials (vehicles, spare parts, machinery, etc.)	662	Sale through highest bidder tender procedures	
Rubber belts	43,850	procedures	
Waste oils/lubricants	1,262,480		
Thermal Power Plants Operations Department	1		
Jsed active carbon	10.40	Recovery/disposal	
Fly ash and dust from diesel boilers	31.94	Recovery	
Sludge from onsite treatment of discharged liquids contain- ng hazardous substances	213.75	Recovery	
All types of mineral oil	1,081.05	Recovery	
Waste oil and diesel	1,185.29	Recovery	
Packaging containing residues of hazardous substances or hat have been polluted with hazardous substances	10.27	Recovery	
Absorptive materials, filter materials, wiping cloths, protec- ive clothing polluted with hazardous substances	17.70	Recovery/disposal	
Disposable vehicles	51.79	Disposal	
Disposable organic chemicals consisting of or containing nazardous substances	76.49	Disposal	
All categories of batteries and accumulators	5.56	Recovery	
Waste containing oil	145.00	Recovery/disposal	
Soil and stones containing dangerous substances	4.60	Disposal	
Construction materials containing asbestos	20.52	Disposal	
Fluorescent tubes and other mercury-containing waste	2.28 and 4 skips	Recovery	
Electronic and electrical equipment waste (municipal waste)	3.66	Recovery	
Mines Environment Department			
Ferrous scrap metal	2,785.45	Recovery	
Decommissioned vehicles, machinery and engines	372.05	Recovery	
Brass filings	141	Recovery	
Jsed lead accumulators	31.97	Recovery	
Plastic rings	42.46	Recovery	
Jsed elastic straps	28.72	Recovery	
Jsed contaminated absorbents and filters	18.46	Recovery	
Naste from electronic equipment	27.20	Recovery	
Batteries	0.15	Recovery	
Waste oils/lubricants	469.30	Recovery	
Mixture of water of oil separators	2.00	Recovery	
Paper	35.00	Recovery	
Fluorescent lamps	48 cans	Recovery	
Jsed pneumatic tires	415 items	Recovery	
		,	

Note: The amounts have been calculated in accordance with the references in the documents of collectors/transporters based on packing lists, delivery notes and invoices. For decommissioned vehicles, the data comes from their certificates of destruction. The terms "recovery" and "disposal" are used in accordance with the provisions of Annexes I and II of Section B of Law 4042/2012.

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To better utilise the waste it generates, the Mines Division commissioned a study entitled "Study to explore alternative solutions to managing used conveyor belts at the Western Macedonia and Megalopolis Lignite Centre mines". This study is nearing completion and records and evaluates various methods and best practices for managing used conveyor belts implemented by corresponding companies. These include re-use after various forms of processing, the production of alternative fuels and recycling of metal parts.

#### Use of by-products

The main PPC by-product is ash (fly and bottom) while gypsum is produced in large quantities by the desulphurisation units of thermal power stations. PPC has already recorded the quantities of ash it commercially trades, in line with the European REACH Regulation (registration number: 01-2119491179-27-0086). In 2011, the Corporation also began to register gypsum so that this by-product can also be disposed of commercially. It is expected that the gypsum registration process will be completed by 2015.

2011

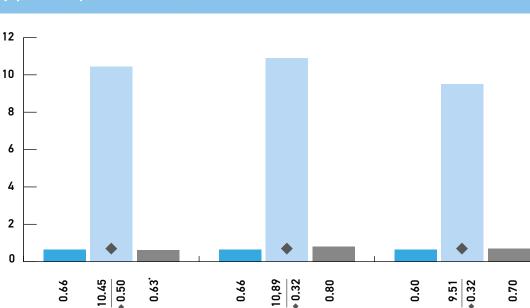
Bottom ash

In 2013, the burning of lignite at the Corporation's thermal power plants produced nearly 9.5 million tons of fly ash, 0.6 million tons of bottom ash and 0.7 million tons of gypsum.

- 8.1 million tons of ash were deposited along with aqgregate in the mines of the Western Macedonia Lignite Centre.
- 0.4 million tons of ash and 0.06 million tons of gypsum • were deposited in a specifically licensed area near the Meliti Steam Electric Plant.
- 1.6 million tons of ash and 0.7 million tons of gypsum were deposited in a specially designed area within a depleted mine at the Megalopolis Lignite Centre.
- Sales of fly ash in 2013 amounted to 0.3 million tons.
- At the moment (until the registration process is completed in accordance with the European REACH Regulation), gypsum is deposited along with ash from the power plants in the Corporation's mines.

2013

Sales of fly ash



Use of by-products (quantities in tons)

Note: The difference between the total quantity of ash produced and the total quantity used as well as all gypsum produced are deposited in specially designed facilities at the Company's mines.

Fly ash

2012

Gypsum

#### Liquid waste

All power plants operated by the Corporation have stateof-the-art systems for treating liquid waste, in accordance with the provisions of relevant decisions approving the environmental terms and conditions of each plant, and in accordance with the Best Available Techniques Manual for Large Combustion Plants. Treated liquid waste is always disposed of in natural bodies or water or underground depending on the location of the facility and the relevant authorisations that are in place. The Corporation systematically monitors the quantities and characteristics of the waste produced and informs the competent authorities as and when necessary.

Type of water source	2011	2012	2013
Sea water for co	oling (m³)		
Lignite plants	-	-	-
Diesel plants	381,716,004	371,140,372	387,630,051
Natural gas plants	634,117,779	508,472,959	197,577,810
Treated liquid waste (m³)			
Lignite plants	36,375,294	34,257,372	29,116,730
Diesel plants	141,177	155,485	143,512
Natural gas plants	1,498,723	1,416,883	1,320,987

Note: The quantities of waste are measured by flow meters and the quantities of cooling water are estimated based on the capacity of the pumps at the maximum load of power plants and their hours of operation.

It should also be noted that a significant quantity of treated waste is disposed of for various purposes, primarily irrigation, especially during the summer months. The quantity disposed of in 2013 was approximately 23.8 million m<sup>3</sup>.

#### **6.7 Biodiversity**

Protecting biodiversity is an integral part of the PPC's environmental policy. The Corporation takes measures in accordance with the applicable legislation to manage the natural environment in the areas it operates in, in relation to lignite mining and in relation to electricity generation. These measures are designed to maintain or restore natural habitats and species of wild flora and fauna to a favourable level of conservation.

To this end, PPC takes measures to optimise the way in which affected areas are rehabilitated and to select the most appropriate final land use, taking into account a number of parameters, such as:

- the local terrain and the climate conditions,
- ecosystem variables after the end of the mining activity,
- human geography and the socio-economic structure, and
- prevailing land uses and the needs for these uses.

Through its rehabilitation programmes that have been implemented for several years in the areas where its lignite mines are situated, PPC has created plantations planted with woodland species including acacia, arizona cypresses and esparto grass, and has contributed to improved fauna diversity in the form of many species of butterflies. As a result, ecosystems of exceptional beauty have been created. Rehabilitation works also include redeveloping land for agricultural use which is then given to farmers in the local area to be used. PPC has also developed cutting-edge greenhouses, an experimental orchard where it applies total management practices, pasture lands for livestock and a recreation park on some of this land.

As part of its ongoing efforts to improve the effectiveness of the environmental rehabilitation of the areas around the Ptolemaida Mines at the Western Macedonia Lignite Centre, in 2010 PPC commissioned the Forest Research Institute of the National Agricultural Research Foundation to conduct a 3-year study on the choice of the most suitable tree species for the region of the PPC's Ptolemaida Mines and the specific soils in the area. In 2013, phase two of this project was completed. It related to monitoring the growth and ecological characteristics of tree species proposed, which had been planted in the previous year for environmental rehabilitation purposes and the development of forested areas for use as forests and pasturelands – livestock purposes. The results of this monitoring process led to proposals being made about how to manage rehabilitation, which was the project's overall objective. During future projects to rehabilitate land around the Ptolemaida Mines, the percentage of acacia trees will be limited, a better mix that favours conifers and broadleaf species will be used and plants will be widely spaced which will allow for mix forestry and livestock uses on the rehabilitated land.

Other actions taken by PPC to protect biodiversity are:

- The creation of artificial plantations of forest species based on the species deemed suitable for the specific location of the mine deposition sites, and
- The creation of artificial nests and habitats, and the development of small wetlands to encourage a growth in bird populations.

#### Studies and research on ecosystem equilibrium

In collaboration with institutions such as the Hellenic Centre for Marine Research, the National Agricultural Research Foundation, as well as university departments, PPC conducts studies on ecosystem equilibrium so as to develop specific strategies, operations, actions or plans relating to biodiversity rehabilitation/regeneration/management in accordance with the provisions of national and European law.

