

CORPORATE SOCIAL  
RESPONSIBILITY  
AND SUSTAINABILITY  
**REPORT 2014**



Energy for everyone







Energy for everyone





Energy for everyone

CORPORATE SOCIAL RESPONSIBILITY  
AND SUSTAINABILITY **REPORT 2014**

# CONTENTS

<b>1.</b>	<b>MESSAGE FROM THE CHAIRMAN AND CEO</b>	<b>8</b>
<b>2.</b>	<b>ABOUT THE REPORT</b>	<b>10</b>
<b>3.</b>	<b>PPC CORPORATE PROFILE</b>	<b>12</b>
3.1	ACTIVITIES	14
3.2	SHAREHOLDER STRUCTURE	18
3.3	HOLDINGS IN SUBSIDIARIES	18
3.4	CORPORATE GOVERNANCE FRAMEWORK	18
3.5	ADMINISTRATIVE ORGANISATION	19
3.6	GOVERNANCE STRUCTURE	19
3.7	CONFLICTS OF INTEREST	21
3.8	AUDITS	21
3.9	RISK AND CRISIS MANAGEMENT	22
3.10	KEY FINANCIAL INFORMATION	22
<b>4.</b>	<b>SUSTAINABLE DEVELOPMENT</b>	<b>24</b>
4.1	MANAGEMENT APPROACH	26
4.2	GOVERNANCE FOR SUSTAINABLE DEVELOPMENT ISSUES	28
4.3	MATERIALITY ANALYSIS	28
4.4	STAKEHOLDERS	30
4.5	MEMBERSHIP OF ASSOCIATIONS AND ORGANISATIONS	33
4.6	AWARDS - DISTINCTIONS	34
4.7	KEY CORPORATE SOCIAL RESPONSIBILITY PERFORMANCE DATA	34
4.8	COMMITMENTS - GOALS	35
<b>5.</b>	<b>EMPLOYEES</b>	<b>38</b>
5.1	HUMAN RESOURCES DATA	40
5.2	TRAINING AND DEVELOPMENT	45
5.3	EMPLOYEE PERFORMANCE EVALUATION	46
5.4	EQUAL OPPORTUNITIES AND RESPECT FOR HUMAN RIGHTS	46
5.5	ADDITIONAL BENEFITS	46
5.6	HEALTH & SAFETY	46
5.7	INTERNAL COMMUNICATION	52
5.8	REGULATORY AND LEGISLATIVE COMPLIANCE	52

<b>6.</b>	<b>ENVIRONMENT</b>	<b>54</b>
6.1	ENVIRONMENTAL MANAGEMENT	56
6.2	CONSUMPTION OF RAW MATERIALS, FUELS AND ENERGY	57
6.3	GREENHOUSE GAS AND OTHER GAS EMISSIONS	59
6.4	ACTIONS TO REDUCE GREENHOUSE GAS EMISSIONS	63
6.5	WATER MANAGEMENT	66
6.6	WASTE MANAGEMENT - USE OF BY-PRODUCTS	71
6.7	BIODIVERSITY	74
6.8	REGULATORY AND LEGISLATIVE COMPLIANCE	77
<b>7.</b>	<b>MARKET AND CUSTOMERS</b>	<b>78</b>
7.1	PRODUCTS AND SERVICES	80
7.2	CUSTOMER RELATIONSHIP MANAGEMENT	84
7.3	RESPONSIBLE AND SAFE ENERGY USE	87
7.4	MARKETING COMMUNICATION PLANS	88
7.5	RESPONSIBLE PROCUREMENT	88
7.6	REGULATORY AND LEGISLATIVE COMPLIANCE	88
<b>8.</b>	<b>CONTRIBUTION TO SOCIETY</b>	<b>90</b>
8.1	PUBLIC POLICY	92
8.2	LOCAL COMMUNITY DEVELOPMENT PROGRAMMES	92
8.3	SPONSORSHIP PROGRAMMES	98
8.4	PARTNERSHIP WITH ARCHAEOLOGICAL SERVICES	99
8.5	EMPLOYEE VOLUNTEER INITIATIVES	100
8.6	OTHER INITIATIVES	100
<b>9.</b>	<b>ABBREVIATIONS</b>	<b>103</b>
<b>10.</b>	<b>GUIDELINES ON PREPARING THE REPORT</b>	<b>104</b>
10.1	GRI GUIDELINES	104
10.2	THE AA1000 ACCOUNTABILITY STANDARD	116
10.3	THE ISO STANDARD 26000	116
<b>11.</b>	<b>EXTERNAL ASSURANCE STATEMENT</b>	<b>118</b>
<b>12.</b>	<b>FEEDBACK FORM</b>	<b>121</b>



# 1 . Message from the Chairman and CEO

Dear friends and associates,

More than 10 million people rely on PPC every day to ensure a life packed with energy, security, and a sense of stability; a life where they have the potential to create.

We are currently experiencing one of the most critical phases in Modern Greek history, and our Corporate Social Responsibility and Sustainability Report allows us to envisage how PPC and Greek society will be over the decades to come. We are all working hard for that; but of course are not overlooking the needs of the present.

Greek society relies on PPC and expects a great deal from it and its staff, to create the potential for development in every corner of our homeland, to improve the living standards of every citizen, and to improve environmental conditions. That's a great responsibility we cannot ignore or overlook. It's unusual for a single company to play such a multi-faceted corporate and social role. However, at PPC we understand that need, and act in a reliable, responsible manner, constantly investing in our home, our people, the environment, society and the future.

For PPC, Greece's largest electricity producer and supplier, social responsibility is a real commitment, and we are firmly focused on society's and citizens' real needs, to create sustainable prospects and actual value.

Corporate Social Responsibility is an integral part of our approach to strategic planning and ranges from production processes and labour relations, transparency and accountability, to the social and environmental programmes we implement.

The 5th successive Annual Corporate Social Responsibility and Sustainability Report is now a firm fixture on our calendar and proof positive of the measurable initiatives we take to achieve our major strategic priorities. Our strategic priorities are to develop PPC's corporate operations; bolster the management function; support our staff -who are our most precious capital- in various ways, and above all by ensuring their occupational health and safety; protect the environment; and create an excellent work climate based on merit, trust in institutions and dedication to and support for corporate goals. At PPC we have been striving to implement these strategic priorities despite



the particularly harsh economic conditions, and we will continue to do so.

The steps we took in 2014 and the challenges we faced are outlined in measurable, comparable terms in the Corporate Social Responsibility and Sustainability Report which has been drawn up in accordance with the Global Reporting Initiative's GRI G3.1 guidelines.

We look to the future with hope and are systematically working with and collaborating more closely than ever with local communities to ensure long-term growth and development, to create new jobs and to ensure economic prosperity for areas nearby PPC's operations. We do this by purchasing goods and services from local suppliers, building infrastructure projects, and improving the quality of life for residents by offering them district heating schemes, providing them with a wide range of offset benefits and running social solidarity programmes. Moving forward, we will cultivate our partnership with local government bodies even further, and will engage with any agency focused on development, the environment, and the cultural and intellectual growth of these areas.

We are implementing a particularly ambitious programme of environmental upgrades at our older power plants and are also investing in major, new environmentally-friendly power plants that will help the Greek economy recover by cutting production costs.

At PPC we recognise that we have a responsibility towards Greek society. We know that we need to constantly strive to do more to be able to meet the needs and expectations of citizens. The Corporation will continue its endeavours despite the difficult conditions all of us face and report these to you in a fully transparent manner.

On behalf of all the staff at PPC S.A. I would like to thank you.

**Emmanuel Panagiotakis**  
Chairman and CEO of PPC S.A.



# 2. About the Report

The Corporate Social Responsibility and Sustainability Report 2014 covers the period 1.1.2014 to 31.1.2014 and is PPC's fifth 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 have been revised, the reasons for such revisions are indicated.

## Defining Content

The Report seeks to present PPC's performance on Corporate Social Responsibility (CSR) and sustainable development issues, by examining the three core aspects of Economy, Environment and Society. It is aimed at all the Corporation's stakeholder groups, such as customers, shareholders and investors, associates, employees, institutional and public bodies, and local communities.

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 responsiveness, the ISO 26000 standard, stakeholders' expectations and the characteristics of Greek society were taken into consideration.

The issues included were ranked based on their impact

on the Corporation and stakeholders, based on the PPC sustainability materiality analysis and contact with stakeholders (as outlined 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 Corporate Social Responsibility Section fails to resolve issues.

The Corporate Social Responsibility Section follows the steps of the Sustainability Report Data Collection process that have been adopted, using electronic data collection forms and a quantitative data calculation and integration tool. The Corporate Social Responsibility 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 Corporate Social Responsibility Section groups the necessary data by information source and coordinates the Corporate Social Responsibility Team members as they gather the relevant information. The data collected



are approved by the relevant Directors and sent to the Corporate Social Responsibility 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. Note that there have not been any major changes to data measurement and processing methods used compared to those employed in the previous report. Where differences do exist, this is clearly stated 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 highly value the opinion of readers of our Report. We welcome your comments, questions, any queries, clarifications or proposals for improvement that you may have.

---

Please forward your comments to:  
**Corporate Social Responsibility Section**  
**Strategy Department**  
**Public Power Corporation S.A.**  
29, Chalkokondyli St., Athens GR-10432  
Tel.: 210 5218629, Fax: 210 5218626  
E-mail: [e.sarikaki@dei.com.gr](mailto:e.sarikaki@dei.com.gr),  
[www.dei.gr](http://www.dei.gr)

# PPC Corporate Profile





# 3. PPC Corporate Profile

## 3.1 Activities

The Public Power Corporation S.A. (PPC or the Corporation), trading as PPC S.A., is Greece's largest electricity producer and supplier. PPC has its own lignite mines, and electricity generation and distribution facilities. It is one of Greece's largest industrial companies in terms of fixed assets, and is a leading public utility offering electricity in Greece.

The Corporation's registered offices are at 30 Chalkokondyli St., 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 also supplies and sells electricity, operates mines, produces and procures fuels to generate energy, and outsources such activities to third parties. 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 immovable 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 consider-

### PPC (the parent company) in figures

Turnover:	€ 5,796.7 mill.
No. of employees:	10,531
Installed capacity:	12,445 MW
Net energy output:	35,076 GWh
Investments:	€ 271,5 mill.
No. of mines:	9 (5 administrative units)
No. of steam electric plants:	15
No. of hydroelectric plants:	16
Stand-alone and local power plants:	
No. of connections:	7,388,614
No. of branches:	118

ations, and therefore is responsible for ensuring that electricity reaches homes and businesses nationwide without interruption. Under that same law, an operator has been established for all networks nationwide (HEDNO), apart from certain small networks which may have their own operator. All network fixed assets remain the property of PPC, apart from the internal network at Athens Airport (which is owned and operated 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 plans prepared by HEDNO are available. The Law also safeguards PPC's financial rights as owner of the Network, including PPC's right to set general limits of the extent of its own borrowing, and the right to approve HEDNO's 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 of 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.

## Production

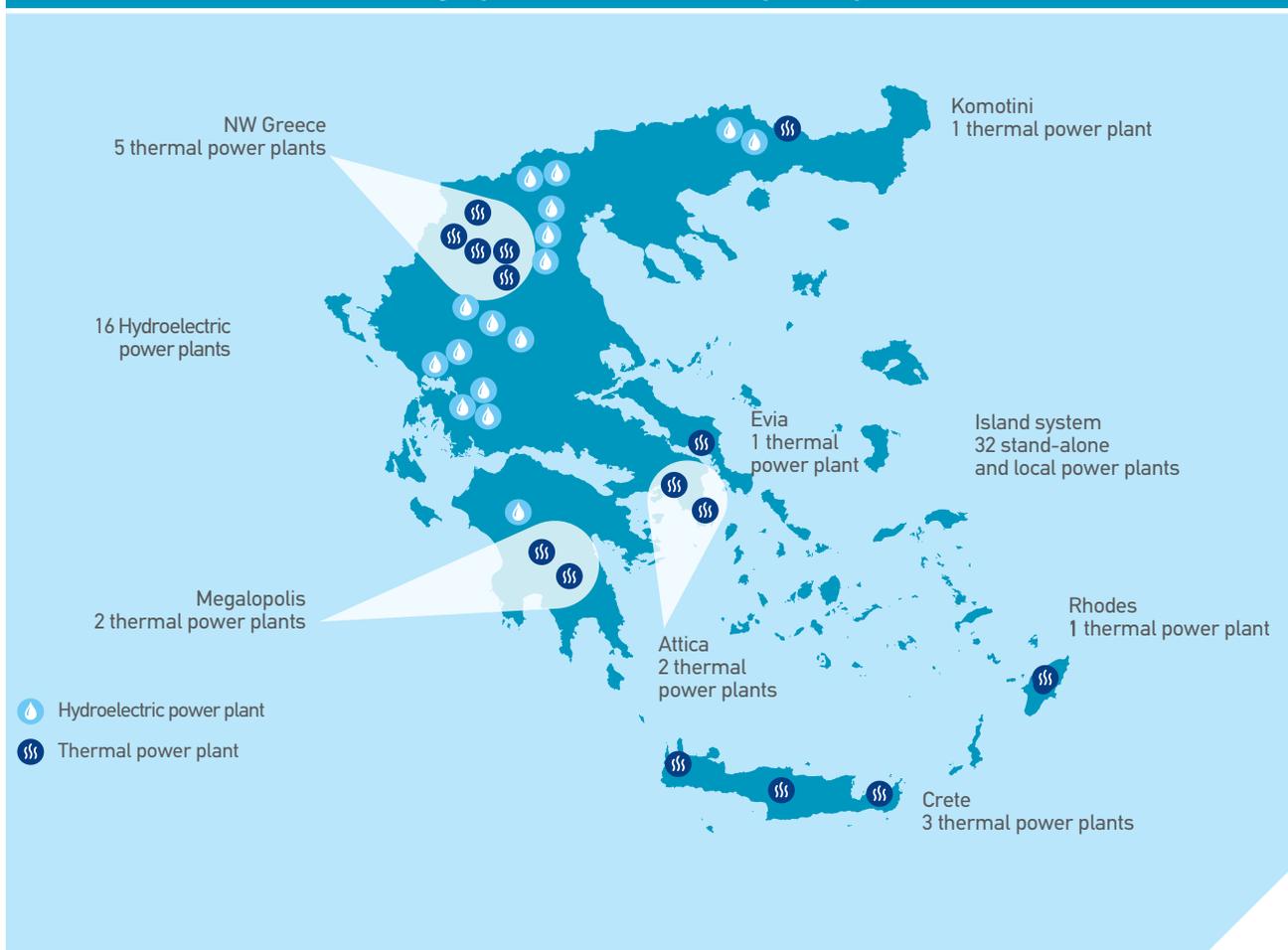
The PPC Generation Division is responsible for power generation. Its main task is to develop the generating capacity of thermal power plants and large hydroelectric power plants (HPP) belonging to PPC and to ensure the optimal running of those facilities, while complying with environmental requirements.

On 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 12,445 MW by primary energy source as of 31.12.2014 (RES excluded) is shown in the table below.



Primary energy source	Installed capacity in 2012 (in MW)	Installed capacity in 2013 (in MW)	Installed capacity in 2014 (in MW)
Lignite	4,930 (40%)	4,930 (39%)	4,762 (38%)
Natural gas	1,966 (16%)	2,394 (19%)	2,017 (16%)
Oil	2,470 (20%)	2,458 (19%)	2,495 (20%)
Hydroelectric	3,018 (24%)	3,018 (24%)	3,171 (25%)
<b>Total</b>	<b>12,384</b>	<b>12,800</b>	<b>12,445</b>

The increase in installed capacity for hydroelectric power plants in 2014 is due to the commissioning of the new Hilarion HPP. The reduction in the installed

capacity for lignite and natural gas is due to the scheduled withdrawal of plants.

The distribution of power plants in terms of net power output (35,076 GWh) per category of energy source is shown in the table below.



Primary energy source	Net power output in 2012 (in GWh)	Net power output in 2013 (in GWh)	Net power output in 2014 (in GWh)
Lignite	27,555 (69%)	23,231 (62%)	22,709 (65%)
Natural gas	3,767 (9%)	3,943 (11%)	3,940 (11%)
Oil	4,790 (12%)	4,376 (12%)	4,521 (13%)
Hydroelectric	3,892 (10%)	5,640 (15%)	3,906 (11%)
<b>Total</b>	<b>40,004</b>	<b>37,190</b>	<b>35,076</b>

The decrease in power generated by hydroelectric energy was due primarily to the fact that 2013 was an exceptionally 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.



Facilities	2012		2013		2014	
	Availability (%)*	Average Efficiency (%)**	Availability (%)*	Average Efficiency (%)**	Availability (%)*	Average Efficiency (%)**
Interconnected System						
Lignite plants	78.91	30.13	76.94	29.83	71.80	31.08
Diesel plants	99.77	35.94	80.40	-	100.00	-
Natural gas plants	83.19	46.69	90.97	49.71	77.59	49.79
<b>Total</b>	<b>82.03</b>	<b>31.49</b>	<b>81.19</b>	<b>31.66</b>	<b>73.74</b>	<b>32.91</b>
Crete						
Diesel plants (fuel oil)	88.80	34.19	89.31	34.02	88.33	33.92
Diesel plants (diesel)	85.37	33.81	80.31	32.63	73.52	33.01
<b>Total</b>	<b>86.85</b>	<b>34.10</b>	<b>84.20</b>	<b>33.71</b>	<b>79.95</b>	<b>33.71</b>
Rhodes						
Diesel plants (fuel oil)	88.72	36.00	84.49	35.69	87.44	35.92
Diesel plants (diesel)	94.68	30.17	92.76	28.57	92.68	27.58
<b>Total</b>	<b>91.83</b>	<b>34.97</b>	<b>88.80</b>	<b>34.24</b>	<b>90.17</b>	<b>37.19</b>
Other non-interconnected islands						
Diesel plants	87.12	40.68	84.98	40.49	88.98	40.40

\* 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.

\*\* Net efficiency is cited, in other words average efficiency is calculated based on the efficiency rate of the energy output. 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

The availability of thermal units on the Interconnected System in 2014 (73.74%) dropped significantly compared to 2013 (81.19%) primarily due to problems in supplying lignite plants (in qualitative and quantitative terms) and an increase in breakdowns at natural gas plants.

## Supply

In the supply sector, the Supply Division is responsible for electricity sales to consumers in every category, and its mission is to promote modern supply through a robust, competitively viable development plan:

- Utilising the Corporation's name, and building on its values in a reliable, consistent manner.
- Modernising Corporation procedures, while complying with the requirements in the Supply Code.
- Developing attractive products based on PPC's competitive advantages.
- Ensuring loyalty among eligible customers when offering energy products and services.
- Building PPC's relations with customers on a new basis, by offering immediate, flawless customer service both in terms of timing and quality, via the phone or internet, and through a network of modern stores:
  - with a highly trained sales-focused team
  - using improved, cutting edge procedures
  - in a comfortable, secure environment for all
  - focused on creating an enlarged multi-channel, diverse sales network
  - that curbs running costs.

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:

- to ensure sufficient energy to meet the needs of PPC's customers in the best possible way through participation in the wholesale market as a supplier
- to provide 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 medium and high voltage customers, and the relevant numbers. Out of a total of 7,388,537 connections, 78% are household connections and 17% are commercial.

In addition to low and medium voltage customers, in 2014, PPC also served 77 high voltage connections.

At the end of 2014 PPC had 118 stores, 22 of which were located in Attica, 27 in Macedonia-Thrace, 31 in the Peloponnese-Epirus, 20 in Central Greece and 18 on the islands. In addition to continuing to redevelop its stores so they all have a uniform look, in 2014 security measures were improved by installing security doors, bulletproof windowpanes at cashier's desks, as well as security systems such as CCTV and alarms, and time-delay safes.



Medium and low voltage connections	No. of connections in 2012	No. of connections in 2013	No. of connections in 2014
Residential	5,719,758	5,715,102	5,731,416
Agricultural	208,130	208,130	205,430
Commercial	1,251,059	1,250,109	1,240,891
Industrial	61,078	60,773	58,892
Public lighting (roads & squares)	96,989	98,827	99,650
Public authorities	51,527	52,263	52,160
Traction	95	98	98
<b>Total</b>	<b>7,388,636</b>	<b>7,385,302</b>	<b>7,388,537</b>

## 3.2 Shareholder Structure

PPC'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 (31.12.14)	Percentage
Greek State*	34.12%
Hellenic Republic Asset Development Fund (HRADF)	17.00%
IKA-ETAM / TAP – PPC Fund and TAYTEKO/TEAPAP-PPC Fund (ex OAP / PPC Pension Fund)	3.81%
General public & institutional investors**	45.07%
<b>Total</b>	<b>100.00%</b>

\* Through the Hellenic Republic Asset Development Fund (HRADF), which is wholly owned by the Greek State, the Greek State directly or indirectly controls 51.12% of the ordinary shares in PPC S.A. On 8.4.2014 the Interministerial Committee for Restructuring and Privatisation decided to transfer 39,440,000 ordinary shares with voting rights in PPC (accounting for 17% of the company's share capital at that time) from the Greek State to HRADF free of consideration, in accordance with the provisions of Law 3986/2011. The transfer was announced on 11.4.2014 after an over-the-counter (OTC) transaction which had taken place on 9.4.2014.

\*\*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.

More information is available in the 2014 Annual Report.

## 3.3 Holdings in Subsidiaries

The following table presents the companies that were wholly owned by PPC on 31.12.14.

Subsidiary	Scope
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 Telecommunications S.A.)	Management, development, operation and maintenance of the Hellenic Independent Power Transmission System (HIPTS) and its interconnections.
PPC FINANCE PLC	Financial services
PPC ELEKTRİK TEDARİK VE TİCARET ANONİM ŞİRKETİ	Electricity supply

## 3.4 Corporate Governance Framework

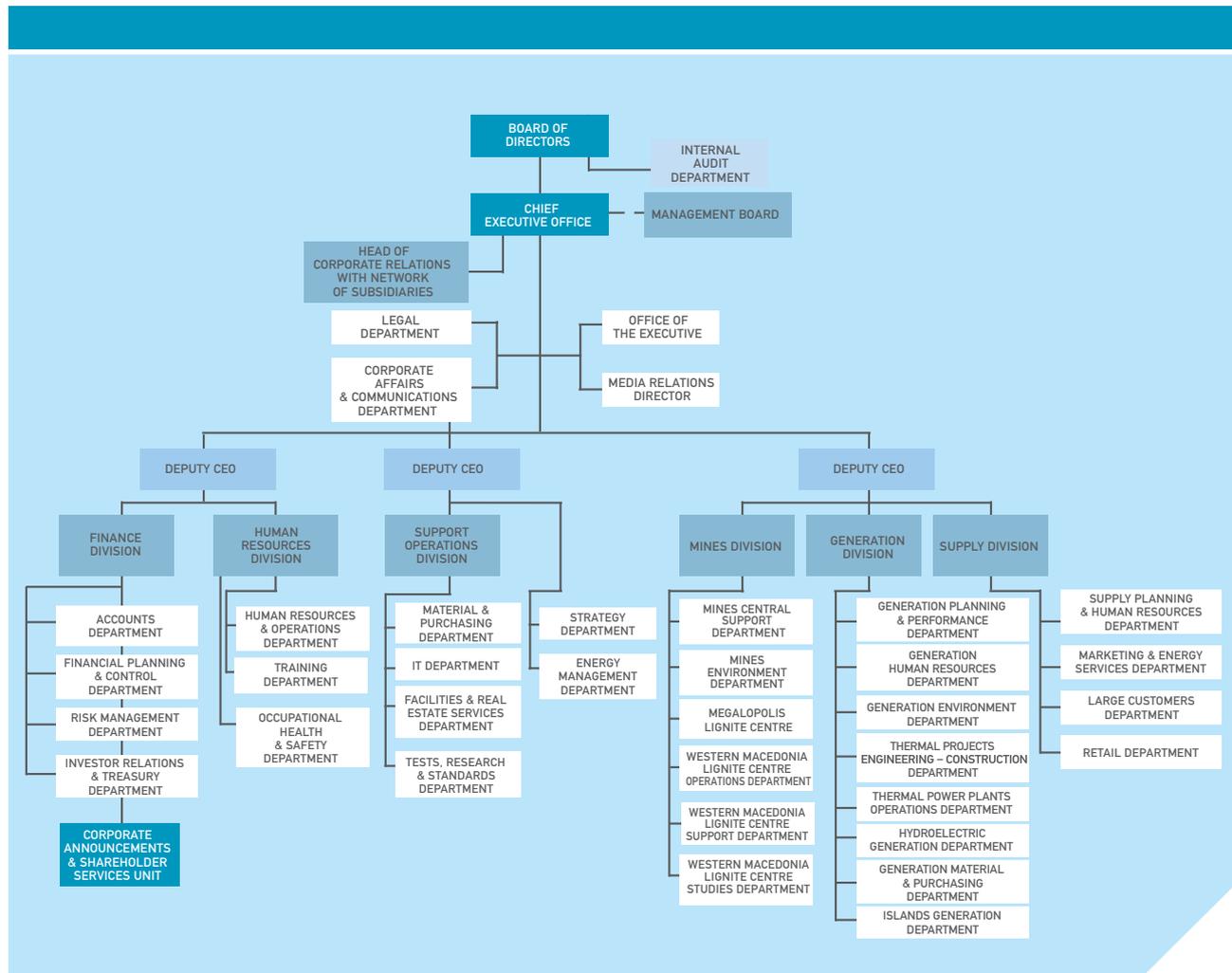
For PPC S.A., complying with corporate governance principles is a key commitment and priority. Since the Corporation aims to ensure that it is optimally organised, managed and run, that there are increased levels of transparency in its relations with shareholders and generally that the Corporation's 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](http://www.dei.gr)).

## 3.5 Administrative Organisation

In 2014 there were no major changes in PPC's organisational chart, other than restructuring of the departments within the Mines Division.



## 3.6 Governance Structure

PPC's General Meeting of Shareholders is the supreme management body and has the right to take decisions on any issue affecting the Corporation.

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 31.12.2014. Detailed information about the governance bodies is available in the 2014 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:

- 8 members, including the CEO, are elected by the Corporation's General Meeting. The Board of Directors then elects the Chairman and Vice Chairman from among those members.
- 2 members representing the PPC employees are elected by direct, universal ballot after PPC's most representative employee trade union is notified.

- 1 member who comes from organisations in sectors related to PPC's activities is appointed by the Economic and Social Committee of Greece.

On 31.12.2014, 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	Corporate Social Responsibility Supervision
Arthur Zervos	Chairman & CEO	√	-	-	-	-	-
Konstantinos Dologlou	Vice Chairman	√	-	-	-	-	-
Urania Ekaterinari	Member	√	-	-	-	-	-
Panayiotis Alexakis	Member	-	√	√	√	√	√
Harilaos Vasilogeorgis	Member	-	√	√	-	-	-
Nikolaos Vernikos	Member	-	√	√	√	√	-
Pavlos Thomoglou	Member	-	√	√	-	-	-
Pantelis Karaleftheris	Member - Employee representative	-	√	-	-	-	-
Stavros Papatotiriou	Member	-	√	√	√	√	-
Filippos Tavis	Member - Economic & Social Committee Representative	-	√	√	-	-	√
Nikolaos Fotopoulos	Member - Employee representative	-	√	-	-	-	-

## 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 Corporation'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.

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 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 2014 Annual Report.

## 3.8 Audits

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

In 2014, in exercising its powers to monitor the correct running of the Internal Audit Department, the Audit Committee held 6 meetings with staff of the Internal Audit Department. The agenda for those meetings focused on briefing the Audit Committee about the findings and results of audits the Internal Audit Department had carried out, and issues relevant to how the Department operates.

The Internal Audit Department's annual audit schedule is drawn up by identifying, updating and assessing PPC's operational risks and taking into account the Corporation's strategic goals, as well as all developments relevant to the environment in which it operates. The Audit Committee then submits the audit schedule to the Board of Directors for approval.

PPC's Board of Directors then examines the key risks PPC faces and refers to them in detail in the Board of Directors' Annual Financial Report.

In 2014, 21 fresh audits were carried out on various departments of the PPC, involving compliance checks, as well as administrative, financial and special forms of audits. 12 audits which had begun before 2014 were also continued. No corruption-related audits took place.

## 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 2014 Annual Report lists 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 2014 Annual Report also lists risks which have identified related to climate change and to CO<sub>2</sub> 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 lack of suitable staff, coupled with 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 Materially Issues process to allow it to identify and prioritise its business impacts/risks based on the triptych of principles fundamental to Corporate Social Responsibility (namely, economy, society and environment). This process is analysed in more detail in section 4.3.

### The Ptolemaida Affair - November 2014

At 09:00 hours on 9.11.2014 a fire broke out at Unit IV at the Ptolemaida Steam Electric Plant, and PPC working with staff at the unit, the fire service and local agencies was able to bring this difficult incident under control. During the incident all emergency protocols specified in the Corporation's regulations were complied with even though the plant was not operational.

## 3.10 Key Financial Information

Turnover in 2014 stood at € 5,796.8 million compared to € 5,918.6 million in 2013, down some € 121.9 million (-2.1%). EBITDA stood at € 793.2 million in 2014 compared to € 638.9 million in 2013, up 22.6%, while net profits stood at € 34.2 million compared to losses of € 324.3 million in 2013. The carried balance of grants on 31.12.2014 was € 281.8 million.

Total PPC investments stood at € 271.5 million and were allocated as follows: € 101.6 million to the Mines Division, € 162 million on Generation, € 3.5 million on Supply, € 4.2 million in support operations and € 0.2 million on Management Divisions.

Financial value and social product (in € '000)	2012	2013	2014
Turnover	5,887,911	5,918,652	5,796,750
Financial income	76,343	76,085	89,952
Direct financial value generated	5,964,254	5,994,737	5,886,702
Salaries and employee benefits including employer social security contributions*	398,022	612,270	589,467
Financial expenses	245,905	238,844	251,434
Income tax, other taxes, duties and provision for surtaxes	70,611	66,750	51,462
Donations and sponsorship	1,068	1,351	1,249
Operating cost balance	5,248,425	5,177,059	4,942,284
<b>Financial value allocated</b>	<b>5,969,292</b>	<b>6,096,274</b>	<b>5,835,930</b>

\* Payrolling costs incorporated in tangible assets are not included.

All PPC's published financial data is available in the 2014 Annual Report.



# Sustainable Development





# 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 Energy Management Department working with the Strategy Department monitor the energy market and emerging trends, and are responsible for preparing Corporation strategy and policy to manage electricity and optimise PPC's overall portfolio within the context of the wholesale electricity market. This approach allows the Corporation to monitor short-term and medium to long-term energy demand, schedule production, energy imports and the purchase of fuel to respond to market needs in good time. Moreover PPC offers a night tariff as a tool for managing demand.

## 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](http://www.dei.gr).

## Challenges and strategic priorities

PPC was and remains one of the main pillars supporting the Greek economy and social life in the country and is a key factor in overcoming the crisis, restarting the economy and promoting growth and development. Management recognises the challenges and has set its priorities accordingly.

### Sustainable Development Policy

PPC's strategic goal is to ensure that it 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 dealt with effectively and in time, while the Strategy Department is responsible for 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.

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. 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.

In 2014 PPC paid € 220 million to purchase greenhouse gas trading rights (CO<sub>2</sub>). In 2015 that figure will be close on € 280 million, with trading rights for CO<sub>2</sub> being sold at € 7.50/ton. At that price, the burden from lignite production is around € 11/MWh or 20%.

In 2014 forecasts and overdue debts rose partially because of the spectacular rise in the special greenhouse gas emission reduction charge (formerly the RES charge). The total special greenhouse gas emission reduction charge for 2014 stood at € 1 billion compared to just € 100 million in 2011. This rise has exceptionally negative consequences for PPC's ability to collect this amount. It should be recalled that this special greenhouse gas emission reduction charge is not PPC revenue but does affect the final electricity bill Greek consumers have to pay, meaning that even good payers may face difficulties in paying their bills. PPC is obliged to pay over the charge even if it has not collected it from consumers.

One of the Corporation's top priorities is now to improve its collection rates and to reduce accumulated debts to PPC. To achieve this, Management has announced a series of measures targeted at specific categories of customers based on qualitative and quantitative criteria.

The Corporation's Management Team has also recognised that key priorities must include reducing the cost of electricity, restructuring the electricity market in Greece and implementing PPC's capital expenditure plan.

A major challenge is to improve PPC's corporate operations, after 4 strategic issues of major importance for the Corporation were identified:

- Improving PPC's corporation operations in line with Corporate Governance principles and rules. This requires a redefinition of relations between PPC and the State, and improved control mechanisms for PPC.
- Improved management across the board, from top management executives right down to the smallest unit. The role of management executives will be significantly improved. Planned actions are also expected to bolster the Corporation's R&D activities, to develop know-how, assimilate and incorporate cutting-edge technological developments and help the Corporation respond to the new, constantly expanding demands of its environment being shaped at EU level.
- Greater PPC Management involvement in institutional bodies, EU institutions and more contacts with key players coupled with better relations with similar corporations abroad.

- Improved Corporation – employee relations which will be achieved by:
  - *Improving working conditions, and above all occupational health and safety.*
  - *More professionalism from staff and executives, through continuing improvements achieved via training.*
  - *Greater dedication, and better ties between employees and the Corporation, more respect for and trust in PPC institutions and procedures, as well as an excellent working environment, meritocracy and objectivity in the entire range of employee relations with the Corporation.*

## 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 Corporate Social Responsibility Section which is part of the Strategy Department. Its mission is to establish, develop and implement a Corporate Social Responsibility 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 Corporate Social Responsibility Section was placed under the Strategy Department and that BoD members have been assigned the task of supervising the Corporate Social Responsibility Section and submitting the annual Sustainability Report to the BoD, demonstrate that the Corporation takes Corporate Social Responsibility seriously.

## 4.3 Materiality Analysis

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 Corporate Social Responsibility Section asked them to assess / score which issues were material for PPC's sustainability in their view.

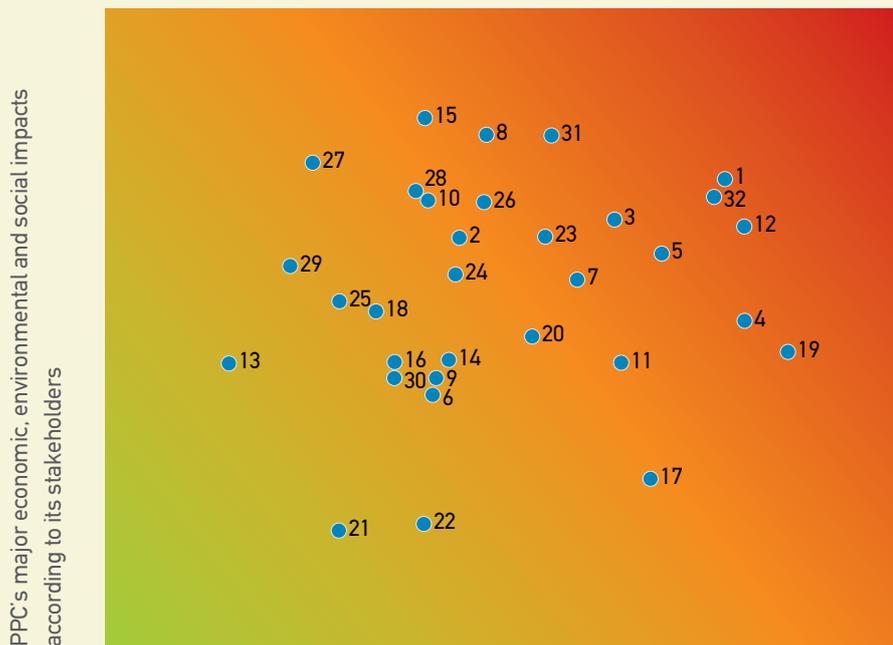
The objective of this exercise was to engage in real dialogue and identify the important issues that affect PPC and its stakeholders and also to increase the degree of transparency and accountability by publishing the results of this process.

A detailed description of the process used by PPC Management and stakeholders to identify material issues is presented in the 2013 Corporate Social Responsibility and Sustainable Development Report which is available on the Corporation's website ([www.dei.gr/el/i-dei/etairiki-koinwniki-euthuni/entupa-gia-etairiki-koinwniki-euthuni](http://www.dei.gr/el/i-dei/etairiki-koinwniki-euthuni/entupa-gia-etairiki-koinwniki-euthuni)).

The results were presented in a materiality 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.

PPC is making concerted efforts to continuously improve how it organises and monitors sustainable development issues. The results of this materiality

## PPC sustainability materiality issues



PPC's major economic, environmental and social impacts according to its Management Team

### 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 greenhouse gas/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

analysis are expected to be used to take important decisions about PPC's future and about the general outline of its Corporate Social Responsibility strategy.

## 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 PPC recognises 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 analysis 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.

### 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 keep 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.

## 5 most material issues for employees

1. Employee and third party health and safety
2. Customer Satisfaction / products and service assurance
3. Financial position / performance
4. Energy efficiency / new technologies
5. Staff Training

*Source: PPC Materiality Analysis, 2013-2014.*

### 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.

## 5 most material issues for customers

1. RES development
2. Customer Satisfaction / products and service assurance
3. Energy efficiency / new technologies
4. Waste
5. Ecosystems / biodiversity

*Source: PPC Materiality Analysis, 2013-2014.*



### 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 Power Transactions 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.

### 5 most material issues for the State, Regulatory Authorities and Public Bodies

1. Customer Satisfaction / products and service assurance
2. Waste
3. Ecosystems / biodiversity
4. Rehabilitation of degraded land
5. Energy efficiency / new technologies

Source: PPC Materiality Analysis, 2013-2014

### 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 2014 Annual Report and in this Report.

### 5 most material issues for shareholders and Investors

1. Energy efficiency / new technologies
2. Financial position / performance
3. New markets and investments
4. Customer Satisfaction / products and service assurance
5. Staff Training

Source: PPC Materiality Analysis, 2013-2014

## 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 2014 is presented in Section 8 of this Report.

## 5 most material issues for Non-Governmental/Non-Profit Organisations

1. RES development
2. Customer Satisfaction / products and service assurance
3. Waste
4. Climate change and greenhouse gas/ particle emissions
5. Energy efficiency / new technologies

Source: PPC Materiality Analysis, 2013-2014

## 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..

## 5 most material issues for Regions, Local Authorities and Local Communities

1. RES development
2. Raw materials / fuel / water
3. Ecosystems / biodiversity
4. Procurement and logistics management
5. Customer Satisfaction / products and service assurance

Source: PPC Materiality Analysis, 2013-2014.