Natural area	Protection/rehabilitation actions in 2013
River Nestos and the Thisavros and Platanovrysi Reservoirs	In cooperation between PPC/Nestos Complex and ELGO DIMITRA/the Institute for Fisheries Research, actions were implemented as part of the project entitled "Collection and transfer of endemic species of fish to deal with the interruption in free communication among fish population in the Nestos River in the period 2013-2014".
	PPC/Nestos Complex is also cooperating with the Interbalkan Environment Centre to implement ac- tions to measure quality and biological parameters on river and lake waters in the Nestos system.
Wider area around PPC projects on the Nestos River	Meteorological data is being collected following the installation of two meteorological stations at locations proposed in the study to identify potential changes in microclimates in the wider area of PPC projects on the Nestos River.
Aliakmon River (Hilarion HPP) Hilarion Monastery, Prefecture of Kozani, Pal- ouria and Panagia in the Prefecture of Grevena	Under contract No. 1224002/9.5.2012 a landscaping design and phytocommunity development study in the area around the reservoir and downstream of the Hilarion HPP dam is being prepared.
Aliakmon River (Hilarion HPP) Agios Athanasios in the Mun. of Deskati, Prefecture of Grevena	Under contract No. 1234020/13.12.2013 a landscaping design and phytocommunity development study is being prepared in the area of Agios Athanasios in the Mun. of Deskati in the Prefecture of Grevena.
Aliakmon (Asomata HPP)	600 m <sup>3</sup> of topsoil were added and an open space was planted with wild flowers to create a pasture for goats and sheep. Ongoing action.
Aliakmon River (Varvares)	An area downstream of the HPP was fenced off to protect against and prevent accidents.
Aliakmon River (Hilarion HPP) Wider area around the reservoir	<ul> <li>Contracts are being implemented to:</li> <li>Estimate the quantity of solids being carried in steams in the wider area of the Hilarion HPP reservoir.</li> <li>Study the qualitative characteristics of water in the Hilarion HPP reservoir for future agricultural and urban use.</li> <li>Bring areas around the edge of the Hilarion HPP reservoir and existing islets into the protective</li> </ul>
	regime in order to attract birdlife. Works to protect the sides of the reservoir against erosion caused by waves were carried out.
Plastiras HPP	A study was commissioned about planting scheme to create sections or zones of interest. The study will be completed in 2014.
Ladonas HPP	630 plants-trees were acquired in November 2013 based on a special forestry study and planting began immediately. Planting has now been completed.

#### NATURA 2000 protected areas

The areas where PPC mining activity takes place are not included in the NATURA 2000 network or in other protected areas. Based on the NATURA maps from the Ministry of the Environment, Energy & Climate Change, PPC hydroelectric facilities located within protected areas cover an area of 65.30 km<sup>2</sup>.

Water Source Name of a NATURA 2000 Area	Area of PPC's Hydro- electric Facilities within protected area (km²)
Almyros, Hania*	0.08
Aliakmon (Asomata HPP)	2.50
Agras	8.08

Water Source Name of a NATURA 2000 Area	Area of PPC's Hydro- electric Facilities within protected area (km²)
Nestos (Thisavros)	18.00
Nestos (Platanovrysi)	3.00
Aoos	8.64
Tavropos (Plastiras HPP)	25.00
Total	65.30

\* The Almyros, Hania water source is within PPC Renewables' jurisdiction. According to the contract between PPC and PPC Renewables, responsibility for operating the hydroelectric plant and monitoring the quality of water in the reservoir lies with the Hania Power Plant, in implementation of the Joint Ministerial Decision on the environmental terms and conditions for the plant.

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#### 6.8 Regulatory And Legislative Compliance

PPC seeks to fully comply with national and European legislation and regulations on environmental issues. However, in 2013, PPC paid  $\in$  346,000 in fines,  $\notin$  247,000 of which related to retrospective planning permission for illegal buildings.  $\notin$  99,000 related to fines imposed in respect of mining operations and power plants.

In 2013 fines of  $\notin$  200,000 were also imposed on PPC in relation to compliance with the ETC for power plants. PPC has filed administrative appeals against those fines before the relevant appellate committee or before the administrative courts.

It should also be noted that PPC takes all necessary measures to ensure that it complies with the maximum permissible noise limits at its facilities, and in 2013 no fine was imposed on PPC in this regard.





# 7. Market and Customers

#### 7.1 Products and Services

The Corporation's main product is electricity supplied to residential customers, professionals and large businesses nationwide. PPC provides electricity to all locations where there is a request for a connection, provided that it is possible to extend the PPC network (in compliance with existing rules on NATURA areas, after obtaining approval from the forestry service, etc.). The countryside electrification programme was completed in the 1980s, and as a result 99.9% of the country's population now has access to electricity.

PPC offers different tariffs for different categories of customers. The tariffs depend on the voltage (high, medium and low) and on the use (residential, industrial, general, agricultural, daily newspaper and street/square lighting tariffs). PPC's BoD decided to approve 7 new high voltage and 8 new medium voltage tariffs which took effect on 1.11.2013 (Decision No. 141/1.8.2013).

RAE has decided that PPC, as the Universal Service Supplier, must undertake to supply electricity to small customers who have not found any other supplier or who cannot find one in the deregulated market taking into account existing commercial terms and conditions. Small customers include households and other customers whose power supply requirements are up to 25kVA. So far, PPC has undertaken to provide power to 28,000 small customers.

Detailed information about all PPC connections is available in section 3.1.

#### e-bills

In 2012 PPC launched its new "e-bill". In 2013 PPC began sending out alerts that a bill had been issued. PPC also upgraded the service, adding links to bank websites to allow bills to be paid automatically in a fully safe environment.

The Corporation also launched a special campaign to raise awareness among consumers about the e-bill info service.

By the end of 2013, 218,877 connections had registered for e-bills and 2,500 online customer requests had been handled.

#### Vulnerable customers

Since 2011 PPC has been offering a Social Residential Tariff following government decisions on this matter. This specific tariff offers up to a 42% discount on the normal residential tariff for selected categories of consumers under the conditions the government has laid down. The discount is available to people on a low income, people with large families, the long-term unemployed, people who are more than 67% disabled and people requiring mechanical support. Since 1996 PPC has also been implementing government policy by giving large families with at least 4 dependent children a special "large family" tariff which is even more favourable than the recent social residential tariff.

The Corporation launched a special info-campaign in 2013 to raise awareness among vulnerable groups about government policy on the social residential tariff and how large groups of people could benefit from it.

After the Ministry of the Environment, Energy & Climate Change issued decisions approving the Supply Code and laying down the requirements for households enrolling in the vulnerable customers register, PPC put in place a series of additional, favourable arrangements to help vulnerable social groups pay their bills. Vulnerable groups (i.e. persons benefiting from the social residential tariff, large families and the elderly who meet the relevant criteria) can now enjoy the following benefits:

- They now have 40 days within which to pay their bill, rather than 25 days from the date of issue.
- They can pay their electricity bills in the number of monthly interest-free instalments needed to ensure that each instalment is not more than half the value of the normal monthly outlay on electricity.
- Interest-free repayment plans can be individually arranged.

Up to 2013, a total of 688,999 applications for special tariffs were submitted. 70% of these have been approved (479,075 applications). The Corporation is doing what it can to help customers submit their applications by going beyond the requirements laid down in the Ministerial Decision and adopting practices such as those outlined below:

- When electricity contracts are first signed, the advance payment required is not more than € 20.
- Customers can apply online by phoning 11770 (charged at a local rate anywhere in Greece).
- Information is available at any time about the progress of an application and the outcome of the assessment process. Customers simply have to dial 11770.

SRT beneficiaries	No. of Applications	Approved Applications
The disabled	142,361	101,421
The unemployed	93,566	69,122
Individuals requiring me- chanical support	6,264	5,499
Large families	552	92
Families with 3 children	54,861	33,096
The elderly (over 70)	5,440	2,016
Low income customers	385,955	267,829
Total	688,999	479,075

#### **Repayment plans and disconnections**

The Board of Directors decided to update the Repayment Plan Rules (Decision No. 137/30.7.2013) allowing the Corporation's customers to pay off their bills in instalments based on how reliable they are with past payments and what customer category they are in. Particular emphasis was placed on providing relief to vulnerable groups and households. A total of 331,561 repayment plans were approved in 2013 worth a total of  $\in$  488.6 million.

To improve customer service for customers wanting to agree a repayment plan and reduce waiting times inbranch, PPC launched a repayment plan helpline in Attica on 19.8.2013 and nationwide on 1.10.2013. By the end of the year PPC had answered 92,683 calls and 22,706 repayment plans had been agreed totalling  $\in$  20.8 million. 50% of calls were customers requesting information.

The number of disconnections for failure to pay overdue bills has reduced significantly. The number of disconnections was visibly low during the current period compared to the overall number of customers PPC has (7.4 million) because:

- During periods of extreme weather conditions (harsh winter, heat waves, etc.) or over the Christmas or Easter holiday periods, there were no disconnections for any PPC customers in arrears.
- Customers dependent on mechanical equipment in any way are never disconnected.
- Orders to disconnect customers on the social residential tariff or vulnerable customers in general (as defined by the government) are never given, not only during the 7 months specified in the new Supply Code (November to March and July-August) but also at any time during the year except where there is criminal conduct (such as tampering with electricity meters).