## 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.

## 5 most material issues for partners and suppliers

1. Energy efficiency / new technologies
2. Employee and third party health and safety
3. Customer Satisfaction / products and service assurance
4. Raw materials / fuel / water
5. Climate change and greenhouse gas/ particle emissions

Source: PPC Materiality Analysis, 2013-2014



## 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.

## 5 most material issues for competitors

1. Employee and third party health and safety
2. Financial position / performance
3. Corporation staff
4. Customer Satisfaction / products and service assurance
5. RES development

Source: PPC Materiality Analysis, 2013-2014

## 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 Network for Corporate Social Responsibility		World Business Council for Sustainable Development (WBCSD)
	The Union of the Electricity Industry - EURELECTRIC		The Southeastern Europe Energy Institute
	Hellenic Electricity Association (HELAS)		The Hellenic Institute of Entrepreneurialism and Sustainable Development
	International Council on Large Electric Systems (CIGRE)		Electric Power Research Institute (EPRI)
	Council for Sustainable Development at the Hellenic Federation of Industry (SEV)		Global Sustain
	Alliance for Greece		Junior Achievement Greece (SEN/JA)

## 4.6 Awards - Distinctions

PPC won the Best Public Sector Corporation at the Hrima - George Ouzounis Business Awards 2014, which have been awarded for 12 consecutive years based on the results on an online vote by 1,328 readers of the [www.hrima.gr](http://www.hrima.gr) website.

PPC was included in the Platts Top 250 Global Energy Corporation Rankings for 2014, in recognition of its economic and business performance in the energy sector.

PPC's Occupational Health and Safety Division also took part in the Health and Safety Awards held in Athens in September 2014 organised by Boussias Communications under the aegis of the Hellenic Federation of Enterprises, with support from the European Parliament and Hellenic Institute of Occupational Health and Safety. PPC won the following prizes:

- The Gold Award in the 'Public Utilities' category conferred on the Occupational Health and Safety Division.
- The Gold Award in the 'Emergency Readiness' category conferred on the Occupational Health and Safety Division.
- The Silver Award in the 'Training and Awareness Raising Initiatives' category conferred on the Occupational Health and Safety Division.
- The Silver Award in the 'Emergency Readiness' category conferred on the Mines Division.

At the 2014 Facilities Management Awards PPC won the Silver Prize in the Electrical Power category for how the Real Estate Services Department manages and develops the PPC Group's building facilities.

## 4.7 Key Corporate Social Responsibility Performance Data

PPC's key financial, environmental and social performance data for 2012-2014 are presented in the table below. More information to help you fully understand this table (including comments on performance, assumptions used in calculations, clarifications, etc.) can be found in the individual sections of this Report.

<b>Economy</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Turnover in € '000	5,887,911	5,918,652	5,769,750
Total Liabilities and Equity (€ '000)	14,996,074	14,773,794	16,138,480
Total liabilities (CI + CII)	9,293,515 <sup>1</sup>	9,450,745	10,170,032
Total Equity (€ '000)	5,702,559 <sup>1</sup>	5,323,049	5,968,448
Domestic sales (GWh)	51,946	49,818	49,434
Financial income (€ '000)	76,343	76,085	89,952
Salaries and employee benefits including employer social security contributions (€ '000) <sup>2</sup>	398,022	612,270	589,467
Dividend payments (€ '000)	35	5,821	7
Earnings (losses) before tax (€ '000)	50,152 <sup>3</sup>	(86,878)	47,910
Long-term borrowings (€ '000)	3,026,223	2,868,671	4,763,477
Short-term borrowings (€ '000)	1,580,456	1,633,854	312,493
<b>Employees</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Total No. of employees	11,352	10,804	10,531
No. of employees with a collective labour agreement	11,346	10,790	10,517
Total No. of accidents	79	60	64
Total No. of fatal accidents	2	1	3
Fatal accident frequency rate	1.30	0.77	2.33
Accident frequency rate	2.68	1.99	2.64
Total No. of days of absence due to accidents	14,542	7,832	19,970
Accident severity rate	0.49	0.26	0.82
Total No. of days of absence from work	81,158	58,888	55,464
Absence rate	2.84%	2.21%	2.14%

Environment	2012	2013	2014
Number of Power Plants (lignite centres, thermal power generation units, hydroelectric units, etc.) with certified Environmental Management Systems	18	18	18
CO <sub>2</sub> emissions from electricity generation (in thousands of tons)	47.598	41.337	39.290
Greenhouse gas (CO <sub>2</sub> ) trading rights (€ '000)	57.086	187.517	216.946
Surface area of PPC's facilities (hydroelectric facilities) in protected areas (km <sup>2</sup> )	65,30	65,30	65,30
Market and customers	2012	2013	2014
Installed capacity (MW)	12,384	12,800	12,445
Net energy output (in GWh)	40,004	37,190	35,076
No. of connections (low and medium voltage)	7,388,636	7,385,302	7,388,537
Market share in the domestic energy market <sup>4</sup>	98.5%	98.3%	97.9%
Society	2012	2013	2014
Donations and sponsorship (€ '000)	1,068	1,351	1,249 <sup>5</sup>
Total amount of lignite levy payable to local communities (€ '000)	29,440	29,593	28,984

<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 incorporated in tangible assets are not included.

<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.

<sup>5</sup> The figure for donations/sponsorship relates to amounts recorded in the accounts from 1.1.2014 to 31.12.2014.

## 4.8 Commitments - Goals

The following tables show the goals set for 2014 and the degree to which they were accomplished, as well as our goals for 2015. The tables follow the structure of the Report.

Sustainable Development	2014 Goals	Implementation
	Improve sustainable development management structures.	Under way, being examined by PPC's Management team
	Publish the Corporate Social Responsibility and Sustainability Report in line with the GRI G3.1 Application Level B +.	Completed. This Report was published in accordance with the GRI G3.1 guidelines for application level A+. (see section 10.1)
2015 Goals		
<ul style="list-style-type: none"> <li>Publish the Corporate Social Responsibility and Sustainability Report in line with GRI G4.</li> </ul>		

Employees	2014 Goals	Implementation
	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).	Under way (see section 5.1)
	Develop incentives for staff to move to 'problematic' areas (the Greek islands).	Completed (see section 5.1)
	Draft a Written Occupational Risk Assessment for two PPC lignite mines.	Completed (see section 5.6)

Employees	<b>2014 Goals</b>	<b>Implementation</b>
	Comment of 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.	Completed (see section 5.6)
	Complete training for authorised staff of contingency planning issues.	Completed (see section 5.6)
	Publish an Occupational Physician Manual for the PPC Group as part of efforts to provide information and support about occupational medicine.	Completed (see section 5.6)
	Brief staff and raise their awareness about checkups.	Under way (see section 5.6)
	Obtain OHSAS 18001 certification for the Southern Field mine and the Megalopolis Lignite Centre Department.	Under way. The Megalopolis Lignite Centre Department obtained certification and the certification bodies for the Southern Field mine has been chosen. Certification is expected to be obtained in 2015. (see section 5.6)
	Amend and update the Evaluation Sheets Special Regulation.	Under way (see section 5.3)
	<b>2015 Goals</b>	
	<ul style="list-style-type: none"> <li>Recruit 600 full-time staff to meet the need to technical staff at Mines and Power Plants and specialised scientific staff for the Corporation's executive services.</li> <li>Decentralise the HR (SAP) system.</li> <li>Sign a new enterprise-wide collective labour agreement and implement it.</li> <li>Draft written occupational risk assessments for two lignite mines at the Western Macedonia Lignite Centre (Amynteo and Kardia).</li> <li>Comment on the features of accidents affecting staff at the Mines and Production Division in 2014.</li> <li>Work in partnership with the Fire Service to have the heads of fire safety teams trained by experienced fire-fighters.</li> <li>Publish and distribute PPC posters and flyers to provide information, raise awareness and improve staff participation in periodic job-related checkups.</li> <li>Obtain repeat ELOT EN ISO 9001:2008 certification for the Quality Management System implemented by the Occupational Health and Safety Division. Extend certification to social worker services.</li> <li>Obtain OHSAS 18001 certification for the Southern Field Mines Sector at the Western Macedonia Lignite Centre.</li> <li>Train Employee Health and Safety Committees within the PPC Group.</li> </ul>	
Environment	<b>2014 Goals</b>	<b>Implementation</b>
	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.	Completed (see section 6.1)
	Obtain ISO 50001 certification for the Energy Management System at the Megalopolis Lignite Centre.	Under way (see section 6.1)
	Obtain ISO 14001 certification for the Environmental Management System at the Rhodes Steam Electric Plant.	Under way (see section 6.1)
	Complete pilot implementation of dry desulphurisation at Unit III at the Agios Dimitrios Plant.	Completed (see section 6.3)

<b>Environment</b>	<b>2015 Goals</b>	
	<ul style="list-style-type: none"> <li>• Obtain ISO 14001 certification for the Environmental Management System at the Rhodes Steam Electric Plant.</li> <li>• Prepare for ISO 14001 certification for the Environmental Management System at the Skyros power plant.</li> <li>• Prepare for ISO 14001 certification for the Environmental Management System at other plants operated by the Island Production Department, chosen by the competent executives.</li> </ul>	

<b>Market and Customers</b>	<b>2014 Goals</b>	<b>Implementation</b>
	Develop a full customer telephone service system by the end of 2014.	Completed (see section 7.1)
	Develop a new look and feel for PPC branches to promote better customer service.	Underway. The look of stores will continue to be changed during 2015-2016 as PPC seeks to improve the recognition factor for the network of PPC stores. (see section 7.2)
	Improve the Supply Division's internal administrative functions.	Completed (see section 7.2)
	Develop the e-bill taking into account market best practices so that the bill is eventually available online.	Under way (see section 7.1)
	Develop our brand by providing guarantees of origin to customers, confirming that a specific part of the energy consumed at home comes from RES.	Under way (see section 7.1)
	Adapt customer service procedures to reflect the New Supply Code.	Completed (see section 7.2)
<b>2015 Goals</b>		
<ul style="list-style-type: none"> <li>• Provide a new computer system to support sales.</li> <li>• Redefine and extend e-services to each customer department, based on modernised computer systems.</li> <li>• Market the guarantees of origin (Green Passes) to special target markets.</li> <li>• Revise the settlement rules to take into account the ongoing economic crisis, based on the proposal to increase the number of instalments and reduce the up-front payment.</li> <li>• Extend the channels and means available to customers to pay their electricity bills, thereby making it easier for them and giving them various choices when it comes to settling their outstanding bill.</li> </ul>		

<b>Contribution to Society</b>	<b>2014 Goals</b>	<b>Implementation</b>
	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)
	Implement training and youth career guidance measures in the Prefecture of Florina.	Completed (see section 8.6)
<b>2015 Goals</b>		
Continue programmes designed to develop and strengthen local communities.		

Employees





# 5. Employees

## 5.1 Human Resources Data

On 31.12.2014, PPC had 10,531 full-time employees. Only 24% 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 Corporation executives.

43 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 43 employees who have been seconded, 40 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

Region	No. of employees (31.12.2012)	No. of employees (31.12.13)	No. of employees (31.12.14)		
			Men	Women	Total
Eastern Macedonia & Thrace	174	171	122	39	161
Attica	2,574	2,518	1,351	1,212	2,563
Northern Aegean	169	166	142	18	160
Western Macedonia	5,069	4,696	4,137	352	4,489
Epirus	163	161	128	28	156
Thessaly	127	122	83	34	117
Ionian Islands	16	17	5	12	17
Central Macedonia	228	231	142	69	211
Crete	458	441	352	76	428
Southern Aegean	448	431	395	40	435
Peloponnese	1,485	1,425	1,205	179	1,384
Mainland Greece (Sterea Ellada) and Evia	441	425	344	66	410
<b>Total</b>	<b>11,352</b>	<b>10,804</b>	<b>8,406</b>	<b>2,125</b>	<b>10,531</b>

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

Employee category	No. of employees (31.12.2012)	No. of employees (31.12.13)	No. of employees (31.12.14)						Total
			Men			Women			
			<30 years old	31 - 50 years old	> 50 years old	<30 years old	31 - 50 years old	> 50 years old	
Executives	133	122	0	9	102	0	8	17	136
Admin. / Finance employees	2,225	2,217	6	363	369	6	1,070	356	2,170
Technical-Technological employees	1,425	1,386	1	596	559	1	145	48	1,350
Technical support employees	6,820	6,358	43	3,902	1,962	3	168	49	6,127
Workers	632	602	6	219	233	2	101	57	618
Expert staff	114	116	0	17	17	1	81	12	128
Consultants	3	3	0	1	1	0	0	0	2
<b>Total</b>	<b>11,352</b>	<b>10,804</b>	<b>56</b>	<b>5,107</b>	<b>3,243</b>	<b>13</b>	<b>1,573</b>	<b>539</b>	<b>10,531</b>

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

Employee category	Estimated number of employees with pension entitlement over the next 5 years	Estimated % of employees with pension entitlement over the next 5 years
Executives	24	18%
Admin. / Finance employees	256	12%
Technical-Technological employees	192	14%
Technical support employees	1,265	21%
Workers	113	18%
Expert staff	20	16%
Consultants	-	-
<b>Total</b>	<b>1.870</b>	<b>18%</b>

The majority of workers (63%) are between 31 and 50 years old. It is estimated that 18% 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.

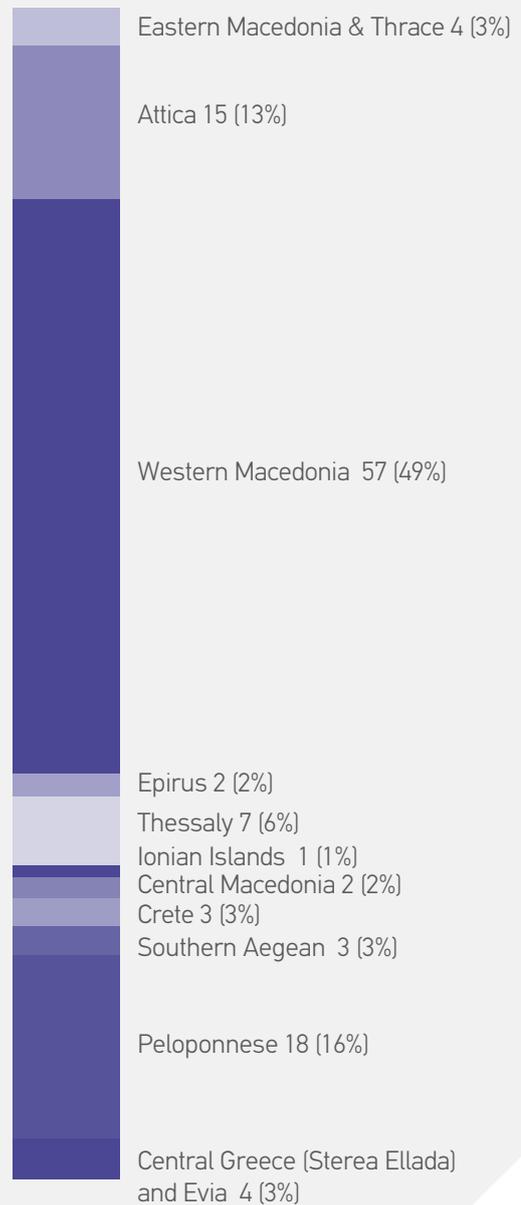
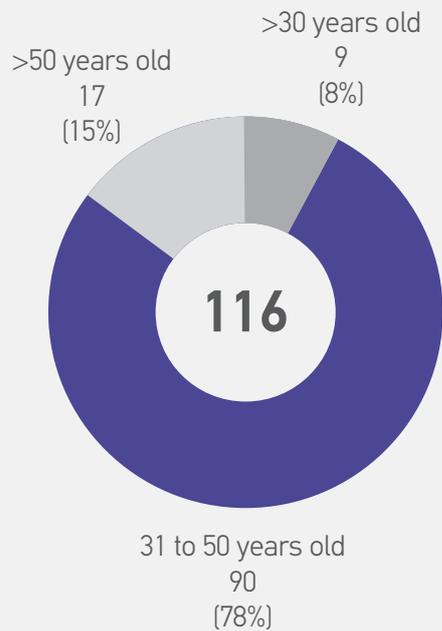
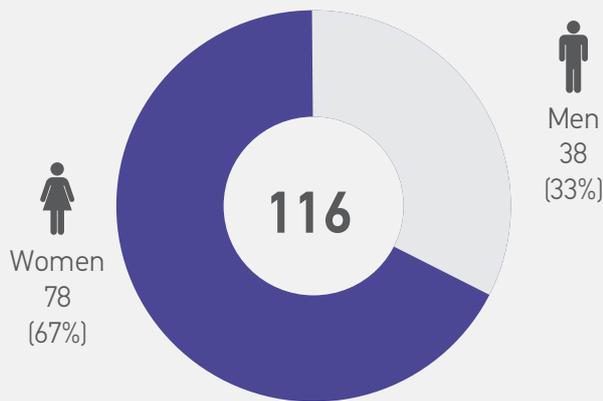
In 2013 the CEO issued decision No. 93/2013 adopting PPC staff mobility rules. The rules set out the framework, procedures and criteria for PPC staff moving to other posts to address the Corporation's needs that arise because other staff have left or because a business unit changes its functions, or because new activities commence. In 2014 incentives for staff to move to 'problematic' areas (the Greek islands) were put in place. The Corporation now provides executives and staff working in those areas with accommodation.

In 2014 PPC hired 116 new employees, and its aim is to hold competitions to recruit a total of 600 full-time staff to meet the technical needs of the Mines and Power

Plants as well as for specialised scientific staff for the Corporation's executive services. Of the 116 recruitments, 40 were transfers of staff from social security providers seconded to PPC. To address specific busi-

ness needs, 2,125 full-time seasonal staff were also hired during 2014 (1,897 of whom were on 8-month contracts and 228 on 2-month contracts).

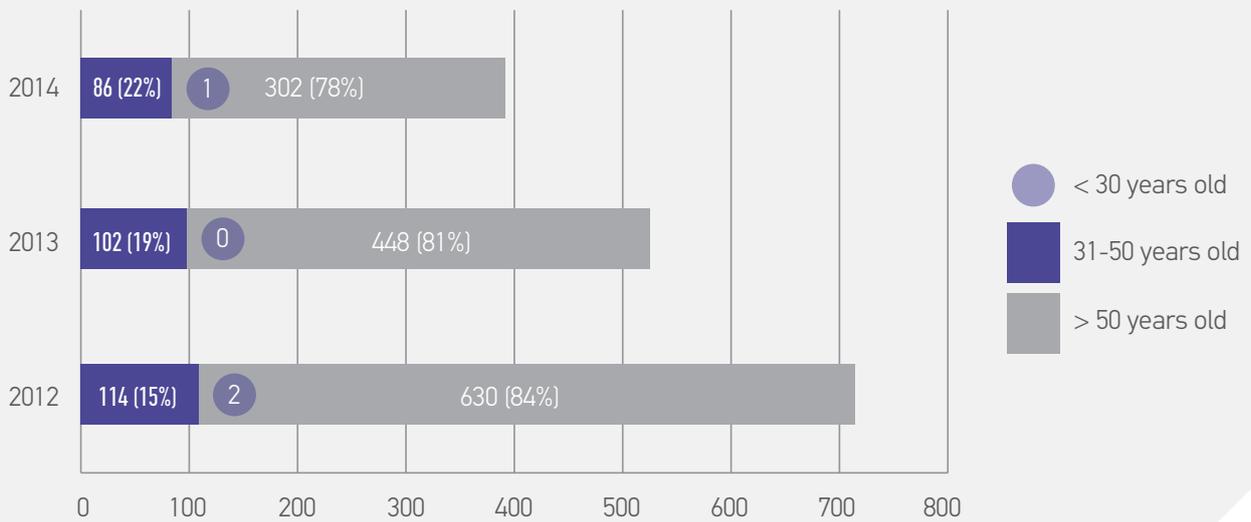
## Recruitment figures for 2014



PPC's staff are employed full-time. Of a total of 10,531 employees, 10,517 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. 389 employees left service in 2014. The attrition rate out of all full-time employees has been calculated at 3.7%.