According to PPC data, in 2013 HEDNO disconnected 290,200 customers. 64% of them were household customers. After the debt is paid, HEDNO reconnects the supply on the same day for the majority of customers. In some cases though the reconnection is done the following morning. This usually happens if payment is made outside of normal business hours.

#### 7.2 Customer Relationship Management

The Corporation constantly strives to improve the way it provides services to its customers to maintain high levels of customer satisfaction. Efforts are being made to strengthen our customer-focused approach, carry out research and examine complaints, taking into account consumer needs.

#### Modern customer engagement methods

In addition to its stores, PPC uses the internet, the electronic means of communication and social networking (Twitter, LinkedIn, Flickr, and YouTube) to communicate with its customers. In 2013, Twitter was used to disseminate 35 corporate news stories and customer service issues and 8 videos and corporate and commercial communication spots from TV were uploaded to PPC's YouTube account.

Responding to current needs and trends which reflect a clear rise in internet usage from mobile devices, such as smartphones and tablets, in 2013 PPC redesigned its website (www.dei.gr) to make it more customer-friendly. The new design is more responsive and better laid out, reflecting new webpage design trends. Greater emphasis has also been attached to making it easier for customers to search for online services such as online access to bills, finding the closest point of interest for customers, online application forms for customers wanting to join the social residential tariff, and so on. In 2013 PPC received the 3rd prize in the Redesign - Relaunch category at the e-volution Awards 2014, an event hosted by Boussias Communications and the e-Business Lab - ELTRUN of the Athens University of Economics and Business, which rewards the most innovative, cutting-edge practices in the e-business sector.

The PPC website offers information in both Greek and English. It also allows consumers to contact the Corporation by email in Greek or English. During 2013 the website (www.dei.gr) received around 13,000 emails, primarily from customers but also from stakeholders such as investors or jobseekers.

PPC has developed a special iPhone and Android phone app that allows users to gain immediate, reliable and rapid access of PPC services no matter where they are. In 2013 an e-bill info link was embedded in the app, giving users online access to their PPC bills.

For people with visual impairments or reading difficulties, PPC also provides information about its services through audio messages. Given the new corporate look PPC has adopted, which is gradually being rolled out to all PPC stores (9 stores were redesigned in 2013), stores have not only been revamped, making them safer and look better to reinforce the corporate brand, but also include special disability access ramps.

#### Plans to expand the network of stores

PPC's Board of Directors decided on 7.8.2013 to set up a company along with DAMCO ENERGY S.A., called PPC Solar Solutions S.A. in which the Corporation will have a 49%

holding. PPC Solar Solutions S.A. will develop a nationwide network of franchising outlets to market integrated household photovoltaic systems, energy saving technologies and energy services, and will also provide PPC customer service. The Hellenic Competition Commission has issued decision No. 587/2014 approving the establishment of this company.

### Customer service in areas outside the store network area

To ensure better customer service in regions where there is no PPC store, in November 2013 launched a pilot phone and online customer service portal. Customers in Lavrio, Oropos, Kea, Megara and Agios Dimitrios Attica and on most islands of the Aegean were able to do business with PPC without visiting a PPC store. The Corporation is satisfied with the results of the pilot scheme given that demand for the service has constantly been on the rise.

#### **Customer satisfaction surveys**

PPC conducts qualitative and quantitative surveys in the context of the customer-centred focus which PPC has put in place in a systematic manner to recognise its customers' new needs and to explore their views about services offered. The one-page electricity bill and the e-bill were developed through this process.

A qualitative survey was conducted in 2012, to examine existing customer service practices being extended to better meet customers' modern needs. The initial plan was for the results of the qualitative survey to allow PPC to conduct a similar survey in 2013. In the end that did not happen. PPC did not consider the survey necessary. Given the exceptional results of the previous survey and modern trends favouring online services, new upgraded customer service channels were tested as pilot schemes and were then implemented and rolled out across the entire Corporation in 2013. The e-bill for example was extended and now allows for bills to be paid online, and a new comprehensive call centre for customers on most remote islands is now in place.

At PPC we also closely watch how the use of different modes of payment by our customers is changing. PPC provides more than 6,500 locations for bill payments nationwide. Every week we monitor payments at automatic bill payment machines found in PPC stores and at the cashiers' desks of stores, banks, as well as of other external partners. The information campaigns about different modes of bill payment resulted in a gradual decrease in the number of visits to cashiers desks our stores. The figure has dropped from about 60% in 2009, to 45%. In some stores, we also monitor service response times using a special system we have developed.

#### **Customer Complaint Management**

Any potential complaints from our customers are an opportunity to improve the services we provide and increase their satisfaction. Complaints-requests to PPC are submitted either in writing (directly by customers, through the Ombudsman or the Hellenic Consumers' Ombudsman, etc.) or by email, and an effort is made to respond to all requests. Of the approximately 17,000 complaints-requests sent via e-mail in 2013, 20% were complaints, while the remaining 80% were requests and questions.

PPC recognises that there is no single method for managing all customer complaints. For a more comprehensive approach, the Retail Department prepared a study about how best to centrally manage and follow up customer complaints and requests. This study showed that PPC needs to procure a computer system to manage and follow up customer complaints. Since PPC expects to switch over to a new customer support system at the end of 2014, the Corporation decided it was best to examine the procurement of separate customer management software after the new IT system is fully installed so that PPC can ensure that it is compatible with the new customer service system and that cost savings can be made. Temporary modifications have been made to the existing incoming-outgoing document software to allow statistics on written complaints to be kept in a uniform manner. The new complaints managementfollow-up app is expected to be installed during 2015.

Customer complaints primarily focused on issues such as electricity charges, the amounts payable to third parties via the electricity bill (municipal tax, public television and the special property tax) and regulated charges (public utility charges and the pollutants emission tax). These charges tend to account for a significant portion of the bill.

The customer service helpline (11770) which has been in operation nationwide since 2012 received a significant number of complaints/requests.

Year	No. of incoming calls	Successful call rate*
2009	722,235	36%
2010	748,813	96%
2011	1,035,905	93%
2012	1,610,074	89%
2013	2,408,855	95%

\*A successful call refers to the call that was answered by PPC staff and the interaction was successful.

#### 7.3 Responsible and Safe Energy Use

Providing information to the public and raising awareness about energy savings and protecting the health and safety of consumers and users of electricity is a key concern for PPC.

In order to prevent risks, PPC processes include a requirement to inspect premises whenever there is a request to change the name of a connection user, or a change in tariffs, or in other particulars of a user/consumer. This means that consumer premises are re-inspected at shorter intervals than the 14-year period set for compulsory inspection under the existing legislation. In 2013, PPC developed a new website (http://energysaving.dei.gr/el) which was launched at the start of 2014 to provide information to and raise awareness among the public about how to use electricity properly. The website offers:

- An easy-to-use web tool to evaluate the energy rating of a home in Greece.
- Hints and tips about how to improve the energy rating.
- Information about household appliance energy ratings.
- Other useful information about using electricity responsibly.

PPC continued its public information and awareness raising campaigns to promote energy savings and also distributed flyers on this topic. 5,000 flyers were handed out at PPC stores, as well as at meetings and conferences in 2013.

PPC also attended the 3rd energy saving exhibition ECO-Energy 2013 at Technopolis in Gazi (from 25 to 28.4.2013) and the Smart Heating and Energy Savings Fair 2013 at Helexpo Palace from 27 to 30.9.2013.

More information for the public about how to use energy safely was also provided by HEDNO.

#### 7.4 Marketing Communication Plans

The Corporation seeks to inform its stakeholders about the full range of its activities, such as on tariffs, new large energy investments, renewable energy projects, and its environmental and social activities.

PPC communication plans are in compliance with the Hellenic Code of Advertising and Communication Ethics. The Code has been developed by the Advertising Self-Regulation Council, an independent, non-profit association. The aim is to implement ethical standards in all marketing communications. Following a decision of the PPC BoD, the Corporation set up a Marketing Activities Committee whose members include the current Chairman and CEO, the Corporate Affairs and Communication Department Director and the General Manager(s) whose remit is relevant to the topic being advertised or marketed. The Committee verifies that the PPC's marketing materials comply with the Hellenic Code of Advertising and Communication Ethics and the current legal and regulatory framework for energy. It is the body which gives final approval for all large-scale advertising/ marketing activities. As a result of this approach, in 2013 all PPC marketing and communication measures (including advertising and marketing campaigns) were fully compliant with the Code.

In the spirit of supporting the local communities in which the Corporation operates, PPC ensures that these areas are promoted through its advertising campaigns. Special care is taken to directly or indirectly support the local communities and to ensure that any needs from products, etc. that arise when filming the advertisement are met by local businesses. Meanwhile, when actors are needed, local actors/ residents of these areas are used. In 2013, PPC's corporate communications measures primarily related to the Western Macedonia region, making the most of both PPC employees and residents of the local communities.

#### 7.5 Responsible Procurement

PPC purchases and signs contracts in order to meet its needs for materials and services and to carry out engineering works. Wherever possible, the Corporation makes agreements with local suppliers, thereby contributing significantly to the development of local economies.

The PPC procurement procedures are described in the PPC Works, Supplies and Services Regulations available on the PPC website http://www.dei.gr/. The Corporation posts tenders notices for works and supplies on its website, to encourage public dialogue in a totally transparent and objective manner.

PPC keeps a register of tried-and-tested suppliers of products and services having evaluated the quality and reliability of the services and products provided by those suppliers, thereby giving them incentives to improve themselves and quality in the market in general. The Corporation is in constant contact with key suppliers to exchange views about how the equipment procured is working to transfer knowhow to them.

To ensure contractors and any subcontractors comply with labour and insurance law for their own staff, PPC includes a general clause in all contracts it signs according to which the contract may be terminated and the contractor may be excluded from future tender procedures in case of repeated non-compliance. In doing so, the Corporation ensures that it cooperates with contractors who adhere to labour law and have their staff insured in the manner specified by law.

To ensure the H&S of the staff of PPC's contractors, those contractors are responsible for implementing occupational H&S legislation and are subject to the legal sanctions involved. Contractors expressly undertake exclusive liability to design and implement safe working practices for persons employed on Project construction and for third parties.

Contractors/subcontractors are obliged to provide staff with suitable personal protective equipment (PPE) depending on the work being carried out, to take all H&S at work measures required by law and to comply with the obligations for a safety engineer and occupational, to assess and prevent occupational risk, to protect against harmful agents and to keep employees informed about these issues.

Upon entering the worksite, contractors are obliged to provide the Corporation with a list of staff to be employed (number, area of specialisation) as well as all other information which the Corporation considers necessary about such staff. The contractor's staff must undergo training at the PPC Vocational Training Centre for specialised technical work if the Corporation considers this necessary.

PPC inspects contractor work crews and examines:

- The PPE, the group protective equipment and tools, to check that they are adequate, what condition they are in and whether the contractor's staff are using them.
- Whether the contractor's staff hold the necessary licenses and permits.
- Whether the provisions of contracts and the PPC CEO's decision No. 96/2010 are being implemented, to ensure that PPC's contractors implement labour and social security law.

5 inspections were carried out in 2013 on the works crews used by PPC Group contractors. An inspector from the PPC's Occupational H&S Division was involved in these inspections.

## 7.6 Regulatory And Legislative Compliance

Compliance with applicable laws and other regulations, including those on market issues, products and services, is a key principle for PPC. However, some cases emerged that the Corporation had to handle in 2013.

9 candidates in tender procedure filed administrative appeals in the pre-contractual stage against the Corporation because their tenders were rejected. Those administrative appeals, generally speaking, contested the terms and conditions of the tender notice and/or the tender procedure because, for example, PPC had rejected their tender, and did not relate to allegations of corruption.

During 2013 customers continued to protest/refuse to pay the special property tax that was imposed on electricity bills

even though the number of protests/refusals was lower than the previous year as the public began to understand that the Corporation was merely following government orders and implementing the law. Hellenic Supreme Court Plenary Session Judgment No. 293/2014 ruled that the special property tax was not contrary to the provisions of the Greek Constitution [and in particular Article 17 which protects property rights, or the principle of proportionality enshrined in Article 25(1)(d) of the Constitution] or the provisions of the European Convention on Human Rights (see also the majority judgment in Council of State Plenary Session Judgment No. 1972/2012). That judgment was issued following litigation filed by various consumer organisations (the General Federation of Greek Consumers/INKA, the Crete Consumers Institute, the Etolo-Akarnania Consumers Association, the Consumer and Citizens Rights Association, and the Greek Consumers Association).

RAE imposed a  $\in$  4.4 million fine on PPC for violating the regulatory framework in PPC's relations with its industrial consumers on the grounds that the Corporation had not prepared tailor-made tariffs for those customers in good time. The case is still under way since RAE referred the matter to the Hellenic Competition Commission.

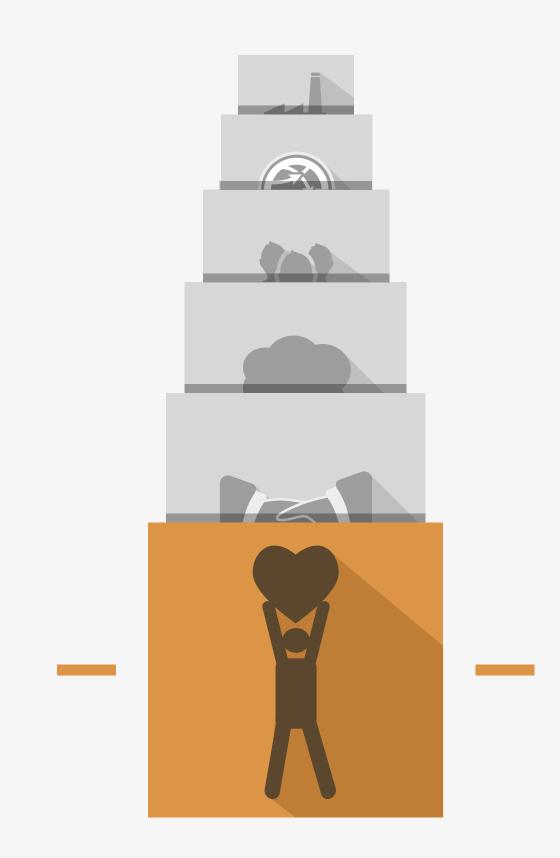
In 2013 there were no complaints about personal data being leaked or about breach of customer privacy. There was no litigation about unfair competition, anti-trust or monopolistic practices. No failure to comply with proper product and service labelling and information was recorded and there were no cases of our products or services negatively impacting on customer H&S.



MARKET AND CUSTOMERS



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## 8. Contribution to Society

#### 8.1 Public Policy

PPC is actively involved in shaping public policy, expressing its views on a range of issues, relating to its operation, and more generally the modernisation of the domestic electricity market. The Corporation communicates its views in Management statements and in press releases, by participating in international and Greek conferences, via its membership of bodies and involvement in events and public consultations.

Over recent years PPC has repeatedly reiterated its arguments about the need to rationalise the electricity market, to ensure it operates competitively in a truly deregulated environment that benefits consumers.

PPC has argued for the need to set up an electricity market that:

- Operates in a transparent, predictable manner to attract new investments when they are needed.
- Bolsters the competitiveness of the national economy.
- Effectively contributes to secure energy supplies for Greece over the long term.

The Greek electricity market needs to transform into a target model, i.e. the common European model, by making structural reforms. In any event, changes that promote the creation of an internal electricity market are a requirement deriving from EU law.

PPC recognises the technical and other difficulties that full harmonisation entails but it considers that it is well worth the effort to achieve this, as a half-way solution entailing "partial harmonisation" would be ineffectual and would merely have to be corrected at additional cost and with additional delays in the future.

During public consultation procedures, the most important change proposed by RAE for the wholesale electricity market was electricity auctions, involving the sale of electricity by PPC's lignite-fuelled power plants to third parties, coupled with an obligation for those parties to sell the electricity to their retail customers. The aim is to stimulate competition in the electricity supply market and to give third party producers who only have natural gas-fuelled plants, a power mix similar to that of PPC. The Corporation agrees to electricity from its lignite-fuelled and hydroelectric plants being sold to third parties (using the NOME model) subject to the following conditions:

- The energy is channelled to end consumers, to create as standard as possible a max of low, medium and high voltage consumers similar to that of PPC.
- There is a minimum electricity auction price which will reflect the full cost of generating power for lignite plants, plus a reasonable mark-up for power generation operations.
- Auctions will only be held if PPC maintains its existing mix of lignite and hydroelectric plants, and not in the case where some of them are sold off (creating the so-called "small PPC").

## 8.2 Local Community Development Programmes

For PPC, the concept of corporate social responsibility is primarily related to satisfying stakeholder expectations (customers, employees, shareholders, suppliers, local communities, and others). PPC attaches particular importance to relations with local communities and performs particularly important mission by implementing special programmes and schemes. This section presents just some of the PPC's activities in this area.

#### Compensatory/public benefit projects

When obtaining authorisation for the environmental terms and conditions of projects it implements, PPC consults with the Ministry of the Environment, Energy & Climate Change and local bodies to specify what compensatory benefits/ projects for local communities will be implemented. Those are then included in the Joint Ministerial Decision which approves the environmental terms and conditions for those projects. These projects primarily relate to improving roads, tree planting and improving irrigation projects.

The cost of public benefit projects associated with power generation for 2013, as described in the table below, amounted to  $\notin$  1.73 million.