## Attrition





Region	No. of employees who left in 2012	No. of employees who left in 2013	No. of employees who left in 2014
Eastern Macedonia & Thrace	9	4	7
Attica	129	73	58
Northern Aegean	11	7	7
Western Macedonia	368	347	213
Epirus	14	5	5
Thessaly	13	5	5
Ionian Islands	4	0	2
Central Macedonia	24	8	8
Crete	11	21	12
Southern Aegean	19	16	13
Peloponnese	109	46	45
Mainland Greece (Sterea Ellada) and Evia	35	18	14
<b>Total</b>	<b>746</b>	<b>550</b>	<b>389</b>

## 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.
- If they do become entitled to retire and/or wish to leave PPC before the child becomes 5 or 6 –and provided the said obligation has not been discharged– they must pay the Corporation an amount corresponding to the remuneration received during their cumulative leave, which was paid instead of them opting for the reduced working hours plan. It should be borne in mind that cumulative leave does not count towards the pension.

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 5 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 2014, 24 men and 127 women applied for and were granted parental leave. During the year, 8 men and 56 women returned to work after their leave ended. 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 9,083 registered PPC employees, the Electricity Industry Workers' Federation that consists of three unions and has 163 registered employees and five more independent unions with which 427 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.

If there are going to be any major organisational changes, employees and trade unions are notified by the HR Department in good time.

Given that electricity is an essential good, PPC ensures that energy continues to be supplied even during strikes by using back-up staff.

## 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). Its training centres are fully equipped and accessible to all employees and

visitors as well as the disabled. 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.

The Corporation's operating environment is affected by the current crisis as well as by changes in its business form which have given rise to new needs to develop staff skills. To improve effectiveness and develop professionalism within the Corporation, a series of courses have been run in cooperation with the Investment Applications Lab of the National and Capodistrian University of Athens, including:

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

In 2014, a total of 112,373 man-hours of training were recorded, and the average training hours per participant was 16 hours. Of 6,877 participants, 5,171 were men and 1,706 women and the average training hours per participant were 13 hours and 25 hours respectively. Of all employees, the average length of training per employee was 11 hours, and 6 ½ hours for men and 20 hours for women.

Employee category	2012 <sup>1</sup>			2013			2014		
	Number of participants in training programmes	Total training man-hours	Average training man-hours per participant	Number of participants in training programmes	Total training man-hours	Average training man-hours per participant	Number of participants in training programmes	Total training man-hours	Average training man-hours per participant
Executives	9	108	12.00	33	306	9.27	30	390	13.00
Admin. / Finance employees	882	16,075	18.23	1,413	22,364	15.83	1,837	50,759	27.63
Technical-Technological employees	501	8,736	17.44	784	13,838	17.65	969	15,996	16.51
Technical support employees	3,335	40,755	12.22	3,085	34,816	11.29	3,573	40,056	11.21
Workers	269	5,872	21.83	205	2,415	11.78	241	3,034	12.59
Expert staff	7	57	8.14	143	934	6.53	17	190	11.18
Consultants	-	-	-	1	5	5.00	-	-	-
Unspecified category <sup>2</sup>	278	2,814	10.12	381	3,253	8.54	210	1,948	9.28
<b>Total</b>	<b>5,281</b>	<b>74,417</b>	<b>14.09</b>	<b>6,045</b>	<b>77,931</b>	<b>12.89</b>	<b>6,877</b>	<b>112,373</b>	<b>16.34</b>

<sup>1</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>2</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 Regulations in force. All permanent staff on open-ended contracts underwent evaluation in 2014. The evaluation process shifted from a paper to an online process using the Corporation's new ERP (SAP) system. The evaluation criteria and their weightings are currently being updated, and changes to Chapter 3 of the current Evaluation Rules have been made in relation to employee evaluators to reflect the Corporation's current structure.

## 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 2014, 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 loans to purchase or repair main residences, for children studying in another town, to purchase electrical appliances, etc.
- Assistance when employees face serious health problems.

- Special leave for employees in addition to normal leave (study leave, family leave, extra 5-day leave for employees working on alternating shifts at power plants and mines).
- Training (seminars, foreign language courses, post-high school training, postgraduate courses, etc.).
- Free private crèches for children of employees, or coverage of part of the cost of private crèches or coverage of the cost of private campsites, up to the amount set by the competent ministry.
- 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.
- Accommodation for employees and executives based on certain conditions.
- 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 2014, 255 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.

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.

In 2014, 4 written occupational risk assessments were prepared for plants operated by the PPC Group, 2 for lignite mines at the Western Macedonia Lignite Centre (Southern and Main Field) and 2 for HEDNO facilities (in the Chios area and the Macedonia-Thrace Regional Storehouse at Sindos).



Moreover, 2 full-scale emergency drills were held at PPC Group facilities in 2014 (at the Chania Steam Electric Plant and the Megalopolis Lignite Centre). In 2014 the Social Workers Team became fully operational and was transformed from a Social Workers Subsector into the Occupational Medicine Sector of the Occupational Health and Safety Department. It provides individual and family counselling and support for staff facing problems on a personal level or within their close family environments, and refers staff members to competent agencies, prepares detailed social investigation reports as well as brief recommendations. 117 social investigation reports were prepared in 2014.

Annual audits of the occupational health and safety management systems were successfully carried out in 2014 by independent bodies in line with the ELOT 1801 standard at the Komotini, Atherinolakkos, Meliti, Megalopolis II, Chania and Agios Dimitrios Steam Electric Plants. An additional 4 steam electric plants (Amynteo, Kardias, Aliveri and Soroni on Rhodes) obtained OHSAS 18001 (ELOT 1801) certification for their occupational health and safety management systems and in early 2015 the Megalopolis I and Keratea – Lavrio steam electric plants also obtained certification. In 2014 the Megalopolis Lignite Centre Department obtained OHSAS 18001 (ELOT 1801) certification for its occupational health and safety management system. The Southern Field mine is currently in the process of obtaining certification. Certification is expected to be obtained in 2015.

In 2014, three level-3 inspections were carried out by mixed teams comprised of inspectors from the Occupational Health and Safety Department and staff from the Mines Division at PPC Mines. The inspections examined occupational safety issues and their results were notified to the heads of departments within the Mines Division. Note that level-3 inspectors from the Occupational Health and Safety Department have attended the ELOT 1801:2008 Occupational Health and Safety Inspector Certification seminar.

PPC's rules require emergency reports to be prepared. The Occupational Health and Safety Department runs training courses in risk/disaster management and carries out emergency drills so that employees of the Corporation are able to deal with any emergencies / incidents.

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.

## 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 2014, 53 people attended training courses on contingency planning (28 PPC employees and 25 HEDNO employees), and all courses about contingency planned which had been scheduled were held. Staff at PPC's (and HEDNO's) central services received training.

When training and briefing staff about health, medicine and occupational safety issues, the occupational physicians also provide information about serious illnesses. In 2014 the PPC Occupational Physician manual was published and distributed. It seeks to provide all information occupational physicians might need about their role and duties, the current legal framework and the Corporation's decisions related to occupational medicine issues. It is therefore a vital aid to occupational physicians and a useful guide for the heads of departments.

In 2014 the Occupational Health and Safety Department launched a process to design a poster and a 4-page flyer about periodic job-related check-ups and the plan is to publish and distribute the material by the end of May 2015. This move is part of the process of briefing staff and raising their awareness about preventative health issues. During 2014 staff also received briefings from occupational physicians about the importance of job-related check-ups and a large number of employees were actually referred for tests (19.2% of all staff).

The 80-hour long training and info-seminars for safety technicians are PPC's main occupational health and safety seminars. In 2014 safety technicians attended:

- Phase two of their training course in Athens lasting 40 hours. Phase one took place in 2013.
- As part of the move to decentralise training activities, phase two of a training course was held at the Kardias Intensive Training School in Kozani lasting 40 hours. Phase one took place in 2013.



- Phase one of another training course in Athens lasting 40 hours (phase two will take place in 2015).

Specific occupational health and safety topics and relevant subjects are included in the materials for other seminars run by the Training Department, such

as the orientation training new recruits receive. Over a 3-month period in 2014 seminars relevant to health and safety issues were held for all technical staff at mines at PPC's training centre in Megalopolis.

PPC units	2012			2013			2014		
	Number of participants in training programmes	Total training man-hours	Average training man-hours per participant	Number of participants in training programmes	Total training man-hours	Average training man-hours per participant	Number of participants in training programmes	Total training man-hours	Average training man-hours per participant
Mines Division	2,157	21,180	9.82	2,628	27,285	10.38	2,173	25,735	11.84
Generation Division	871	7,432	8.53	805	6,506	8.08	1,518	12,249	8.07
Distribution Division	44	597	13.57	-	-	-	-	-	-
Supply Division	2	70	35.00	153	870	5.69	20	191	9.55
Finance Division	3	18	6.00	13	67	5.15	3	16	5.33
HR Division	12	80	6.67	277	1,734	6.26	84	827	9.85
Support Operations Division	62	583	9.40	277	2,755	9.95	39	226	5.79
Other divisions/units	29	216	7.45	66	343	5.20	35	250	7.14
<b>Total</b>	<b>3,180</b>	<b>30,176</b>	<b>9.49</b>	<b>4,219</b>	<b>39,560</b>	<b>9.38</b>	<b>3,872</b>	<b>39,494</b>	<b>10.20</b>

Note: The data in the table above relate to training programmes handled and organised by the Training Department ("locally" implemented training conducted by the Divisions in PPC power plants is not included). In 2014, the male employees participated in 36,941 training hours, whereas female employees attended 3,233 hours of training.

## Health and safety for contractors and sub-contractors

To ensure the health and safety of the staff of PPC's contractors, those contractors are responsible for implementing occupational health and safety 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 health and safety at work measures required by law and to comply with the obligations for a safety engineer and occupational physician, 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 implemented labour and social security law.

In 2014 inspections were carried out on 13 contractor work crews engaged by HEDNO and on 1 contractor work crew engaged by the Mines Division. An inspector from the Occupational Health and Safety Department took part in the inspections.



## Health and Safety Performance



PPC Health and Safety Data	2012	2013	2014
Total number of accidents <sup>1</sup>	79	60	64
Total No. of fatal accidents	2	1	3
Fatal accident frequency rate <sup>2</sup>	1.30	0.77	2.33
Accident frequency rate <sup>3</sup>	2.68	1.99	2.64
Total No. of days of absence due to accidents	14,542	7,832	19,970
Accident severity rate <sup>4</sup>	0.49	0.26	0.82
Total No. of days of absence from work <sup>5</sup>	81,158	58,888	55,464
<b>Absence rate<sup>5</sup></b>	<b>2.84%</b>	<b>2.21%</b>	<b>2.14%</b>

<sup>1</sup> The number of accidents 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> Calculation Method: No. of fatal 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>5</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.



Accidents	2012		2013		2014	
	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	77	2	59	1	61	3
PPC contractor accidents <sup>1</sup>	17	0	15	0	22	1
Third party accidents <sup>2</sup>	6	6	5	4	1	1

<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. The previous year's data has been updated with accidents that took place at the Mines which were not captured in previous Reports.

<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.

There was a fatal accident involving a contractor's employee engaged in landscaping the site at the new Ptolemaida V plant, at the contractor's work crew site. The accident occurred during repair of the back door of a truck owned by the contractor.

A fatal accident involving a third party involved a migrant working as a labourer on the construction of a metal roof. He lifted a 7-m long metal bar which came into contact with a live electricity cable overhead resulting in electrocution.

Off all accidents involving PPC employees, the 3 non-fatal accidents involved female employees engaged in office work. Moreover, 43 of the purely work-related accidents in 2014 occurred in the Western Macedonia region (mainly the Kozani Regional Unit) due to PPC's intensive operations in that area.

The 3 fatal accidents occurred at PPC's Mines, involving men who were full-time staff. 2 occurred at the Western Macedonia Lignite Centre. 1 involved a drowning in a reservoir which an employee visited for some unknown reason (even though he had no work there) and the other was a worksite road accident (falling out of cabin



PPC units	2012				2013				2014			
	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	43	4.83	13,235	1.49	31	3.57	6,836	0.79	43	4.90	19,417	2.21
Generation Division	25	2.15	1,039	0.09	26	2.19	940	0.08	19	1.71	451	0.04
Distribution Division	7	1.67	134	0.03	-	-	-	-	-	-	-	-
Supply Division	0	0	0	0	1	0.01	10	0.01	0	0	0	0
Other divisions / headquarters	4	1.4	134	0.05	2	0.00	46	0.01	2	0.81	102	0.04

of a diesel excavator when it collided with a JCB which it was attempting to take over). The third occurred at the Megalopolis Lignite Centre and involved electrocution from the electrical circuits of an electrical-powered excavator due to failure to comply with safety rules.

The Occupational Health and Safety Department ensures that PPC's Accident Prevention Policy and its effectiveness is fully documented and systematically evaluated. In 2014, 2 accident statistical analysis reports for 2013 (1 for PPC and 1 for HEDNO) and 1 report / commentary on the features of accidents involving staff of the Mines and Production Divisions for the 2-year

period 2012-2013 were published. The commentary on the most important accidents was sent to all PPC business units to prevent similar incidents occurring again.

To brief foremen at the mines, current occupational health and safety issues are referred to in the 4 issues of the quarterly Ergodigos (Foreman) magazine we published during the year. Each issue focused on one central theme:

- Issue 1: Falling and slipping.
- Issue 2: Knocking into or blows from objects.
- Issue 3: Electrical accidents and

- Issue 4: Road traffic accidents.

In September 2014 our newsletter special edition called 'Safe Work Warning', which was designed to brief staff at the Lignite Centres, referred to safe working procedures so as to avoid electrical accidents.

## 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 2014. 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 issued based on the EURELECTRIC information bulletins.
- A monthly energy market review is conducted as a means 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.*

- 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 trades 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.*
  - *Staff info-events.*

## 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 2014, 3 Corporation employees were subject to disciplinary proceedings for corruption issues. They were temporarily suspended from work without pay.

There were 3 other cases of criminal complaints filed against Corporation employees and 1 employee of a collection firm for embezzlement and repeated cases of felonious fraud, felonious forgery, breach of duty, tampering with documents and exploitation of documents he had been entrusted with. In addition to launching criminal proceedings, PPC also commenced disciplinary proceedings. In one case, the disciplinary penalty was imposed during 2014 (namely dismissal).

In 2014 there was also 1 case involving a PPC employee /contractor (an associated customs clearance agent) which involved both felonious embezzlement and fraud. As a result of the embezzlement the Corporation's losses were € 850,000. The accused was convicted to 18 months imprisonment in 2012 but he filed an appeal and the case will be heard in 2015.



# Environment





# 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 facilities (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 certified Environmental Management Systems (ISO 14001:2004) for the Western Macedonia Lignite Centre and the following power plants which generate around 86.5% of PPC's total electricity output.

In 2014 Unit V at the Aliveri steam electric plant received certification and annual re-evaluation inspections for the other Environmental Management Systems were a success meaning that the ISO 14001:2004 compliance certificate remains in effect for another year. € 23,980 was spent on certification / re-evaluation of the Environmental Management Systems for those hydroelectric and steam electric plants. The Soroni steam electric plant on Rhodes will obtain certification in 2015.



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

In addition the Megalopolis Lignite Centre Department will continue work to implement its ISO 50001 Energy Management System. That system is expected to be certified by the end of 2016. Moreover, it is expected that ISO 14001 certification for the Environmental Management System at the Megalopolis Lignite Centre will be awarded in 2016 after the licensing authority completes its evaluation of the amended Environmental Impact Study submitted to renew the mines' environmental terms and conditions.

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 2014 the Centre retained 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.

In 2014, 45 tons of combustion improvers and quantities of lubricants and PCB-free oil (580 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.



Raw materials	2012	2013	2014
Lignite-solid fossil fuels (tons)	61,910,675	54,291,901	51,630,691
Hard coal (tons)	2,083	755	-
LFO (tons)	932,461	856,041	885,813
Diesel (kilolitres)	342,032	314,203	323,747
Natural Gas (kNm <sup>3</sup> )	783,888	786,226	767,218
LNG (kNm <sup>3</sup> )	-	-	-
Biomass (tons)	-	3,530	-
Desulphurisation limestone (tons)	485,775	409,989	438,289
Lime (tons)	-	18,532	-
Lubricants and mineral oils without PCBs (tons)	4,660	4,837	7,009
(kilolitres)	0.8	2.4	1.1

## 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 354.1 PJ in 2014, down some 6% compared to 2013. The final withdrawal from service of old, inefficient power plants and minimal use of others all contributed to this change (for more information see paragraphs 6.3 and 6.4 below). Note that energy consumption in Greece in 2014 remained at 2013 levels, and there was no real difference in terms of the structure of direct energy consumption per type of energy, compared to 2013.

Consumption figures can be broken down as follows:

- Fuel use at thermal plants was 339.9 PJ (accounting for 96% of direct energy consumption). This figure includes consumption by the plants themselves (0.9 PJ) and consumption for district heating schemes (2.1 PJ).
- Electricity produced by PPC hydroelectric power plants (around 4% of overall direct energy consumption).

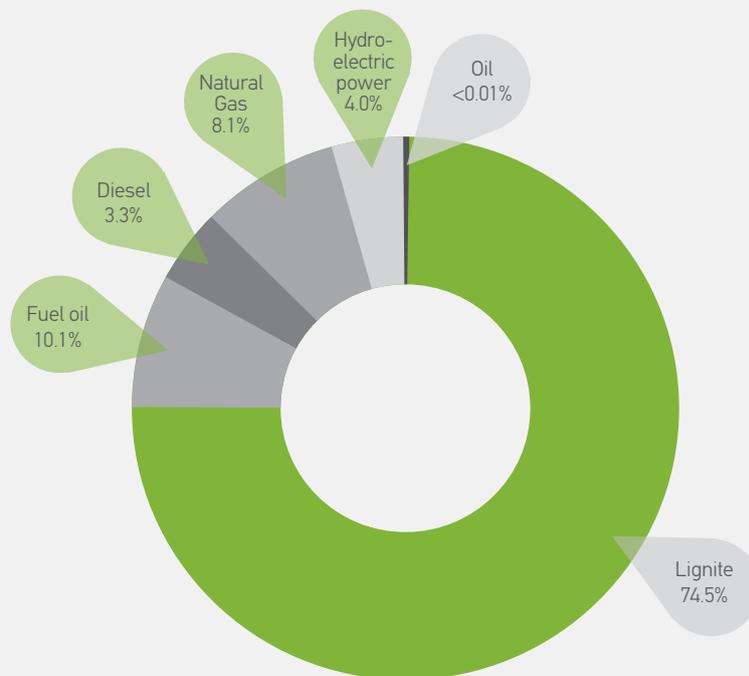
- Fuel consumption for vehicles (35.6 TJ) and to heat buildings (6.6 TJ). Overall, these two categories account for 0.01% of total direct consumption (in primary energy terms).

- *PPC runs a fleet of 1,852 vehicles including 1,053 with ordinary license plates and 359 off-road mobile vehicles, 161 of which are only used within the boundaries of the Corporation's premises and 279 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 7.5 million km or 11,150 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 2014



Direct consumption: 354,052 TJ

## 6.3 Greenhouse Gas and Other Gas Emissions

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

Greenhouse gas emissions of thermal power plants (which are the main source of PPC emissions) are monitored in line with European Commission guide-

lines on plants participating in the European Union Emissions Trading Scheme (EU ETS) and with monitoring plans developed by PPC and approved by the Ministry for Productive Recovery, the Environment & Energy (ex 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 greenhouse gas 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).