Compensatory/public benefit projects	Category	Project budget (€)	Total du- ration of works in months		Additional information
Remaining work at Panagia Tornikiou Monastery	Aesthetic upgrade, environmental terms and conditions for the Hilarion Hydroelectric Station	30,000	3	4,820	
Payment of expenditures to the 30th Ephorate of Prehistoric and Classical Antiquities	A contractual obliga- tion of the Hilarion Hydroelectric Station	10,256,495	65	575,883	
Environmental Restorations - Management Plan and Promotion Design for the Area of Lakes and artificial Dams (Kremasta)	Financial Aid, Prefec- ture of Etolo-Akarnania			168,356	
Financing Projects in the Municipality of Deskati	Donation			6,087	
Redevelopment of the commercial centre of Aliveri		300,000		11,179	
Lighting for the Aliveri Municipal Stadium, Mun. of Tamynes		150,000		2,945	Part of an overall
Agios Loukas Football Ground in the Mun. of Tamynes (grass and completion of changing rooms)	A public benefit project	560,000		66,103	package of PPC public benefit projects over 3
Repair of the road surface on the national road in the section from Lepoura to Karystos	as part of the new Aliveri power plant			150,000	years, initially costing € 3,500,000. The amount has been further
Completion of the theatre in Agios Ioannis, Mun. of Tamynes		150,000		24,309	increased and now reaches € 4,727,500
Earthworks and building work to install a compact biological reatment plant at Monodryo		100,000		60,000	
MoU with 23rd Ephorate of Byzantine Antiquities	A public benefit project as part of the new Aliveri power plant	150,000	36	61,554	
2nd MoU with 23rd Ephorate of Byzantine Antiquities	A public benefit project as part of the new Aliveri power plant	500,000	48	38,182	
The Papanikolaou General Hospital Institute	Donation	1,000,000	48	250,000	
Financing Projects and Studies for the Prefecture of Lassithi	Compensation for the Atherinolakkos project	1,100,000	36	105,891	This relates to drilling projects in Katofygi, Apidia in the Municipality of Sitia and at Papa Kefala, Handra in the Municipality of Sitia
Appropriations for archaeological projects in cooperation with the 39th Ephorate of Prehistoric and Classical Antiquities	Cultural sponsorship as part of the new Megalopolis Steam Electric Plant	3,238,000	48	73,000	
Paving, tarmacking and street lighting for local roads in the District of Soroni in the Mun. of Kamiros, Rhodes	Public benefit project			128,346	
Total				1,726,655	

In August 2013 PPC, the municipal authorities and the residents of the Mun. of Santorini had to manage the repercussions of an unprecedented, exceptionally complex failure in the power system caused by a catastrophic fire at the island's power plant.

As a result of this partnership and constructive dialogue between these parties, the Board of Directors of PPC decided to include various initiatives and actions aimed at improving the environment, showcasing cultural activities on Santorini and presenting the island as a global tourist destination, should be included in the Corporation's CSR programme. To achieve this, PPC signed a MoU with the Municipality of Santorini and undertook to finance infrastructure works and marketing campaigns identified in tandem with the Municipality of Santorini.

The unprecedented destructive fire which caused major problems at PPC's power plant on Santorini may well have been dealt with effectively and immediately, in line with international standards and best practices by the Corporation, but no one can deny that the island was thrown into disarray, especially at a time of the year when Santorini is one of the world's top tourist destinations.

With that in mind, as a corporation which has historically speaking been highly socially aware in everything it does, the Corporation included financing for infrastructure and marketing campaigns identified with the Municipality of Santorini in its CSR programme to ensure further tourist development of the island.

#### **District Heating Schemes**

Through programme developed with local municipalities and the relevant municipal bodies, PPC utilises the heat generated by its lignite-fuelled steam electric plants in Western Macedonia and Arcadia and provides the heat generated in the form of hot water to heat buildings to meet the town's needs in Kozani, Amynteo, Ptolemaida and Megalopolis. The cost of providing energy as part of these programmes is significantly lower than conventional heating methods.

These district heating schemes are a model for sustainable management as they generate numerous benefits for all parties involved. The most important are (a) a reduction in atmospheric pollution since hydrocarbons and wood are not burned to generate heat, and (b) the financial benefits for local communities due to reduced heating costs.

Overall, in 2013, 2 million GJ of energy were generated/ used in district heating.

#### Lignite levy

The lignite levy is an amount charged to promote the development of industrial areas where electricity is generated by the lignite-fuelled power plants in Florina, Kozani and Arcadia. Law 4062/2012 increased the levy from 0.4% to 0.5% on PPC turnover. The levy is used to finance infrastruc-

ture and environmental protection projects that bolster the economy in the specific areas which are affected by lignite mining and its combustion.

Prefecture	Lignite levy in 2013 (€ '000)
Prefecture of Kozani	20,644
Prefecture of Florina	4,918
Prefecture of Arcadia	4,031
Total	29.593

#### **Relocations and compulsory purchases**

If it is necessary to compulsorily purchase land or even relocate villages to build new power plants or to expand mines, PPC follows specific procedures that are fully in line with Greek law (such as Law 2882/2001 on compulsory purchase of land, and the provisions of the Mining Code contained in Legislative Decree 210/1973).

In 2013 PPC launched the compulsory purchase procedure to relocate the population of Mavropigi in the Mun. of Ptolemaida in the Prefecture of Kozani as part of a public benefit project, to enable lignite deposits under the village to be mined. This process is expected to be completed in 2014. In addition to the cost of compulsory purchase which is quite high, PPC also supports the local residents by providing infrastructure (networks and roads), communal space as well as churches and graveyards for the new village at a site chosen by the residents.

#### 8.3 Sponsorship Programmes

PPC recognises the needs of the various areas of the country in which it operates and responds to these needs with sensitivity. Many of our actions focus on local communities around our mining and power generation facilities. At the same time, given that our products reach all corners of Greece, we run programmes in other parts of the country as well.

#### Financial aid

In 2013, PPC provided  $\in$  1,351,000 for projects in various sectors, such as the environment, sports, culture and education. These projects include:

- Aid for the Goulandris Natural History Museum to enable it to organise an interactive programme called "Save Father Christmas", focused on the topical issue of climate change.
- Construction of 5x5 football pitches and volleyball courts to allow young people in the Community of Agios Dimitrios in the Prefecture of Kozani (an area where PPC has many operations) to have somewhere to exercise.

Area sponsorship/ donation relates to	Size of sponsorship/ donation in 2013 (€ '000)
Sport	133
Society	201
Environment	106
Energy	79
Culture	492
Education	123
Staff benefits	159
Health	58
Total	1,351

As part of the MoU signed in 2012 with the University of Western Macedonia to implement a comprehensive, 4-year sponsorship programme at a total cost of  $\in$  522,720 to support the University's teaching work by covering the cost of 3 "PPC" chairs and to develop scientific and research activities, the process of selecting the 3 "PPC" chairs was completed in 2013. The professorships relate to:

- Innovation Management Entrepreneurship Cross-Border Partnerships
- Material moulding processes for power generation purposes and
- Renewable Energy Sources and energy resource management.

The basic objectives of this MoU are to transform Western Macedonia into a model regional centre in Europe for education and research, especially on energy-related topics and in other fields of economic interest. This will be done by focusing on education, internships and specialisation for students, to allow graduates of the University of Western Macedonia to become highly capable, internationally competitive employees who can take up posts in the energy sector in Greece.

For the third consecutive year PPC supported the free presymptomatic check-up scheme to raise awareness and provide information to women in the Western Macedonia region about the value of prevention and early diagnosis of breast cancer. This scheme was run in cooperation with the Alma Zois charity for women with breast cancer in the Prefecture of Thessaloniki, the Theagenio Anti-Cancer Hospital of Thessaloniki and the Bodosakio Hospital of Ptolemaida.

As in previous years, in 2013 PPC did not provide any donations, sponsorships or financial aid to any political party or politician.

#### Donations in kind

In addition to financial sponsorship, PPC also offered donations in kind. As a Corporation firmly committed to supporting the local communities in which it operates, PPC donated 8 computers, 1 photocopier, 1 laser printer and 1 projector to the Ptolemaida 2nd General Lyceum, 12 computers, 1 laser printer and 1 projector to the Amynteo Gymnasium and 4 computers and 1 projector to the Kozani 3rd Gymnasium.

The Western Macedonia and Megalopolis Lignite Centres donated machinery and supplies for various projects (such as the opening and clearing of country roads, the creation of fire gaps in forests, water tanks, repairs to municipal buildings, etc.) in the municipalities of Eordea, Kozani, Amynteo, Servia-Velventos and Megalopolis.

The PPC Western Macedonia Lignite Centre offers the produce harvested from the experimental orchard it has in the rehabilitated area of lignite mines to religious, educational institutions and the local community of the Municipalities of Kozani, Eordea, Amynteo and Servia-Velventos. In 2013, it distributed around 6.5 tons of peaches, pears and apples to the Analipsi Monastery in the Mun. of Kozani, the Kozani Old People's Home, the Ptolemaida Disabled Association, the Ptolemaida Childcare Centre, the Ptolemaida Orphanage, the Servia/Kozani/Ptolemaida Community Stores, the Ptolemaida Good Samaritans Association, the ARSIS Association, the Florina and Ptolemaida Hospitals, the Servia Mental Health and Social Rehabilitation Association and schools, kindergartens and playgroups in the Municipalities of Eordea and Amynteo.

The Western Macedonia Lignite Centre also landscaped a spent mine to develop sports tourism in the area and to allow the Panhellenic Motocross Games to be held in September 2013, attended by sportsmen from various areas of Greece, and attracting a large crowd of spectators.

PPC also holds talks with local bodies in communities near hydroelectric plants and implemented the following measures in 2013:

- The Vlachas Babalios stream was re-routed and technical works were built to promote access (Kremasta HPP).
- A section of road from the Zerva Bridge to Raines was opened and maintained (Kastraki HPP).
- 8 average-sized trees were transplanted from PPC premises to a landscaped area on the Stratos-Matsouki Road (Stratos HPP).
- Architectural designs and the load-bearing initial design for a high, suspended footbridge to cross the Aliakmon River in the area of the Hosios Nikanoras Hermitage were completed. The designs for paths giving access to the footbridge on both banks of the river were also prepared. The Ministry of Culture has approved the design but in order to move on to construction the Region needs first to agree to operate and maintain the bridge.

At the 78th Thessaloniki International Fair, instead of any other corporate presentation, PPC set up a clinic which it turned over to Medicins du Monde to provide free primary care medical tests (paediatric, gynaecological, dental, ophthalmological, internal medicine and cardiology exams). The 100 or so volunteer doctors provided primary care and examinations for the 1,706 people who visited the booth. The clinic's equipment was then donated to Medicins du Monde at the end of the fair.

To allow pupils at the Gymno Gymnasium on Evia to exercise, PPC laid an artificial surface on the school's basketball court which had previously been covered in tarmac. The Corporation also provided playground equipment for Agios Panteleimonas Square to prevent the area becoming downgraded and to improve the guality of life for local residents.

PPC also bought medicines, food and equipment to improve living conditions for 130 dogs in the Municipal Dog Shelter in Florina.

## 8.4 Partnership with Archaeological Services

The provisions of the archaeology Law (Law 3028/2002 on protection of antiquities and the cultural heritage in general) and the circular from the General Secretariat of the Ministry of Culture and Tourism about rescue digs on third party technical works state that PPC is obliged to protect archaeological finds discovered when mining for lignite.

The Corporation is obliged to finance the local Archaeological Service as it carries off rescue digs. After the rescue digs are completed the Archaeological Service will then hand the area back to PPC and allow it to continue mining, provided that mining work is carried out under the Archaeological Service's supervision.

As part of this framework, rescue digs have been carried out at more than 20 archaeological sites at PPC lignite mines over the last decade, financed by PPC at a total cost of over  $\in$  10 million. In 2013  $\in$  2.6 million was spent on rescue digs at the Amynteo and Mavropigi mines.

To date the results of the excavations show that the area around the Amynteo lake has been inhabited for more than 8,000 years covering the entire prehistoric and historical period.

#### 8.5 Employee Volunteer Initiatives

With the support of its employees, PPC organises volunteer initiatives every year and gives something back to society. Just some of the initiatives organised in 2013 are listed below:

#### Support for Medicins du Monde

In 2013, to support the work of Medicins du Monde, the employees of PPC and HEDNO collected food, medicines, clothes, shoes, school supplies, books and toys and delivered them to Medicins du Monde

#### **Blood donations**

For many years now PPC employees have been organising voluntary blood donation rallies through their employee associations. More specifically, employee associations such as the Panhellenic Employee Association (PASYP), the Association of Technicians (ETE), the Association of Administrative and Financial Employees (EDOP) and the SPARTACUS Association in Western Macedonia organised 57 rallies and 1,234 units of blood were collected in 2013.

#### 8.6 Other Initiatives

In addition to the above, PPC has included other initiatives in its work of giving something back to society.

#### **PPC's Vocational Training Centre**

In 2013 the PPC Vocational Training Centre's involvement in the programme entitled "Voucher-based training for the unemployed in the secondary productive sector of the economy + mandatory recruitment" financed by the HR Development Operational Programme with national and European funds, was approved. This programme provides training vouchers worth  $\notin$  4,240 to 4,900 technicians and qualified engineers.

The programme is aimed at unemployed technicians and qualified engineers in the secondary productive sector of the economy (mining, oil and natural gas). PPC's Vocational Training Centre expressed its intention to run courses in the Peloponnese and Western Macedonia regions.

The internships will require trainees from the Western Macedonia Region to attend courses run at the Western Macedonia Lignite Centre and trainees from the Peloponnese Region to attend courses at the Megalopolis Lignite Centre. Mandatory recruitment also relates to the same facilities.

Although the programme only requires mandatory recruitment of 30% of the trainees, the PPC's Management Board has decided that it will employ all trainees as part of its commitment to corporate social responsibility.

#### **PPC central library**

The PPC Central Library is an important information centre, with approximately 10,000 books and 150 periodical titles, and 76 branches throughout Greece. The Library lends material to PPC staff and is open to the rest of the public (researchers, students, academics, etc.) so that they study the material in the reading room of the library and photocopy any information needed. Thanks to its participation in the Greek National Documentation Centre's Network of Libraries, the PPC Central Library enables network members to order photocopies of articles from journals that the Library has in its collection online and simultaneously request photocopies of articles from the collections of other libraries that are members of the aforementioned network.

#### **PPC Historical Archives**

The PPC Historical Archives collect, preserve and develop the rich archival materials of the Corporation. The archives provide information about PPC being transformed into a nationwide corporation and public body, about major projects (mines, power stations, dams, Transmission and Distribution Networks), about the creation of a single national network and overall about the huge contribution PPC made to post-war economic growth in Greece. The Historical Archives include two more archival sections of particular importance: the Oral History Archives that contain valuable personal testimonies of PPC executives and employees and the Historical Archives of PPC Building Facilities and Mechanical Equipment, which record and document the material remains of the Corporation's power generation activities and its rich cultural/industrial heritage.

In 2013 the Historical Archive added materials to the archive which are also available to the general public. This involved:

- Adding interviews from old Corporation executives and employees to the Oral History Archives/PPC Historical Archive.
- Preparing archival materials (collection, recording and sorting) (such as the Ebasco Archive) to make them accessible to the scientific-research community.
- Welcoming researchers (students, academics, and researchers in general) to the PPC Historical Archive (and selecting and preparing archival materials on the topic being studied).
- Cooperating with the National and Capodistrian University of Athens and the National Technical University of Athens on training about historical documentation and showcasing the industrial heritage.

- Participating on the Board of Directors of the Greek Section of the International Committee for the Conservation of the Industrial heritage (TICCIH).
- Publishing the PPC historical and central archive newsletter (design, collecting and preparing archival materials, organisation materials by theme).

#### **PPC employee choir**

The PPC choir comprised of the Group's employees and retired staff participated in various musical events such as the 3rd World Musical Choir Festival, the Municipality of Naxos and the Small Cyclades series of summer cultural events, the Orthodox Polyphony 2013 event and in various cultural events that PPC participates in and contributes to.

#### Internships

PPC allows students of universities and technical educational institutes and students of Hellenic Manpower Employment Agency programmes to complete their internships at the Corporation's plants and units. PPC employed 40 university students, 71 technical educational institute students and 36 Hellenic Manpower Employment Agency students in 2013.



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# 9. Abbreviations

IPT0	Independent Power Transmission Operator S.A.
RES	Renewable Energy Sources
GHG	Greenhouse Gases
HEDNO	Hellenic Electricity Distribution Network Operator S.A.
BoD	Board of Directors
CSR	Corporate Social Responsibility
RAE	Regulatory Authority for Energy
EU ETS	EU Emissions Trading Scheme
HRADF	Hellenic Republic Asset Development Fund S.A.
НРР	Hydroelectric power plant
EURELECTRIC	European Union of the Electricity Industry
GRI	Global Reporting Initiative
WBCSD	World Business Council for Sustainable Development

# 10. Guidelines on Preparing the Report

#### **10.1 GRI Guidelines**

#### **GRI Indicators Table**

The following table links the contents of the 2013 PPC Corporate Responsibility and Sustainability Report with the GRI - G3.1 indicators and with the supplement on the energy sector (GRI-EUSS).