Greenhouse gas emissions	Type	2012	2013	2014
Running of power plants				
Per fuel (kt CO <sub>2</sub> )	Scope 1	47,598	41,337	39,290
Lignite (kt CO <sub>2</sub> )		41,990	36,108	33,954
Fuel oil (kt CO <sub>2</sub> )		2,901	2,635	2,727
Diesel (kt CO <sub>2</sub> )		811	763	785
Desulphurisation (kt CO <sub>2</sub> )		211	180	192
Natural gas (kt CO <sub>2</sub> )		1,612	1,600	1,581
Plants not included in EU ETS system (kt CO <sub>2</sub> )		73	51	51
Other activities				
Lignite Mining <sup>1</sup> (kt CO <sub>2</sub> eq)	Scope 1	1,550	1,361	1,296
Buildings <sup>2</sup> (t CO <sub>2</sub> )	Scope 1		361	415
Fuel for vehicles <sup>2</sup> (t CO <sub>2</sub> )	Scope 1	Not available	2,925	2,591
Flights <sup>3</sup> (t CO <sub>2</sub> )	Scope 3		301	267

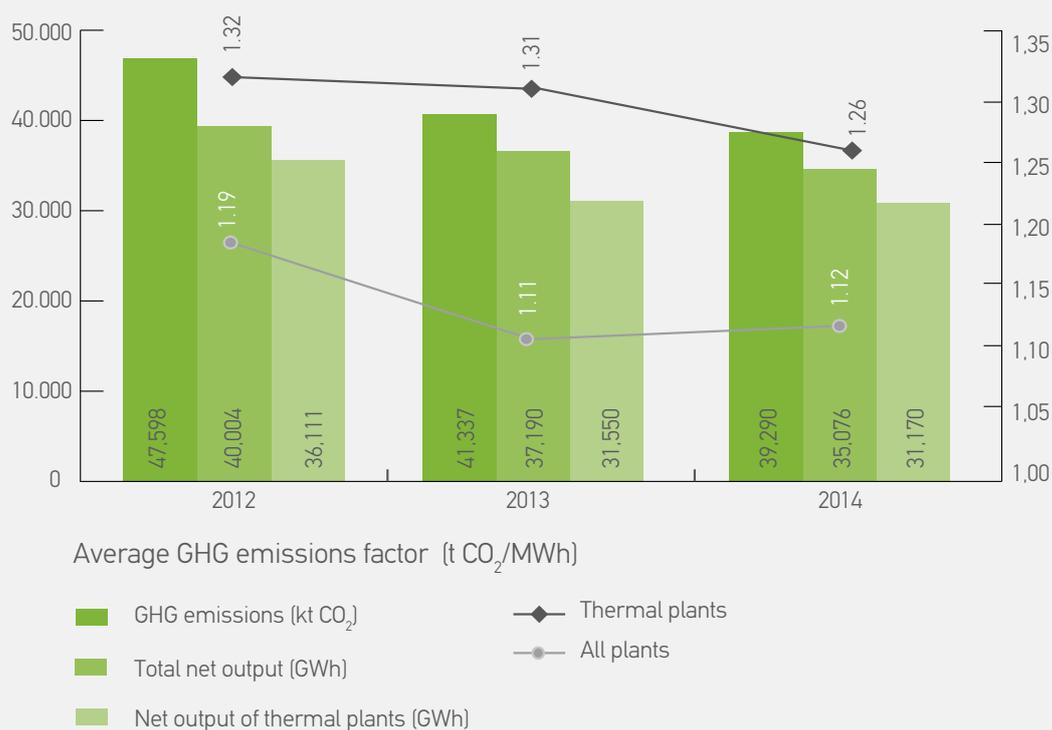
Note: Other indirect emissions from electricity imported by PPC are not counted since detailed data about the power plants and/or power systems that provide imported electricity are required, and that data is not available.

<sup>1</sup> The emission factor from the national emissions inventory has been used. To calculate the Global Warming Potential of methane, the value which appears in Annex III of Decision 24/CP.19 was used (GWP = 25) so that the relevant national obligations conform to the UN Framework Convention on Climate Change (UNFCCC) and European Commission figures. The entire time series was recalculated.

<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 greenhouse gas Protocol were used.

## Net output (in GWh) and greenhouse gas emissions (in kt CO<sub>2</sub>) from generation plants



In 2014 the average rate of CO<sub>2</sub> emissions by PPC thermal plants (1.26 t CO<sub>2</sub> / MWh) was down 3.8% compared to 2013 (1.31 t CO<sub>2</sub> / MWh) while the average emission rate for all plants (thermal and hydroelectric) was up 0.8% (from 1.11 t CO<sub>2</sub> / MWh in 2013 to 1.12 t CO<sub>2</sub> / MWh in 2014).

- The values of the average thermal plant emission rate depend on the quality of the lignite extracted and the percentage of lignite and natural gas used to produce electricity. In 2014, net energy production by lignite plants dropped by 2.25% while net production by natural gas plants remained practically the same as in 2013 (down just 3 GWh). In addition, the final withdrawal from service of old, inefficient power plants and minimal use of others had a positive impact on greenhouse gas emissions (for more information see paragraphs 6.3 and 6.4 below).
- The value for the overall emission rate is affected to a major degree by the productivity of hydroelectric power plants. In 2014, the quantity of electricity produced by hydroelectric power plants dropped by 31% compared to 2013 (which was a year with high hydraulicity) meaning that the contribution hydroelectric power plants made to overall power production

by PPC plants was down to 11% of net output in 2014 (compared to 15% in 2013).

Overall, PPC has managed to reduce the CO<sub>2</sub> emissions rate of its overall power production system by around 15% compared to 1990 (1.3 t CO<sub>2</sub> / MWh).

### 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 2014 all pollutant gas emissions fell compared to 2013. Particle emissions dropped by more than they did in 2013 (19%, while in the period 2013/2012 there had been an increase in such emissions). This drop in particle emissions and the general drop in pollutant gas emissions was due to the final withdrawal from service of old lignite plants (for more information see paragraphs 6.3 and 6.4 below) and an increase in the usage rate of desulphurisation units.



Pollutants	Emissions in 2012 (tons)	Emissions in 2013 (tons)	Emissions in 2014 (tons)
Sulphur oxides (SO <sub>x</sub> )	93,500	58,200	52,500
Nitrogen oxides (NO <sub>x</sub> )	69,300	56,200	50,000
Particle emissions (PM)	15,600	15,700	12,700
Pb	1.23	1.12	1.02
Ni*	26.8	24.48	22.40
Cu	1.06	0.97	0.89
Cr(tot)	2.0	1.85	1.69
Zn	8.23	7.53	6.89
Cd	0.075	0.069	0.063
Hg	1.38	1.26	1.15
As	0.71	0.65	0.59

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).

The Transitional National Emissions Reduction Plan for the period 2016–2020 (in implementation of Article 32 of Directive 2010/75/EU) requires a linear reduction (between 2016 and 2019) of overall annual emissions by units included in the plan (for SO<sub>2</sub> and particles), while also allowing gradual implementation of the necessary environmental investments at those plants, while for NO<sub>x</sub> emissions, compliance must take place by 1.1.2016. The Plan includes the Agios Dimitrios, Meliti, Megalop-

olis I and II steam electric plants and the Amynteo and Kardia steam electric plants are under a limited-duration 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.



Unit	Completion target	
	Reduce NO <sub>x</sub> 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	-

The investments being made primarily relate to projects to reduce NO<sub>x</sub> emissions (such as replacing existing burners with new low-NO<sub>x</sub> emission ones, installing additional and/or modifying existing gas afterburn systems, recycling cold flue gases and in general anything other primary measures deemed necessary to achieve the targets set) at the Agios Dimitrios and Megalopolis steam electric plants, as well as projects to reduce SO<sub>2</sub> emissions at the Agios Dimitrios steam electric plant. These investments will cost approximately € 170 million. The relevant procedures for implementing the works and signing the relevant contracts are under way. We would cite the following points in this regard:

- A decision has been taken to construct a flue gas wet desulphurisation plant at Unit V at the Agios Dimitrios steam electric plant (forced oxidation wet desulphurisation using lime). The project tender notice was published on 26.2.2015. (Project budget: € 75 million).
- After an international lowest bidder tender procedure was launched on 7.10.2013, the contract for the project entitled "Upgrade of boiler at Unit V of the Agios Dimitrios Steam Electric Plant to reduce NO<sub>x</sub> emissions by taking direct measures" was signed with SOLERGON S.A. on 24.6.2014 (contractual price: € 2.94 million). The project is currently in the configuration and testing phase.
- It has also been decided to use dry desulphurisation at Units I to IV of the Agios Dimitrios Steam Electric Plant by injecting absorbent materials into the flue gas pipes before the new electrostatic filters (based on tests which produced positive results in 2015 at Unit III of the Agios Dimitrios Steam Electric Plant). If dry desulphurisation cannot be used, wet desulphurisation will be used instead.
- On 7.8.2014 the tender notice for the project entitled "Upgrade of boilers at Units I and II of the Agios Dimitrios Steam Electric Plant to reduce NO<sub>x</sub> emissions by taking direct measures" was announced while a similar project for Units III and IV at the Agios Dimitrios Steam Electric Plant was announced on 26.1.2015 (with a budget of € 29.5 million for each project). At present the recommendation to award the project to reduce NO<sub>x</sub> emissions at Units I and II to the lowest bidder METKA S.A. at a price of €13.75 is currently being prepared, based on the evaluation of the tenders submitted. The contract is expected to be signed with the contractor in July 2015. The technical tenders for the project to reduce NO<sub>x</sub> emissions at Units III and IV are currently being evaluated.
- Limited interventions will be needed at the Meliti and Megalopolis I and II Steam Electric Plants, without the



burners having to be replaced in order to achieve NO<sub>x</sub> emission reductions. A project relating to this matter is expected to be announced.

- On 30.6.2014 a tender procedure for the project entitled "Interconnection of alternators at the Agios Dimitrios Steam Electric Plant" was announced. The contract was signed on 29.5.2015 with the project contractor ERGOTEM S.A. (contractual price: € 2,884 million).

In order to monitor pollutant gas emissions, 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. 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.

The Vice Chairman and Deputy CEO have issued a decision setting up a Critical Environmental Issues Management Team comprised of staff from the Generation and Mines Divisions. The team's task is to constantly monitor the results of air quality measurements and to develop a specific strategy to deal with limit exceedances of the permissible limits to the minimum possible.

In mid-2014 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 being implemented on behalf of the West Macedonia Lignite Centre were completed. The results of those projects are expected to be used in the design, planning and implementation of measures to monitor and check suspended particles emitted from mining operations.

### 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.

- 253 kg of ODS (R22) were used to top up existing facilities in 2014 (or 13.92 kg of CFC-11 equivalent).
- The fluorinated greenhouse gases used in air-conditioning facilities are R407C, R410 and MO29. 365 kg, 45 kg and 87 kg were used respectively to top



up air-conditioners. These quantities correspond to emission of 979 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 greenhouse gas 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<sub>2</sub> emission factor of the PPC's electricity generation system over time

### PPC's capital expenditure 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, environmentally-friendly, cutting-edge, more efficient power plants. The following can be noted regarding the progress of the relevant investment projects in 2014:

- 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 12.08.13 and in February 2014 the unit was entered in the Register of Units and the Dispatchable Units Register held by IPTO.
- The natural-gas fuelled Megalopolis V combined cycle plant, with a net capacity of 811 MW, is expected to be put into commercial service in the second half of 2015. IPTO S.A.'s accompanying works to build the

Megalopolis 400 kV super-high voltage centre and HGTSO S.A.'s works to build a high pressure natural gas pipeline from Agii Theodori to Megalopolis have been completed and the Unit is currently undergoing tests. The process to renew the installation license and review the building permit are currently under way.

- On 1.7.2015 a building permit was issued to allow the new steam electric plant at Ptolemaida (Unit V) with a gross capacity of 660 MW fuelled by pulped lignite, capable to generating 140 MWth of thermal power for a district heating scheme, to be built. Work is expected to commence at the worksite soon. There are plans to install a CO<sub>2</sub> capture and compression system at this unit (which will replace the current Ptolemaida Steam Electric Plant) when CO<sub>2</sub> capture technology is ready.

In 2014 the plan to withdraw old units from service continued. The units to be withdrawn from service are chosen based on criteria to do with their technical and economic obsolescence, and the inability (in technical and financial terms) to adapt them to new stricter environmental requirements. The commitments undertaken at national level to address climate change, and combat air pollution have also been taken into account. With that in mind:

- The lignite units Megalopolis I and II, the LIPTOL I and II steam electric plants (RAE Decision No. 111/2014) and Ptolemaida I steam electric plant (Decision No. Δ5/H/A/Φ.7/161/3800/9.3.2011) and II (RAE Decision No. 654/2014) have been withdrawn and completely shut down. Those units represented a total installed capacity of 488 MW.
- The natural gas units Lavrio III and Agios Georgios 9, with a total installed capacity of 376.5 MW have also been withdrawn from service once and for all (RAE Decision No. 654/2014).
- In 2014 Units III and IV at the Aliveri steam electric plant continued to operate only minimally (only for the hours needed to ensure system reliability and/or in cases of problems with natural gas supplies), which was also the case for Units I and II at the Lavrio steam electric plant. RAE decided that they oil-fuelled plants (with a total installed capacity of 430 MW) should operate as emergency reserves up until the end of 2015.
- There are also plans to withdraw other lignite plants at the Ptolemaida steam electric plant from service (units III and IV with an installed output of 425 MW) which have been out of operation since November 2014 following a fire at the plant. PPC has filed a request to the Ministry for Productive Recovery, the Environment & Energy to examine the possibility of

Ptolemaida III being reopened by including it within a limited-duration derogation under Article 33 of Directive 2010/75/EU because of special circumstances (district heating scheme in the town of Ptolemaida, until the new Ptolemaida V unit comes online).

More information about the PPC Capital Expenditure Plan is included in the 2014 Annual Report (pages 25-31 and 131-135).

## 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 hydro-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 hydro-potential to ensure that supply meets demand in each local catchment area. Today, PPC owns and operates 16 major hydroelectric power plants in various regions of Greece.

Note that the Sfikia hydroelectric power plant on the Aliakmon River and the Thisavros hydroelectric power plant on the Nestos River are pumping plants which store excess hydroelectric energy to distribute it when there is excess demand compared to output.

As far as the development of hydroelectric power plants is concerned (see the 2014 Annual Report for more information), the Hilarion HPP was put into commercial service in 2014 (it has an installed capacity of 157 MW and estimated net electricity output of 330 GWh). As far as the Mesochora hydroelectric project on the upper reaches of the Acheloos River, with units whose capacity is 2x80 MW and 1x1.6 MW, is concerned, after the decisions approving the catchment basin management plans for rivers in the Western Mainland Greece water region and the Thessaly water region were published in the Government Gazette (Government Gazette 2562/B/25.9.2014, and Government Gazette 2561/B/25.9.2014 respectively), a comprehensive Environmental Impact Study for the hydroelectric project was submitted to the Environmental Authorisation Directorate of the Ministry for Productive Recovery, the Environment & Energy. Approval is expected to be given and the Joint Ministerial Decision approving the environmental terms and conditions for the project, as a project separate from and independent of the river diversion works, will be issued. This will mean that

PPC can carry out the rest of the works and complete the compulsory purchases of land needed to allow the diversion tunnel to be blocked up and allow the reservoir to start filling up. This should enable the project to be put into commercial service in 2017. Legislative reforms tabled by the Ministry for Productive Recovery, the Environment & Energy are also expected to be made, which will classify the project as separate from and independent of the works to divert the Acheloos River towards Thessaly.

### EU Emissions Trading Scheme

The Emissions Trading Scheme (ETS) is one of the European Union's main tools for reducing greenhouse gas 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 the free allocation that was in force from 2005 to 2012). More information on the regulatory framework governing ETS operations can be found on the websites of the Greek Ministry for Productive Recovery, the Environment & Energy (<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](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 2014 were 102,836 (for running the district heating schemes at the LIPTOL, Ptolemaida, Agios Dimitrios, Amynteo, Megalopolis I and Kardias Steam Electric Plants), and PPC handed back 39.2 million allowances. The cost of purchasing these allowances was € 216.9 million, up € 29.4 million compared to 2013 due to the higher average cost of CO<sub>2</sub> emission allowances.

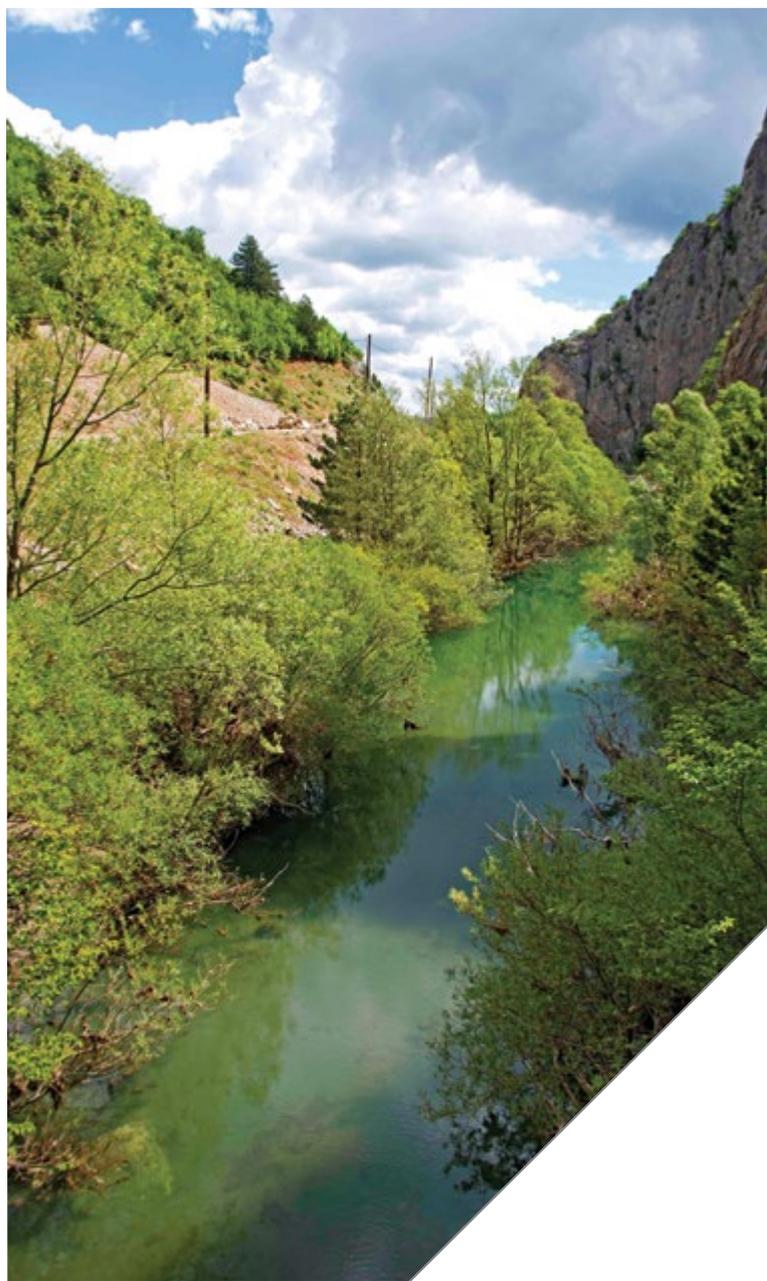
### Other initiatives

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. On 24.9.2014 PPC organised an international conference in Athens on electrification where the results of the programme were presented.