GRI code	Description	Section	Comments / references
	Part I: Profile		
	Strategy and Analysis		
1.1	Statement from the Chairman and CEO	1	
1.2	Description of key impacts, risks and opportunities	3.9, 4.1, 4.3, 4.8	
	Organisational Profile		
2.1	Name of the organisation	2	
2.2	Primary brands, products, and/or services	3.1, 7.1	
2.3	Operational structure of the organisation	3.1, 3.3, 3.5	
2.4	Location of organisation's headquarters	3.1	
2.5	Number of countries the organisation operates in	3.1	
2.6	Nature of ownership and legal form	3.1, 3.2	
2.7	Markets served	3.1, 7.1	
2.8	Scale of the reporting organisation	3.10, 4.7, 5.1	
2.9	Significant changes during the reporting period	3.5, 3.6	
2.10	Awards received in the reporting period	4.6	
EU1	Installed capacity, broken down by primary energy source and by regulatory regime	3.1	
EU2	Net energy output broken down by primary energy source and by regulatory regime	3.1	
EU3	Number of residential, industrial, institutional and commercial cus- tomer accounts	3.1	
EU5	Allocation of $\rm CO_2$ emissions allowances or equivalent, broken down by carbon trading framework	6.4	
	Report Parameters		
	Profile Disclosure		
3.1	Reporting period	2	
3.2	Date of most recent previous report	2	
3.3	Reporting cycle	2	
3.4	Contact point	2	
	Scope and Boundary		
3.5	Process for defining report content	2, 4.3	
3.6	Boundary of the report	2	
3.7	Specific limitations on the scope or boundary of the report	2	

GRI code	Description	Section
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, etc.	2
3.9	Data measurement techniques and the bases of calculations	2
3.10	Re-statements of information	2, 4.7
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	2, 3.1
	Table of GRI location of the Standard Disclosures in the report	
3.12	Table identifying the location of the Standard Disclosures in the report	11.1
	Assurance	
3.13	Policy and current practice with regard to seeking external assurance for the report	2, 12
	Governance, Commitments, and Engagement	
	Governance	
4.1	Governance structure	3.4-3.6, 4.2
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	3.6
4.3	Independent and/or non-executive members	3.6
4.4	Mechanisms for shareholders and employees to provide recommen- dations or direction to the highest governance body	3.6
4.5	Linkage between compensation for senior managers and the organi- sation's performance	3.6
4.6	Processes in place to ensure conflicts of interest are avoided	3.7
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees	3.6
4.8	Company policies values, mission, codes of conduct, relevant to sus- tainable development	3.4, 4.1
4.9	Procedures of the highest governance body for overseeing-managing sustainable development	4.2
4.10	Processes for evaluating the highest governance body's own perfor- mance	3.6
	Commitment to third party initiatives	
4.11	Application of the preventative principle	3.9, 4.1, 5.6, 6.3, 6.5
4.12	Externally developed charters, principles or other initiatives to which the organisation subscribes or endorses	2, 4.5, 10

Memberships in associations and organisations

Approaches to stakeholder engagement

List of stakeholder groups engaged by the organisation

Basis for identification and selection of stakeholders with whom to

Key topics and concerns that have been raised through stakeholder

Stakeholder engagement

3.6

3.6

3.6

4.5

4.4

4.4

4.4

4.4

**Comments / references** 

4.13

4.14

4.15

4.16

4.17

DMA EC

engage

GRI code	Description	Section	Comments / references
	Indirect economic impacts	3.10, 4.1, 8.2-8.5	
EU6	Availability and Reliability of electricity short and long-term	4.1	
EU7	Demand-side Management	4.1	
EU8	Research and Development	6.4, 6.6-6.7	
DMA EN	Disclosures on Management Approach to Environment		
	Materials	4.1, 6.2	
	Energy	4.1, 6.2, 6.4	
	Water	4.1, 6.5	
	Biodiversity	4.1, 6.7	
	Emissions, effluents and waste	4.1, 6.3, 6.6	
	Products and services	4.1, 6.1	
	Compliance	4.1, 6.8	
	Transport	4.1, 6.3	
	Overall	4.1, 6.1, 6.4-6.7	
DMA LA	Disclosure on Management Approach to Labour Practices		
	Employment	4.1, 5.1, 5.5	
EU14	Programmes and processes to ensure the availability of a skilled workforce	5.1, 8.3, 8.6	
EU15	Percentage of employees eligible to retire in the next 5 and 10 years	5.1	
EU16	Labour/management relations regarding health and safety of employ- ees of the organisation and contractors	4.1, 5.6	
	Employee/management relations	5.1	
	Occupational Health & Safety	4.1, 5.6	
	Training and education	4.1, 5.2, 5.5-5.6	
	Diversity and equal opportunity	4.1, 5.1	
	Equal remuneration for women and men	4.1, 5.4	
DMA HR	Disclosure on Management Approach to Human Rights		
	Investment and procurement practices	4.1	
	Non-discrimination	4.1, 5.4	
	Freedom of association and collective bargaining	5.1	
	Child Labour	4.1, 5.4	
	Forced and compulsory labour	4.1, 5.4	
	Security practices	5.2	
	Indigenous Rights	5.4	
	Assessment	-	
	Remediation	5.4	
DMA SO	Disclosure on Management Approach to Society		
	Local communities	4.1	
EU20	Approach to managing the impacts of displacement	8.2	
	Corruption	4.1, 5.8	
	Public policy	8.1	
	Anti-competitive behaviour	4.1, 8.1	
	Compliance	5.8	

GRI code	Description	Section	Comments / references
DMA PR	Disclosure on Management Approach to Product Safety		
	Customer health and safety	7.3	
	Product and Services Labelling	4.1, 7.1-7.3	
	Marketing Communications	7.4	
	Customer Privacy	7.6	
	Compliance	7.6	
EU23	Programmes, including those in partnership with government, to im- prove or maintain access to electricity and customer support services	7.1-7.2	
EU24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services	7.1-7.2	
	Part III: Performance indicators		
	Economy		
	Economic performance		
EC1	Direct economic value generated and distributed	3.10	
EC2	Financial implications and other risks and opportunities for the organi- sation's activities due to climate change	3.9, 4.7	
EC4	Significant financial assistance received from government	3.2, 3.10	
	Market presence		
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	7.4, 7.5	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	5.1, 7.4	
	Indirect economic impacts		
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit	8.2-8.5	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	3.1, 5.1, 7.1, 8.2	
	Availability and Reliability		
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	4.1, 6.4, 8.1	
	System efficiency		
EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	3.1	
	Environment		
	Materials		
EN1	Materials used by weight or volume	6.2	
EN2	Percentage of materials used that are recycled input materials		This is not a material indicator for PPC
	Energy		
EN3	Direct energy consumption by primary energy source	6.2	
EN4	Indirect energy consumption by primary energy source	6.2	
EN5	Energy savings	6.4	
EN6	Initiatives to provide energy-efficient products and services	6.4	
	Water		
EN8	Total water withdrawal by source	6.5	

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GRI code	Description	Section	Comments / references
EN9	Water sources significantly affected by withdrawal of water	6.5	
EN10	Percentage and total volume of water recycled and reused	6.5	
	Biodiversity		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	6.7	
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	6.7	
EN13	Habitats protected or restored	6.7	
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	6.7	
	Emissions, effluents and waste		
EN16	Total direct and indirect greenhouse gas emissions by weight	6.3	
EN17	Indirect greenhouse gas emissions	6.3	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	6.4	
EN19	Ozone layer	6.3	
EN20	$NO_{x^{\prime}}SO_{x^{\prime}}$ and other significant air emissions by type and weight	6.3	
EN21	Total water discharge by quality and destination	6.5, 6.6	
EN22	Total weight of waste by type and disposal method	6.6	
EN23	Total number and volume of significant spills	6.6	
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous	6.6	
EN25	Identity, size, protected status of areas significantly affected by dis- charges of water and runoff	6.5, 6.7	
	Products and services		
EN26	Initiatives to mitigate environmental impacts of products and services	6.4-6.7	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category		This is not a material indicator for PPC
	Compliance		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regula- tions	6.8	
	Labour practices		
	Employment		
LA1	Total workforce by employment type, employment contract, and region, broken down by gender	5.1	
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	5.1	
LA3	Benefits provided to full-time employees that are not provided to tem- porary or part-time employees, by major operations	5.5	
LA15	Return to work and retention rates after parental leave, by gender	5.1	
	Employee/management relations		
LA4	Percentage of employees covered by collective bargaining agreements	5.1	

GRI code	Description	Section	Comments / references
	Occupational Health & Safety		
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region	5.6	
LA8	Education, training, counselling, prevention regarding serious diseases	5.6	
LA9	Health and safety topics covered in formal agreements with trade unions.	5.6	
	Training and education		
LA10	Average hours of training per year per employee, by gender, and by employee category	5.2, 5.6	
LA11	Programmes for skills management and lifelong learning	5.2, 5.5	
LA12	Percentage of employees receiving regular performance and career development reviews, by gender	5.3	
	Diversity and equal opportunity		
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	3.6, 5.1	
	Equal remuneration for women and men		
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	5.4	
	Human rights		
	Non-discrimination		
HR4	Total number of incidents of discrimination and corrective actions taken	5.4	
	Freedom of association and collective bargaining		
HR5	Freedom of association and collective bargaining	5.1	
	Child Labour		
HR6	Child Labour	5.4	
	Forced and compulsory labour		
HR7	Forced and compulsory labour	5.4	
	Security practices		
HR8	Percentage of security personnel trained in aspects of human rights	5.2	
	Indigenous Rights		
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	5.4	
	Remediation		
HR11	Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms	5.4	
	Society		
	Local communities		
S01	Local community engagement and development programmes, impact assessments	6.7, 8.2	
	Corruption		
S02	Percentage and total number of business units analysed for risks related to corruption	3.8	

5.8

S04

Actions taken in response to incidents of corruption

S05	Public policy positions and participation in public policy development and lobbying	8.1	
S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	5.1, 8.3	
	Anti-competitive behaviour		
S07	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	7.6	
	Compliance		
S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	5.8	€ 27,000 was paid in tax and other fines and surcharges. In a total of 8 cases municipali- ties imposed fines of € 3,914,805.31 on PPC. All those amounts were assessed in 2013 and PPC has filed the relevant administrative appeals before the administrative courts.
	Product liability		
	Customer health and safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed	5.6, 5.7, 7.3	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	7.6	
EU25	Number of injuries and fatalities to the public involving company as- sets	5.6	
	Product and Services Labelling		
PR3	Type of product and service information required	7.1, 7.3, 7.4	
PR4	Total number of incidents of non-compliance with regulations and vol- untary codes concerning product and service information and labelling, by type of outcomes	7.6	
PR5	Customer satisfaction	7.2	
	Marketing Communications		
PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promo- tion, and sponsorship	7.4	
PR7	Total number of incidents of non-compliance with regulations relating to marketing practices	7.4	
	Customer Privacy		
PR8	Complaints regarding breaches of customer privacy and customer data	7.6	

GRI code

Description

Public policy

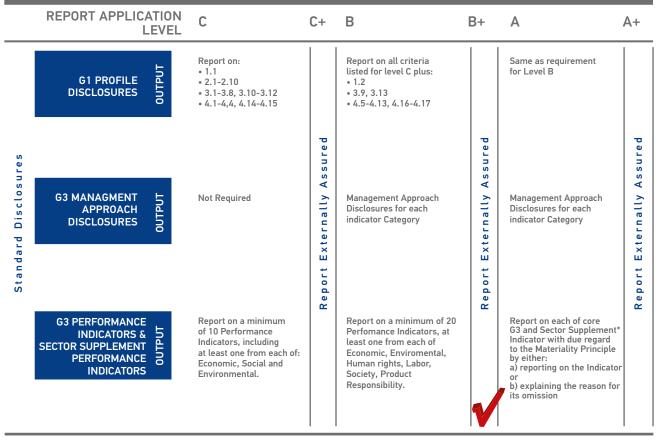
Section

**Comments / references** 

GRI code	Description	Section	Comments / references
	Access		
EU26	Percentage of population unserved in licensed distribution or service areas	7.1	
EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	7.1	
EU30	Average plant availability factor by energy source and by regulatory regime	3.1	

#### **GRI Application Level**

PPC has met the requirements for the B+ application level of the G3.1 version of the guidelines of the Global Reporting Initiative.



\* Sector supplement in final version.

#### **10.2 The AA1000 Accountability Standard**

The Corporation follows the principles in the AS1000 APS Accountability Standard (2008) in identifying, prioritising and responding to sustainability issues.

These are:

- Inclusivity: Stakeholders participate in developing a responsible, strategic approach to sustainability and corporate responsibility.
- Materiality: The relative materiality of each topic is determined to identify how it is to be managed by the Corporation and to determine the content of the PPC's PPC Corporate Responsibility and Sustainability Reports.
- Responsiveness: Material issues and the challenges they present are managed and responded to with the participation of all the Corporation's organisational units.

The table below shows how the content of the PPC's 2013 PPC Corporate Responsibility and Sustainability Report matches the principles of the AA1000 standard.

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Principle	Section of the Report
Inclusiveness	4.3-4.4
Materiality	4.3-4.4
Responsiveness	4-8

#### 10.3 THE ISO Standard 26000

The table below links the content of the 2013 PPC Corporate Responsibility and Sustainability Report with the core subjects in line with the ISO 26000 standard.

Core subjects in line with ISO 26000	Section of the Report		
Organisational Governance	3.4-3.6, 4.2		
Human rights	4.1, 5.1, 5.4		
Labour practices	5		
Environment	6		
Fair Operating Practices	4.1, 5.8, 8.1		
Consumer Issues	7		
Community Involvement and Development	8		

# 11. External Assurance Statement

### Independent Limited Assurance Report to Public Power Corporation S.A.

We were engaged by the Board of Directors of Public Power Corporation S.A. (referred to as "the Company") to provide limited assurance on section 4.7 titled "Key CSR Performance Data" of the Greek version of the sustainability report titled "2013 Corporate Social Responsibility and Sustainability Report" (referred to as "the Report") of the Company for the reporting period 1 January 2013 - 31 December 2013.

Management is responsible for the preparation and presentation of the Report in accordance with the Sustainability Reporting Guidelines (G3.1) of the GRI as described in the Report, and the information and assertions contained within it; for determining the Company's objectives in respect of sustainable development performance and reporting, including the identification of stakeholders and material issues; and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

Our responsibility is to carry out a limited assurance engagement on the information of the Report's section "Key CSR Performance Data" and to express a conclusion based on the work performed. We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. That Standard requires that we comply with applicable ethical requirements, including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the section "Key CSR Performance Data" of the Report is free from material misstatement.

A limited assurance engagement on a sustainability report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the sustainability report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Inquiries of management to gain an understanding of the Company's processes for determining the material issues for its key stakeholder groups.
- Interviews with relevant managerial staff at Company level concerning sustainability strategy and policies for material issues, and the implementation of these across the business.
- Interviews with relevant Company staff responsible for providing the information in the section "Key CSR Performance Data" of the Report, during which we were informed about the systems and reviewed the processes for information management, internal control and processing of the qualitative and quantitative information, at Company level.
- Visits to the central offices of the Company in Athens, where we reviewed the procedures of developing and managing the content of the section "Key CSR Performance Data" of the Report, as well as the current structure of the Corporate Governance in sustainability issues.

- Comparing the information presented in the section "Key CSR Performance Data" of the Report to corresponding information in the relevant underlying sources to determine whether all the relevant information contained in such underlying sources has been included in the section "Key CSR Performance Data" of the Report.
- Reading the information presented in the section "Key CSR Performance Data" of the Report to determine whether it is in line with our overall knowledge of, and experience with, the sustainability performance of the Company.

It is noted that for the financial indicators and data reported in the section "Key CSR Performance Data" of the Report and specifically for the "turnover", the "total liabilities and equity", the "total liabilities", the "total equity", the "financial income", the "payroll cost including employee benefits and employer's social security contribution", the "dividend payments", the "earnings (losses) before taxes", the "long-term borrowings", the "short-term borrowings" and the "emission allowances ( $CO_2$ )", KPMG's work was limited to the reliability check of the transfer of these data from the published / approved "Financial report 2013" or the "Annual report 2013" of the Company, to the section "Key CSR Performance Data" of the Report.

In addition, the scope of our work did not include the review / testing of the operational effectiveness of the information systems used to collect and aggregate data in the section "Key CSR Performance Data" of the Report.

The extent of evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore a lower level of assurance is provided.

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the section 4.7 titled "Key CSR Performance Data" of the Report of Public Power Corporation S.A. for the period 1 January 2013 - 31 December 2013 is not, presented fairly, in all material respects, in accordance with the Sustainability Reporting Guidelines of the Global Reporting Initiative.

Our assurance report is made solely to the Company in accordance with the terms of our engagement. Our work has been undertaken so that we might state to the Company those matters we have been engaged to state in this assurance report and for no other purpose. We do not accept or assume responsibility to anyone other than Public Power Corporation S.A. for our work, for this assurance report, or for the conclusions we have reached.

KPMG Advisors A.E.

George Raounas *Partner* Athens, 22 October 2014

2013 Corporate Social Responsibility and Sustainability Report was prepared by the PPC CSR Section, assisted by the PPC CSR team.

Photography: Dimitris Rizos.

Advisory Services for Report Preparation



Design and Layout Bold Ogilvy & Mather

Translation



# 12. Feedback Form

What readers think of this Report is very important to us. We welcome your comments, questions, any queries, clarifications or proposals for improvement that you may have. By filling in and sending this questionnaire, you will be actively contributing to our attempt to improve our performance and the annual PPC Corporate Social Responsibility and Sustainability Report.

/hich PPC stakeholder group do you belong to?				
Employee         Shareholder/Investor         Public/Statutory body         Customer         Associate/Supplier		mpetitor gion/Local Gover n-governmental er:		Local Communi
/hat is your overall impression of this Report?				
It covers key issues relating to the Corporation's activities The quantitative data are comprehensive The texts are comprehensive Images and graphics The various sections are well-balanced	Very Good	Good	Aver- age	Poor
/hat is your opinion on the following sections of the Report?	Very Good	Good	Aver-	Poor
About The Report PPC Profile			age	
Sustainable Development				
Employees				
Environment				
Market and customers				
Contribution to Society				

Personal details (optional):	Please fill in and forward the questionnaire to the address
Name-surname:	below:
	Corporate Social Responsibility Section
Organisation/Company:	Strategy Department
Address:	Public Power Corporation S.A.
Tel./Fax:	29, Halkokondyli St., Athens GR-10432
	Tel.: 210 5218629, Fax: 210 5218626
E-mail:	E-mail: e.sarikaki@dei.com.gr

All data collected from this feedback form will be used by the relevant PPC Division for internal evaluation purposes only. Personal data is protected in the manner laid down by the privacy legislation.

FEEDBACK FORM



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