- The Corporation is participating the EU's Greenbuilding scheme to carry out energy improvements to and obtain certification for buildings. It has included its buildings in Kallithea (covering 1,400 m<sup>2</sup>) and Pagra-ti (covering 1,075 m<sup>2</sup>) that house customer service facilities in the scheme. Energy saving measures with a total capacity of 288 MWh were implemented at these buildings (which accounts for around 68% of consumption at the buildings before the measures were taken).
- PPC is also participating in EURELECTRIC's climate change adaptation working group, which it represents on the EU's Adaptation Steering Group.
- PPC is a member of the World Business Council for Sustainable Development (WBCSD), and sits on the working groups on electric utility, energy efficiency, smart grids, and water.
- A MoU has been signed with the Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing (IAASARS) of the National Observatory of Athens to develop methods to monitor and manage the risk of flooding. This will be deployed initially in the sub-basins of the Arachthos River as part of the research programme entitled "BEYOND – Building Capacity for a Centre of Excellence for EO-based monitoring of Natural Disasters".
- A contract was signed with the Special Secretariat for Water to digitise rainfall and water level records from the hydro-meteorological network run by PPC's Hydroelectric Production Department for the period 1997-2012, to update the National Hydrological and Meteorological Databank (HYDROSKOPIO) and meet the Special Secretariat for Water's urgent needs to prepare flood risk maps in line with Directive 2007/60/EC. Note that a large part of this data is unique to Greece and utterly essential to prepare flood risk management plans. As part of the contract, requests for data from design consultants throughout the year will receive a quick response, and the National Hydrological and Meteorological Databank has already been updated.

## 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, with a view to maximising the overall social and environmental benefits.

PPC also places particular emphasis on systematically monitoring the country's hydrological potential by maintaining a model monitoring network, which includes a highly reliable rain and meteorological network, with 179 metering stations primarily in mountainous areas, and a hydrometric network comprised of 45 stations that measure flow levels in rivers. It should be noted that in 2013 an open tender procedure was conducted to install ten automatic telemetry stations measuring physico-chemical parameters that will be placed in different lakes nationwide. It is expected that work to install and commission these stations at reservoirs will be completed during 2015.

In addition to using data from the hydro-meteorological network for the PPC's own purposes, and to ensure safe planning of public and private works, the data also provides Greece's public authorities and other parties concerned with valuable information to help them effectively manage and protect the aqueous environment. In this context:

- A 2-year partnership has been developed with the Land Improvement Institute of the Greek Farming Organisation (DIMITRA) under private agreements signed on 24.12.2013, to monitor the quantity of water at 7 hydrometric stations in the national monitoring network as part of the integrated protection and management of water under Directive 2000/60/EC.
- The JointWaterS programme, a cross-border partnership between Greece and Albania, as part of the European cross-border programme IPA Greece – Albania 2007-2013, was successfully completed. It involved joint planning and implementation of a programme to monitor water in the Aaos River, and in particular to explore manmade pressures on the fish population in the area. The Hydrology Sector of the PPC's Hydroelectric Production Department was one of the Greek partners in the project along with the Epirus Water Directorate (leader) and the Greek Biotope/Wetland Centre. The Hydrology Sector's role was to procure and install two stations to monitor physico-chemical parameters and the level of water in the cross-border Aaos and Sarantaporos Rivers, and to provide the Albanian side with know-how about how to procure and install similar stations on the Vjosa (Aaos) River.
- Hydro-meteorological data continued to be provided free of charge to support education and research activities in the field of water resources.



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 features). Information about the NATU-

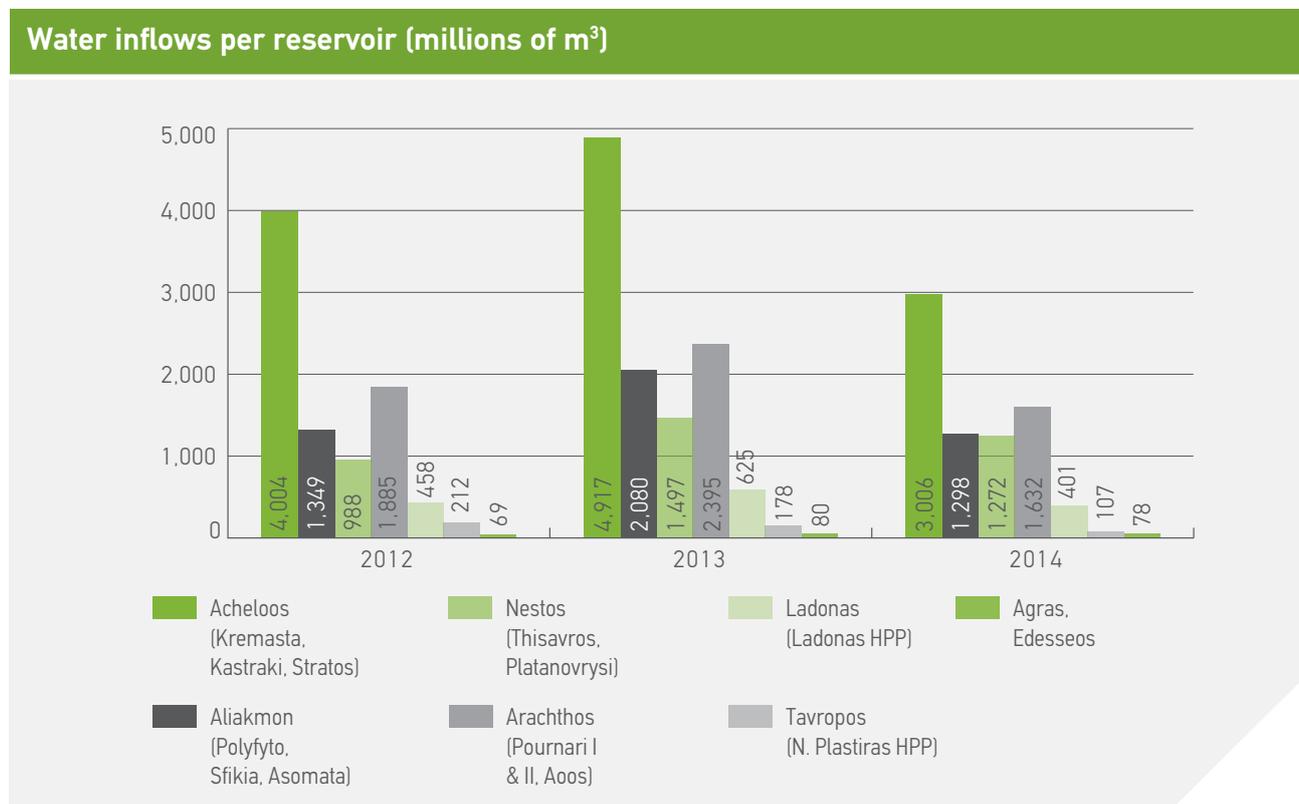
RA 2000 European Ecological Network can be found on the Ministry for Productive Recovery, the Environment & Energy website (<http://www.ypeka.gr/Default.aspx?tabid=432&language=el-GR>).

Name of water source	Type	Protection regime
Almyros, Chania*	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, Chania, source is within the PPC Renewables jurisdiction. According to the contract between PPC and PPC Renewables, responsibility for operating the hydroelectric power plant and monitoring the quality of water in the reservoir lies with the Chania Power Plant, in implementation of the Joint Ministerial Decision on the environmental terms and conditions for the plant

## Water management at hydroelectric power plants

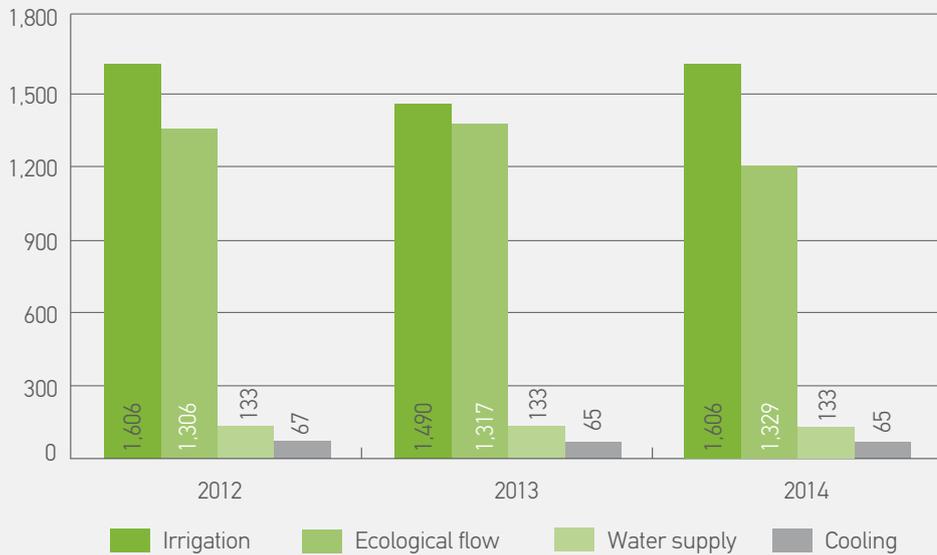
2014 was a year with average to low hydraulicity, with water inflows to reservoirs down around 35% compared to 2013.



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.

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

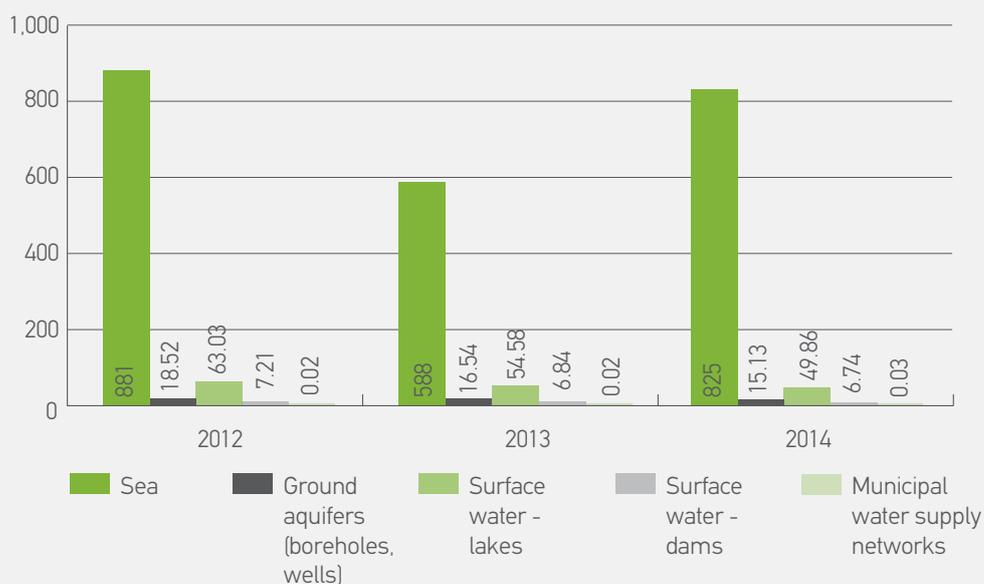


Note: The PPC reservoirs mostly provide water to Thessaloniki, Agrinio, and Karditsa, Lefkada and many lakeside areas.

### Water management at thermal power plants

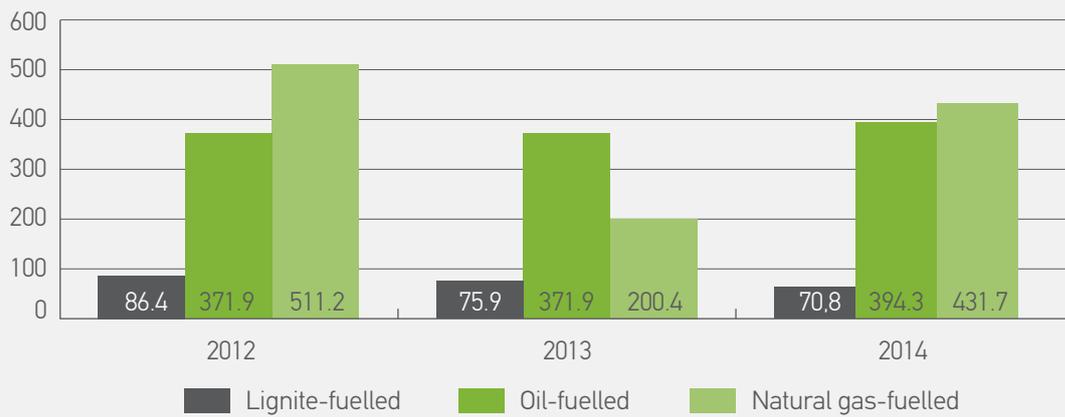
Water is abstracted in the area around thermal power plant projects for various uses, such as for cooling the power generation towers.

### Quantity of water drawn from abstraction sources (millions of m<sup>3</sup>)



Note: This includes the quantity of seawater used for cooling (2012: 880 million m<sup>3</sup>, 2013: 585 million m<sup>3</sup>, 2014: 822 million m<sup>3</sup>).

## Quantity of water drawn per category of thermal power plant (millions of m<sup>3</sup>)



*Note: This includes the quantity of seawater used for cooling (2012: 880 million m<sup>3</sup>, 2013: 585 million m<sup>3</sup>, 2014: 822 million m<sup>3</sup>).*

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 23.02% for the lignite-fuelled plants and 0.31% for oil 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

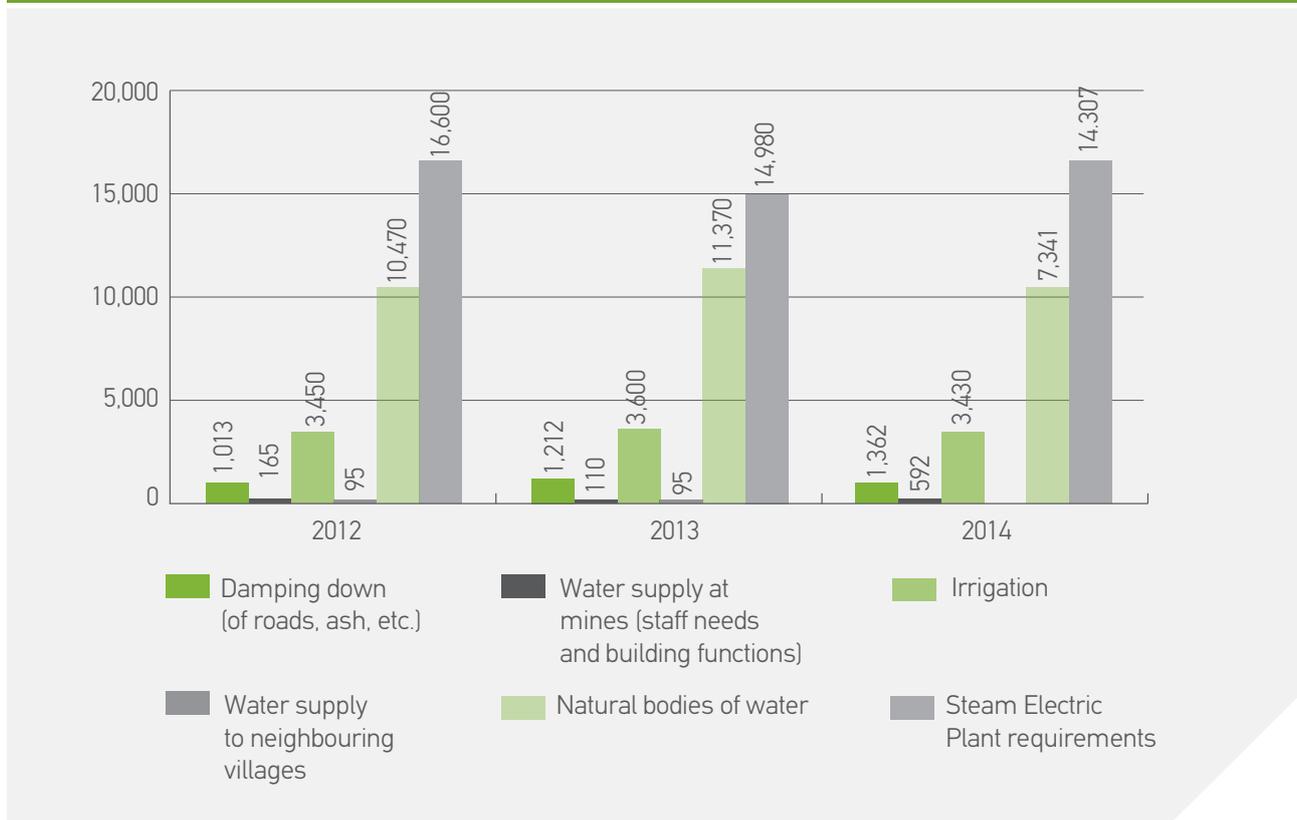


communities, water is made available to neighbouring municipalities to irrigate local crops or for other uses. At the same time, excess amounts of water are returned to natural bodies of water in the region, thereby improving the water balance and their overall quality, since the water is groundwater abstracted from

boreholes.

It should be noted that the Corporation makes a positive contribution to maintaining the Soulou artificial moat in the Ptolemaida area, 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 waste and waste in liquid form

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 2014 hazardous waste -2 tons of PCBs, 33.94 tons of asbestos and materials containing asbestos and 6.9 tons of hazardous organic chemicals- were shipped. In addition to those, PPC used alternative management schemes to handle 17.2 tons of batteries, 0.02 tons of mercury waste and 4.98 tons of contaminated packaging.

Waste description	Quantity (tons)	Management method
<b>Material, Fuel, Purchasing And Transportation Department</b>		
Metals (iron, steel, steel ropes, etc.)	6,284.72	Sale through highest bidder tenders
Different types of cables	74.72	
Surplus materials (vehicles, spare parts, machinery, etc.)	2.00	
Waste oils / lubricants	2,721.51	
<b>Thermal Power Plants Operations Department</b>		
Print toner waste containing hazardous substances	0.13	Disposal
Fly ash and dust from diesel boilers	59.57	Recovery
Sludge from onsite treatment of discharged liquids containing hazardous substances	145.01	Recovery
All types of mineral oil	856.83	Recovery
Waste oil and diesel	1,019.80	Recovery
Packaging containing residues of hazardous substances or that have been polluted with hazardous substances	13.65	Recovery
Absorptive materials, filter materials, wiping cloths, protective clothing polluted with hazardous substances	37.31	Recovery / disposal
All categories of batteries and accumulators	5.79	Recovery
Waste containing oil	242.84	Recovery / disposal
Soil and stones containing dangerous substances	10.50	Disposal
Construction materials containing asbestos	20.52	Disposal
Fluorescent tubes and other mercury-containing waste	5.56 and 15 skips	Recovery
Electronic and electrical equipment waste (municipal waste)	0.90	Recovery
<b>Mines Environment Department</b>		
Ferrous scrap metal	7,704.69	Recovery
Used pipes (65% copper content)	107.01	Recovery
Used lead accumulators	29.11	Recovery
Plastic rings	143.65	Recovery
Used contaminated absorbents and filters	41.22	Recovery
Waste from electronic equipment	2.27	Recovery
Lights and fluorescent light tubes	36.58	Recovery
Waste oils / lubricants	419.09	Recovery
Soil contaminated by oil spills	106.02	Recovery
Paper	37.00	Recovery
Scrap timber	56.01	Recovery
Used pneumatic tires	120.90	Recovery
Empty barrels that contained lubricants	6,508 items	Recovery
Empty print cartridges	229 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.*

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 expected to be completed in mid-2015 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.

In addition to this, in 2014 the company Fotokyklosis picked up 1,123 kg of waste electrical and electronic equipment to be recycled. Most of this consisted of light bulbs.

### Use of by-products

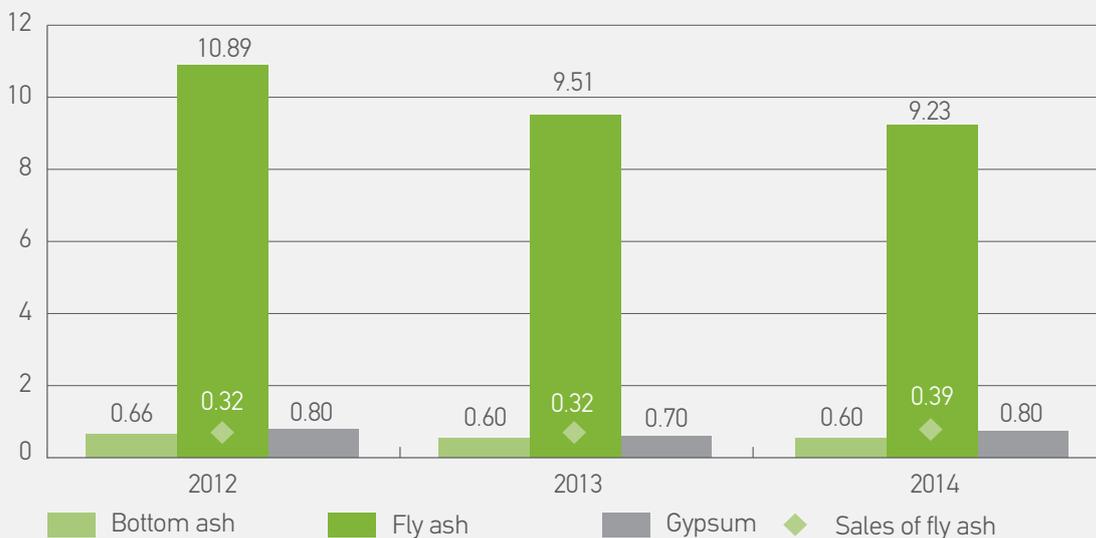
The main PPC by-product is ash (fly and bottom) while gypsum is produced in large quantities by the desulphurisation units of thermal power stations. PPC has already recorded the quantities of ash it commercially trades, in line with the European REACH Regulation (registration number: 01-2119491179-27-0086). 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.

In 2014, the burning of lignite at the Corporation's thermal power plants produced nearly 9.2 million tons of fly ash, 0.6 million tons of bottom ash and 0.8 million tons of gypsum.

- 7.4 million tons of ash were deposited along with inactive materials in the mines of the Western Macedonia Lignite Centre.
- 0.5 million tons of ash and 0.1 million tons of gypsum were deposited in a specifically licensed area near the Meliti Steam Electric Plant.
- 2 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 2014 amounted to 0.4 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.

### 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 Corporation's mines.

## Liquid manure

All power plants operated by the Corporation have state-of-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 wastewater

is either disposed of into natural bodies of surface water or ground water depending on the location of the facility and the authorisations in place. The Corporation systematically monitors the quantities and characteristics of the waste generated and briefs the competent authorities on a regular basis as it is obliged to.



	2012	2013	2014
<b>Sea water for cooling (m<sup>3</sup>)</b>			
Lignite plants	-	-	-
Diesel plants	371,140,372	387,630,051	392,074,665
Natural gas plants	508,472,959	197,577,810	429,963,425
<b>Treated liquid waste (m<sup>3</sup>)</b>			
Lignite plants	34,257,372	29,116,730	30,022,771
Diesel plants	155,485	143,512	155,463
Natural gas plants	1,416,883	1,320,987	554,760

*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 2014 was approximately 25.8 million m<sup>3</sup>.

## 6.7 Biodiversity

Protecting biodiversity is an integral part of the PPC environmental policy. The Corporation takes measures in line with the applicable legislation and decisions approving the environmental terms and conditions for running its power plants (and the technical studies that accompany the applications submitted to the competent authorities) to manage the natural environment in areas where it operates, to extract lignite and generate electricity. These measures are designed to maintain or restore natural habitats and species of wild flora and fauna to a favourable level of conservation. As far as technically feasible, it also employs pollution abatement technologies and best practices to limit the pollution load generated for all possible media and to minimise the impact of PPC operations on the environment and the ecosystem. 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.

For a number of years now PPC has been implementing extensive soil rehabilitation programmes for soils affected by mine operations. Around 4,000 hectares at the Western Macedonia Lignite Centre have undergone rehabilitation so far. Plantations have been set up with forest species, covering around 2,000 hectares (so far 27,200 acacia saplings, 2,750 maple saplings and 1,770 pine saplings have been planted). The plantations are particularly beautiful ecosystems which are home to a variety of wildlife. 1,400 hectares of farmland have also been created which have been given over to local farmers to be cultivated. The remaining 600 hectares have been set aside for special land uses. Around 700 hectares so far have undergone rehabilitation at the Megalopolis Lignite Centre, with plantations of forest species having been created on an area of 500 hectares and 200 hectares given over to farming. In addition, 170 hectares have been set aside for special land uses and another 200 hectares will be used to construct a photovoltaic farm.

In 2014 PPC leased the following areas of cultivable land to others:

- 14 model farms at the Megalopolis Lignite Centre.
- 760 hectares at the aggregate deposition sites at the Ptolemaida Mines.
- 370 hectares at the aggregate deposition sites at the Amynteo Mines

Rehabilitation projects were put to special uses such as a pilot hydroponic greenhouse heated by a district heating scheme in cooperation with the National Agricultural Research Institute and the Florina Technological Educational Institute, artificial wetlands, a forestry park, outdoor disposal areas at the Main Field Mine in Western Macedonia planted with all species of trees that flourish in Northern Greece, leisure parks, exhibition centres, waste disposal facilities, a nursery for small birds and animals, and moto-cross tracks, to name a few.

Other actions taken by PPC to protect biodiversity are:

- Artificial plantations of forest species have been created based on the species deemed suitable for the specific location of the mine deposition sites,
- Artificial nests and habitats have been created and small wetlands developed to encourage a growth in bird populations, and
- Partnerships have been developed with universities to record and rescue the brown bear population (endangered species, EN for Greece, least concern, LC, for Europe and vulnerable, VU, internationally).

### 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 2014
<b>River Nestos and the Thisavros and Platanovrysi Reservoirs</b>	<p>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."</p> <p>PPC/Nestos Complex is also cooperating with the Interbalkan Environment Centre to implement actions to measure quality and biological parameters on river and lake waters in the Nestos system.</p> <p>Dams and the surface of reservoirs in the immediate area around dams are regularly cleaned to remove wood and rubbish.</p>
<b>Nestos River</b>	<p>The power plants are scheduled to operate so as to ensure that the minimum flow in the bed of the river downstream of the PPC S.A. works required for ecological purposes is maintained.</p> <p>A pond to allow fish species to acclimatize has been built downstream from the Platanovrysi hydroelectric power plant before the delta of the Arkoudorema stream, and a sensor installed to measure water levels in the river at the same location.</p> <p>Measures to transfer fish upstream and downstream of the PPC dams on the River Nestos continue to be implemented.</p>
<b>Wider area around PPC projects on the Nestos River</b>	<p>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.</p> <p>A comprehensive study is being prepared to determine the boundaries of inundation zone of the bed of the Nestos River downstream of the Platanovrysi dam as far as the delta for various levels of flooding, and the impact of the flood wave should dams on the Nestos River fail within the administrative boundaries of the Prefectures of Drama, Kavala and Xanthi.</p>

Natural area	Protection / rehabilitation actions in 2014
<b>Hilarion HPP</b>	Special technical studies are being prepared (a) to conserve fish stocks and (b) conserve and attract bird species into the area around the Hilarion HPP's reservoir. A water quality characteristics study for the Hilarion reservoir is also being prepared.
<b>Arachthos complex</b>	A crane bridge was installed and commissioned at the weir of the Pournari I hydroelectric power plant to clear sediment from the reservoir from the area of the dam. The Hydroelectric Production Department also completed the study on a comprehensive plan to manage and showcase the area around the Pournari I and II hydroelectric power plant reservoirs, which was commissioned by the Arta Regional Unit.
<b>Acheloos Complex – Kremasta HPP</b>	A system to collect oil beneath the units' transformers was constructed.
<b>Aliakmon Complex – Asomata hydroelectric power plant</b>	Mulch was spread over an area of 0.2 ha on the left bank of the river after the hydroelectric power plant to prepare the soil for future tree planting. Ongoing action.
<b>Plastiras HPP</b>	A study was carried out about a planting scheme to create sections or zones of interest.
<b>Ladonas HPP</b>	In the first 2 months of 2014, 630 shrubs and trees were planted based on a special forestry study which had been prepared and watering commenced. A tank was built to collect and separate oil from the units' turbines, which was installed just before the drainage tank. A study / research programme entitled 'Exploratory examination of the potential for interventions in the area of the Ladonas River and Reservoir' was completed and delivered. The study had been assigned by the Mun. of Gortynia to the National Technical University of Athens, and was prepared in cooperation with PPC.

### NATURA 2000 protected areas

The areas here PPC engages in mining operations are not located in NATURA 2000 network areas or other protected areas. The Corporation's hydroelectric power plants located inside protected areas (based on

NATURA maps provided by the Ministry for Productive Recovery, the Environment & Energy) occupy an area of 65.30 km<sup>2</sup>.

Water Source Name of a NATURA 2000 Area	Area of PPC's Hydroelectric Facilities within protected area (km <sup>2</sup> )
Almyros, Chania*	0.08
Aliakmon (Asomata HPP)	2.50
Agras	8.08
Nestos (Thisavros)	18.00
Nestos (Platanovrysi)	3.00
Aoos	8.64
Tavropos (Plastiras HPP)	25.00
<b>Total</b>	<b>65.30</b>

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

## 6.8 Regulatory and Legislative Compliance

PPC seeks to fully comply with national and European legislation and regulations on environmental issues. However, during 2014 PPC paid fines of € 369,000 relating to planning law violations and failure to comply with the provisions of the existing legislation when carrying out work on mines and power plants.

In 2014 fines of € 216,500 were also imposed on PPC in relation to compliance with the environmental terms

and conditions 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 2014 no fine was imposed on PPC in this regard.



# Market and Customers





# 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 newspapers and street/square lighting tariffs).

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. Based on December 2014 data, PPC had 19,000 small customers in the Universal Service scheme.

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

### Pricing Policy

To come into line with European rules on cost-reflective tariffs, in July 2014 charges in certain tariffs relating to SMEs and holiday and second homes were adjusted. 1.4 million SME consumers (offices, small shops, bakeries, workshops, small industries, machine shops, etc.) enjoyed reductions.

True to its strategic business choice of supporting Greece's producers, having first reduced tariffs for SMEs, in October 2014 PPC announced major commercial incentives via its new discount policy for medium- and large enterprises effective from 1.1.2015. PPC's discount policy now not only covers medium voltage customers but also low voltage ones, and the consumption limits have been extended accordingly. The discount applies to the entire competitive element of the medium and low voltage tariffs for customers in the discount scheme.

In doing so, PPC has provided a practical demonstration that it is there for business users of electricity, helping significantly reduce their business operating costs and bolstering their endeavours to improve their competitiveness.

After conducting an open tender procedure, a contract was also signed to develop a single model for preparing PPC's pricing strategy and the individual pricing policies used by the Supply Division.

### New electricity supply agreements with high and medium voltage customers

Following a decision taken by the Corporation's Board of Directors on 1.8.2013, seven new tariffs were approved for high voltage customers and eight new tariffs for medium voltage customers, applicable to electricity consumed from 1.11.2013 onwards.

On 28.2.2014 PPC held its Extraordinary General Meeting of Shareholders which decided, inter alia, to approve specific discounts to approved high voltage tariffs for 2014, with the option to extend this for a further year. New supply agreements with almost all high voltage customers were signed pursuant to that decision.

PPC invited medium voltage customers to sign new supply agreements, with the option to choose the most suitable new tariff in their view.

All medium voltage customers with the right to choose a new competitive BM-type tariff, signed new supply agreements.

### 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 54% 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.

After the Ministry for Productive Recovery, the Environment & Energy 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 2014, a total of 816,253 applications for special tariffs were submitted. 74% of these have been approved (604,861 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 now under than € 20.
- Customers can now apply over the phone by calling 11770.
- 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.



Beneficiaries of special tariffs	No. of Applications	Approved applications
The disabled	158,796	114,953
The unemployed	112,972	90,587
Individuals requiring mechanical support	9,197	8,214
Large families	1,422	694
Families with 3 children	60,579	39,303
The elderly (over 70)	11,639	10,421
Low income customers	461,648	340,689
<b>Total</b>	<b>816,253</b>	<b>604,861</b>

Several mass media carried stories that PPC was responsible for the death of individuals requiring mechanical support to stay alive but in announcements it issued the Corporation stressed that:

- In the case of individuals requiring mechanical support to stay alive who were entered in the Vulnerable Customers Register the Corporation had never cut off a residential electricity supply due to an outstanding debt during the entire year (not only during the months when the official codes expressly forbade it).
- Power was not cut off because of debt of anyone on the Social Residential Tariff.
- If customers submitted paperwork demonstrating they needed an uninterrupted power supply at home for medical reasons, the Corporation took special measures to ensure that power would not be cut off if there was any debt.

### 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 aim was to develop the e-bill taking into

account market best practices so that the bill is eventually only available online.

In January 2014 the Corporation also launched a special campaign to raise awareness among consumers about the e-bill info service.

By the end of 2014, 450,000 customers had registered for the e-bill service.

### Guarantees of Origin

Guarantees of origin confirm to anyone concerned that the quantity of electricity consumed at his facilities has been produced from Renewable Energy Sources and has been specifically set aside by the producer (PPC in our case) in his name. Each guarantee of origin relates to 1MWh.

In 2014 we branded this new product, designed a logo for it which will be accompany it in any way it is used, and the advertising material was finalised and printed, and first contacts were made with customers to register and record their opinions and views. In the final stage, the Supply Division, working with Legal Services, is examining the legal framework governing this form of activity, and we expect this process to be completed in mid-2015.



## Nationwide customer service line

PPC customers can now dial 11770 to receive customer service rather than visiting one of our branches. A comprehensive call centre was launched on a small-scale pilot basis in 2013, and was rolled out nationwide in September 2014.

## Alternative payment channels

To improve the services offered and reduce customer waiting time, contracts were signed with third parties to allow them to collect payments for PPC at more than 6,000 locations in Greece, which could be found using the Google Maps application. Those alternative channels are bank ATMs, Hellenic Post offices, WIND, VODAFONE and ACS Courier stores, large supermarkets, OPAP betting agencies, as well as bank standing orders or cash payments at automatic bill payment machines. Links were also developed for bank websites to allow bills to be paid automatically in complete safety.

The information campaigns about different modes of bill payment resulted in a gradual decrease in the number of visits to cashiers desks at our stores. The figure has dropped from about 60% in 2009, to 44%. Today more than 55% of customers pay their bills using channels other than PPC cashier desks.

At PPC we also closely watch how the use of different modes of payment by our customers is changing. 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.

## 'Discount policy' application for medium voltage customers

PPC has an application (Discount policy for medium voltage customers) which it uses to provide a discount to companies or groups with a total annual consumption at their premises connected to the medium or high voltage network, of over 10 million kWh.

## Repayment plans and disconnections

For several years now PPC has shown that it is a socially aware, responsible corporation by putting in place actions and measures, like the new Repayment Plan Rules, depending on the category of customers involved (residential, commercial, vulnerable groups, etc.) and how consistent they are in paying their bills, to ensure that they are all treated in a more favourable way, as a response to the challenges Greek households and businesses are facing in the current economic crisis.

In March 2013 before the new Supply Code was issued, to make it even easier for customers to settle their bills



to PPC, the Corporation's Board of Directors issued a decision to update the existing electricity bill repayment rules to provide more relief to vulnerable social groups and households.

To improve service to customers wanting to enter into a repayment plan and reduce waiting time at PPC stores, the Corporation started handling such requests over the phone in 2013. In 2014 around 160,000 such repayment plans were agreed over the phone, worth a total of € 107 million. Around 50% of the calls were just for information purposes.

In 2014 more than 400,000 repayment plans were agreed, worth more than € 600 million.

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 (7.3 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).

Based on data PPC has available to it, in 2014 HEDNO disconnected around 220,200 customers because of failure to pay.

Of those customers disconnected for failure to pay, only 50% have settled their debt or entered into a repayment plan. Customers like that are usually reconnected by HEDNO the same day. Of the other 50% of customers who were disconnected, more than half illegally reconnected their electricity supply by tampering with the meters, without paying the debt.

However, customers whose names are in the Vulnerable Customers Register based on the definitions of vulnerable customer provided by the State (those aged over 70 and people with 'large' families) and customers on the Social Residential Tariff (individuals on low income, those with three children, the unemployed, persons with more than 67% disability and persons needing mechanical support) do not have disconnection orders issued if they owe money. This is the case not

just during the 7 months specified in the new Supply Code (November to March and July - August) but during the entire year. The only exception is illegal activity on their part, such as theft of electricity.

## 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, electronic means of communication and social networking (Twitter, LinkedIn, Flickr, and YouTube) to communicate with its customers. In 2014, Twitter was used to disseminate 42 corporate news stories and customer service issues and 1 commercial communication spot from TV was 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](http://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.

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 2014 the website ([www.dei.gr](http://www.dei.gr)) received around 14,000 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 to PPC services no matter where they are. In 2014 PPC began redesigning the app to meet the modern-day needs of customers and this process was completed in mid-2015.

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 (7 stores were redesigned in 2014, namely the Koropi, Western Thessaloniki, Komotini, Patra, Kallithea, Drama and Trikala stores), stores have not only been revamped, making them safer and look better to reinforce the corporate brand, but also include special disability access ramps.

### **New Billing - Customer Care (SAP-ISU) system**

To constantly improve its services, PPC has installed a new, cutting-edge SAP system which will significantly improve customer service. The new SAP system is yet another important step towards modernising PPC so that its customers can enjoy better quality, faster customer service. The new medium voltage customers' computer system was also completed and customer data was rolled over to the new system on 31.1.2014 and the system became operational on 3.2.2014. High voltage customer data gradually began to be input on 3.10.2014. Low voltage customers will also be added to the system.

### **Centralising the accounting office / back office**

To ensure better customer service and to save both money and staff, the Supply Division has placed all back office functions in one sector. Work which used to be decentralised has been brought under one roof ensuring more rational management of accounting functions and faster customer service. The programme to centralise all accounting office / back office functions at the Attica Sales Sector and the Macedonia Sales Sector was completed in 2014 and it is gradually being rolled out to other sectors. The end goal is to merge these together into a single central accounting office / back office.

### **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. As a result of this process we developed the one-page bill and the e-bill, and as part of this process we are also planning new e-services for low voltage customers once the new IT system is fully installed.

PPC did not carry out a customer satisfaction survey in 2014 since the Corporation was continuing to work to take into account the results of surveys in previous years, and improve customer services by providing electronic services in accordance with modern demands for such services.

### 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 14,000 complaints - requests sent via e-mail in 2014, 15% were actual complaints, while the remaining 85% were requests and questions.

PPC's main objective is to ensure quality customer service and to handle customer requests as best it can. The Corporation has designed specific, uniform procedures to ensure rapid, effective handling of customer requests and complaints. These procedures are in line with the Supply Code (Government Gazette 832/B/9.4.2013) and in particular Annex III on principles for managing consumer requests.

To that end, in 2014 PPC drew up the Customer Requests and Complaints Management Code, which outlines the method and procedures customers must follow if they need more information or clarifications about the supply of electricity to their property and facilities, or want to make a request/file a complaint. The Customer Requests and Complaints Management Code is available on PPC's website (only in the greek version of the site).

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. The percentage of successful calls in 2014 dropped compared to 2013,

primarily because customers nationwide could receive comprehensive services relating to the commencement and termination of contracts over the phone.

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%
2014	2,960,373	89%

\*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.

Under current legislation (Law 4483/1965) internal electrical facilities must be re-inspected by licensed electrical fitters who issue a solemn declaration which is then submitted to HEDNO. Re-inspections must be carried out at regular intervals which are specified in Article 5 of Decision No. Φ.7.5/1816/88 of the Deputy Minister of Development (Government Gazette 470/5.3.2004). Homes must be re-inspected at least every 14 years.

New HEDNO guidelines state that re-inspections may be required under these provisions when properties are being reconnected to the grid or when a name is changed. A re-inspection is no longer needed when changing tariff, changing supplier or installing a night-time tariff meter.

In 2013, PPC developed a new website (<http://energy-saving.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.

Using interactive tools, users of the app can calculate their household electricity consumption and the benefits they could gain from making energy improvements. According to PPC data, in 2014 alone this website had 14,252 unique hits.

PPC continued its public information and awareness raising campaigns to promote energy savings and also distributed flyers on this topic. 10,000 flyers were handed out at PPC stores, as well as meetings and conferences in 2014.

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 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 2014 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.

## 7.5 Responsible Procurement

PPC signs contracts when purchasing materials and services to meet its needs and to carry out engineering works. Where possible, the Corporation makes agreements with local suppliers, contributing significantly to the development of the 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 know-how 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 recurrent non-compliance. When paying contractors, PPC requests proof that the contractor has complied with its obligations to its staff, and paid its employer social security contributions. 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.

## 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 2014.

In 2014 one candidate in a PPC tender procedure filed an administrative appeal against the Corporation in the pre-contractual stage, because the tender of another candidate in the tender procedure was accepted. It contested the technical evaluation. The case was resolved within 1 year since the candidate dropped the matter.

In 2014 there were 2 complaints from municipal water supply companies (from Mesolongi and Zakynthos) submitted to the Consumer Ombudsman and RAE about alleged illegal or excessive billing by PPC when supplying them with electricity. Both the Consumer Ombudsman and RAE rejected the complaints as unfounded.

There was another complaint from the Thessaly Consumers Institute about 2 terms in low voltage electricity supply agreements. Acting on recommendations from the Consumers Institute, PPC withdrew the 2 contested terms in the process of updating the agreements, which is something it does regularly in any event.

In 2014 there were 3 cases pending concerning unfair competition practices by PPC. In 2 decisions (one dating from 2013 and the other from 2014) RAE referred the Corporation to the Hellenic Competition Commission for a further investigation to be carried out into the competi-

tion law aspects of the Corporation's practice of offsetting its claims against LAGIE (the Hellenic Electricity Market Operator). PPC has contested the RAE decisions before the administrative courts and consequently the case before the independent authorities is under way. At the end of 2013 a private company filed a complaint before the Hellenic Competition Commission against the Corporation for PPC's alleged obstructive and exploitative strategy and anti-competitive conduct in general. The Hellenic Competition Commission has not issued a decision on this complaint so far.

In 2014 there were no complaints about personal data being leaked or about breach of customer privacy. 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 health and safety.



# Contribution to Society





Η ΔΕΗ έχει στην  
και προόδου π  
πολιτικ  
συνέπ  
στ

# 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 speeches and statements and in press releases, by sending senior executives to participate 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 a modern electricity market that:

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

Taking into account Greece's special features, the Greek electricity market needs to be transformed into a target model, i.e. the common European model, by making structural reforms. In any event, statutory changes that promote the creation of an internal electricity market are a requirement deriving from EU law.

During public consultation procedures in 2014, 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 of this policy 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.

In public statements made by Management in 2014, the Corporation supported the idea of electricity from its lignite-fuelled and hydroelectric power 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 mix 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 and
- Auctions will only be held if PPC maintains its existing mix of lignite and hydroelectric power 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

PPC attaches great importance to its relations with local communities and briefs both local communities and the authorities about any large new projects and invites them to participate in discussions on issues that could affect their activities.

The Corporation is engaged in ongoing dialogue with local communities, involving General Managers, the managers of key business units, sector managers from steam electric plants, hydroelectric power plants and mines as well as other staff from PPC.

The Corporation works in partnership with stakeholders in taking decisions on energy planning and infrastructure development:

- Local communities in areas which PPC's power production facilities are installed are involved alongside local government authorities, representatives of various agencies and organisations and local residents.
- The regional branches of the Technical Chamber of Greece express their views to local authorities, PPC and local community bodies.
- PPC's employee trade unions and associations are involved in decision-making by consulting on the relevant legislation.

Stakeholders participate in decision-making via the procedures specified in the legal framework, such as consultation, working alongside PPC's relevant committees and representatives of local community bodies or by attending info-events and conferences. Consultation is normally used when new projects are being licensed or when projects which already have environmental authorisation are being extended,

upgraded or modified, when local communities and bodies need to express their views.

Staff from PPC's Mines Division are involved in the statutorily-mandated process of consultation on mine environmental studies when obtaining environmental authorisation for such activities. In some cases, like approval for the environmental impact study for the Ptolemaida Mines, PPC took the initiative of hosting a workshop at the Western Macedonia Lignite Centre facilities to discuss the study. Local bodies were invited to attend and had the chance to express their views and concerns about the study, before statutory consultation with the competent local government bodies commenced. Their views were taken into account as much as possible, and were included in the Environmental Impact Study which the Prefectural Council actually discussed.

Working with other bodies such as universities, consultants, economic, commercial, technical and other bodies, PPC runs programmes and prepares studies to evaluate and manage the Corporation's impacts on local communities:



- Before PPC commences operations

With major new projects, PPC may prepare a social impact evaluation study for the projects, engage in ex ante evaluation and calculate potential social repercussions from the new investment (during the building and running of the projects) in the specific geographical area. The aim of such studies of a project is to identify processes and mechanisms that could be utilised to monitor impacts while implementing the project and to proactively address and offset potential risks or negative social repercussions that the specific project could cause.

An example of one such study is the “Social Impacts Evaluation Study for the new Rhodes Thermal Electrical Plant” prepared in 2013 to identify and analyse the expected social performance of the new power plant with a total capacity of 120 MW which PPC plans to build in the Piso Kambos – Plaka Steni area, within the Kattavia Community in the southern part of Rhodes. The social impacts analysis for the new PPC power plant relied on international standards and methodologies such as the Social Return on Investment (SROI) methodology.

- While PPC activities are under way / being implemented

PPC’s operations to date in the Western Macedonia region and its impact on development in the area have been recognised by the Corporation’s senior management by concluding a MoU with the Prefecture of Kozani in 2007 which records the jobs created and measures taken to protect the environment and improve the quality of life of local residents.

According to data from 2012, taking into account the benefits accruing in the labour sector, PPC has calculated that the employment gain from running the power plant was 1.3 while for mines it was 4.19, which gives a total employment rate for the entire Western Macedonia region of around 3.28 (which means that for each job at the mines and power plants, 3.28 jobs have been created and retained in the local labour market). On that estimate, PPC has made a significant contribution to supporting jobs and the local economy in Western Macedonia, contributing more than 25% of regional GDP from its industrial lignite production processes.

PPC attaches particular importance to relations with local communities in which it operates and performs a particularly important mission by implementing special programmes and schemes. Just some of PPC’s activities are set out in this section.

- After PPC’s operations are over

One illustrative example is the business plan for development of the Western Macedonia facilities after lignite mining is finished. The plan relates to the Kozani and Florina regional units and places emphasis on the energy axis Kozani – Ptolemaida – Amynteo – Florina and is both an action plan and roadmap for transitioning to the post-lignite period.

A contract was signed by the prefectural authorities of Kozani and Florina (now the Western Macedonia Region) and Western Macedonia Development Company (ANKO) S.A. to prepare the business plan. To implement it, a representative project team comprised of all stakeholders directly or indirectly affected by the economic growth of the local community was set up. Those stakeholders include the Regional Association of Municipalities of Western Macedonia, the Technical Chamber of Greece / Western Macedonia Branch, the Economic Chamber of Greece / Western Macedonia Branch, the Geotechnical Chamber of Greece / Western Macedonia Branch, the Kozani and Florina Chambers, the University of Western Macedonia, the Western Macedonia Technological Educational Institute, the Kozani Ecology Movement and other bodies whose input is needed.

The particular importance the plan has for the future of the area during this transitional phase for the local economy requires the highest degree of citizen and stakeholder participation possible in the consultations on the post-lignite period. To assist with this, a simple, attractive consultation portal was set up which can be accessed via the websites of the Western Macedonia Region ([www.pdm.gov.gr](http://www.pdm.gov.gr)), the Kozani Regional Unit ([www.kozani.gr](http://www.kozani.gr)), the Florina Regional Unit ([www.florina.gr](http://www.florina.gr)) and Western Macedonia Development Company (ANKO) S.A. ([www.anko.gr](http://www.anko.gr)).

### Compensatory/public benefit projects

When obtaining authorisation for the environmental terms and conditions of projects it implements, PPC consults with the Ministry for Productive Recovery, the Environment & Energy 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 2014, as described in the table below, amounted to € 1.52 million.

Compensatory/public benefit projects	Category	Project budget (€)	Total duration of works in months	Cost in 2014 (€)	Additional information
Payment of expenditures to the 30th Department of Prehistoric and Classical Antiquities	A contractual obligation of the Hilarion HPP	10,256,495	65	86,179	
Environmental Restorations - Management Plan and Promotion Design for the Area of Lakes and artificial dams (Kremasta).	Financial Aid, Prefecture of Etolo-Akarnania			33,671	
Redevelopment of the commercial centre of Aliveri	A public benefit project as part of the new Aliveri Steam Electric Plant	300,000		149,303	Part of an overall package of PPC public benefit projects over 3 years, initially costing € 3,500,000. The amount has been further increased and now stands at € 4,727,500
Agios Loukas Football Pitch, Municipality of Tamynea		560,000		113,428	
Agios Loukas Football Pitch, Municipality of Tamynea (lawn)				38,353	
Repair of the road surface on the national road in the section from Lepoura to Karystos				28,838	
Earthworks and building work to install a compact biological treatment plant at Monodryio		100,000		26,353	
Completion of the theatre in Agios Ioannis, Mun. of Tamynea		150,000		10,909	
Flood protection works on River Lilantas				33,514	
Flood protection works on River Kireas				48,531	
Road from Zarakes to Almyropotamos beach		1,100,000		114,346	
Road from Agii Apostoli in the Mun. of Dystia to Kalamos in Mun. of Avlonas		800,000		32,253	
Road from Agios Loukas to Trachili, Mun. of Tamynea		1,200,000		27,913	
Construction of stands at the Neochori and Avlonario football pitches				21,337	
G. N. Papanikolaou Institute	Donation	1,000,000	48	250,000	
MoU with 23rd Ephorate of Byzantine Antiquities	A public benefit project as part of the new Aliveri Steam Electric Plant	150,000	36	7,973	
2nd MoU with 23rd Ephorate of Byzantine Antiquities	A public benefit project as part of the new Aliveri Steam Electric Plant	500,000	48	150,000	
Paving, tarmacking and street lighting for local roads in the District of Soroni in the Mun. of Kamiros, Rhodes	Public benefit project			344,527	
<b>Total</b>				<b>1,517,428</b>	

Some of the projects carried out by the Hydroelectric Production Department are listed below:

- A study to relocate and stabilise the Katholikon (central church) of the Torniki Monastery in the area of the Hilarion HPP reservoir was prepared and the works carried out.
- Sections of the road network in the wider area of the Hilarion HPP reservoir which were affected were repaired and new sections built.
- Studies were prepared and works carried out to restore connections between the different banks of the Hilarion HPP reservoir by building the Paliouria, Panagia and Karperos bridges.
- A study was prepared and work carried out to build a water supply and irrigation network for the village of Paliouria near the Hilarion HPP reservoir.
- A study was prepared and work carried out to stabilise and protect the Skete of Hosios Nikanoras in the area of the Hilarion HPP reservoir.
- A landscape architecture and planting scheme study for the areas of the Hilarion Monastery, Paliouria bridge, Gavros Paliouria, Agios Athanasios Dimitra, Torniki Monastery -all near the Hilarion HPP reservoir- was prepared.
- A study was prepared on water supply to the aqueduct in the Meliti Municipal Unit of the Mun. of Florina, from the Papadia Reservoir.

### 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 2014, 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 infrastructure and environmental protection projects that bolster the economy in the specific areas which are affected by lignite mining and its combustion.

Prefecture	Lignite level in 2014 (€ '000)
Kozani	19,289
Florina	5,795
Arcadia	3,900
<b>Total</b>	<b>28,984</b>

### 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).

One representative example is local community involvement in the Municipalities of Amynteo, Eordea, Kozani, Megalopolis and Florina, where important energy projects are located, in decision-making about relocating villages to allow PPC mines to be developed.

As PPC mines in Western Macedonia have expanded, the villages of Kardia, Haravgi, and Exochi have been relocated while public infrastructure works are now under way at new approved villages where villagers from Klitos and Komanos will relocate. PPC signed a MoU with the local community concerning the relocation of Pontokomi, which was agreed with all statutory bodies in the Prefecture of Kozani. The MoU sets out how the mine located next to Pontokomi will expand. The relocation sites for the villages of Akrini and Anargyri were identified as part of wide-ranging collaborations between the competent PPC committee and staff from the local municipalities.

The Mines Division sets up teams comprised of executives from the Corporation and legal advisors, who negotiate land acquisition issues with residents in the mining areas. Such teams have been set up in both the Ptolemaida – Amynteo area and the Megalopolis area. One example is the negotiating team tasked with acquiring land in the area of the village of Tripotamos near Megalopolis, where there are plans to expand the Choremi Mine.



In 2013 PPC launched the compulsory purchase procedure for the village 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. The programme was completed in 2014. Compulsory purchase procedures have also been initiated at the villages of Pontokomi and Ptelona. Based on the 2011 census, the population of Mavropigi was 456, Pontokomi 1,116 and Ptelona 36. In addition to covering the cost of compulsory purchase, 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 2014, PPC provided € 1,249,000 for projects in various sectors, such as the environment, sports, culture and education. These projects include:

- Financial support for the vocational training and rehabilitation centre for the disabled in the Kozani Regional Unit which received € 20,000.
- Financial support for the only charity in Greece which addresses eating disorders like anorexia nervosa, bulimia, binge eating, called ANASA, which received € 10,000. The money was used to cover the running costs of ANASA's first day-care centre, which offers free diagnosis and treatment, and engages in community information/prevention activities.
- A donation to the Municipality of Athens, namely playground equipment for Agios Panteleimonas Square to allow the playground to reopen and prevent the area becoming downgraded and to improve the quality of life for local residents. The € 20,000 donation related to the supply and installation of instruments and certification of the facilities.
- Financial aid for the Panhellenic Adolescent and Boys and Girls Championships held by the Hellenic Weightlifting Federation in Florina, which received € 8,000.
- Financial support for the Parnitha National Park

Operator which received € 13,000 to extend the cutting-edge fire-detection system which forms part of the Prolipsis (Prevention) Programme.

- Financial aid for the NGO Medecins du Monde to cover the running costs of its clinic in Evosmos, Thessaloniki, which received € 12,500.

Area sponsorship/donation relates to	Size of sponsorship/donation in 2014 (€ '000)
Sport	50
Society	255
Environment	41
Culture	572
Education	331
<b>Total</b>	<b>1,249</b>

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 € 522,720 to support the University's teaching work by covering the cost of 3 'PPC' chairs and to develop scientific and research activities, in 2014 PPC continued its support to the University. 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 interests, 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 Greece in the energy sector.

For the fourth consecutive year PPC supported the free pre-symptomatic 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 2014 PPC did not provide any donations, sponsorships or financial aid to any political party or politician.

#### Donations in kind

In addition to cash sponsorship, PPC also offers donations in kind to support local communities in the areas where it operates. For example, PPC donated some of its old computers to 9 primary and secondary schools and purchased 6 interactive boards which it donated to

schools. Other donations in kind included cables for use with church bells, photocopiers, all-in-one printers, an electronic piano for the Piraeus 36th Primary School, and 12 bikes for a children's competition about road safety and education in Kozani. PPC also donated 1 old ambulance to the RSF Hellas Volunteer Communications and Rescue Team.

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

In 2014 the Western Macedonia Lignite Centre offered the entire harvest from its orchards located on rehabilitated land on the Main Field deposition sites to ecclesiastical, educational and charitable bodies in the local community. 6,010 kilos of pears, 6,025 kilos of apples, 453 kilos of cherries, 1,660 kilos of quinces, and 200 kilos of grapes were distributed to Analipsi Monastery in Kozani, the Mun. of Kozani Soup Kitchen, the Agios Stylianos Children's Home in Kozani, the Kozani Old People's Home, the Ptolemaida Adult Education Centre, the Ptolemaida Special Vocational Education and Training Centre, the Amynteo Physical Medicine and Rehabilitation Centre, the Social Grocery Stores in Servia, Kozani and Ptolemaida, the Ptolemaida Good Samaritan Association, the ARSIS Association, the Servia Mental Heal and Social Rehabilitation Association and the special workshops in Kozani, Ptolemaida and

Pentavryssos.

At the 79th Thessaloniki International Fair, instead of another corporate presentation, PPC set up a clinic which it turned over to "Medecins 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 1,363 people out of the 5,500 who visited the booth. The clinic's equipment was then donated to Medecins du Monde at the end of the fair.

## 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 out 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 € 35 million. In 2014 € 12.7 million was spent on rescue digs in 7 areas at the Western Macedonia Lignite Centre and in particular 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 organizes volunteer initiatives every year and gives something back to society. Just some of the initiatives organised in 2014 are listed below:

### Supporting children

In 2014 to celebrate Easter PPC's employees organised a scheme to collect office supplies, clothing, footwear, food, games and medicines as well as Easter candles and other festive items for the Smile of the Child charity.

A similar scheme was run in cooperation with HEDNO and the items collected were donated to Medecins du Monde for children in Perama and their families.

### Blood donations

For many years now PPC employees have been organising voluntary blood donation rallies through their trade unions. 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 rallies and collected 1,170 units of blood in 2014.

## 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

As part of its Training Voucher scheme for the unemployed in Productive Sector B of the Economy, which is a scheme requiring mandatory work financed by the HR Development Operational Programme using national and European funds, PPC's Vocational Training Centre ran 400-hour long training courses in the Peloponnese Region (at the Peloponnese Intensive Studies Academy in Megalopolis), the Western Macedonia Region (at

the Western Macedonia Mine Staff Intensive Studies Academy and the Western Macedonia Intensive Studies Academy at Kardia) relating to:

- The extractive and mining industry (for qualified engineers). 19 unemployed people attended
- Continuous operation for surface mining of open-air lignite mines (for technicians). 12 unemployed people attended.

Practical experience and mandatory work for trainees took place at the PPC's Lignite Centres.

It is a requirement of the programme that 30% of trainees do mandatory work. Following a decision of PPC's Management Board, the vocational training centre employed all trainees, showing how consistent the Corporation is towards its commitment to corporate social responsibility (2 trainees refused to do mandatory work and 1 left his job).

### PPC central library

The PPC Central Library is an important information centre, with approximately 10,000 books and 150 periodical titles and newspapers, 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 has valuable personal testimonies of PPC executives and employees and the Historical Archives relating to 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 2014 the Archive Section of PPC (Historical Archives) added to its archival materials, made them accessible to the public, took a series of measures to promote its work, and developed partnerships with archival and other bodies:

- The Oral History Archives of the PPC Historical Archives were added to.
- A major section of the General Management Archives (1950-1967) was properly organised and made available to researchers.
- Data and archival materials from PPC's Historical Archives were received from and provided to more than 180 researchers in various areas of specialisation and from various bodies (including researchers and professors from the National Technical University of Athens, the National and Capodistrian University of Athens and the National Research Foundation, among others).
- The PPC's Historical Archives continued to cooperate with the National Technical University of Athens and the National and Capodistrian University of Athens on

issues of education and training in historical documentation and showcasing the Corporation's industrial heritage and in fact stepped up their cooperation. Visits were organised to PPC historical facilities (such as the Faliro steam electric plant, the Ladonas hydroelectric power plant, and the Aliveri and Megalopolis Lignite Mines).

- A representative from the Archives Section of PPC sat on the Board of Directors of the Greek Section of the International Committee for the Conservation of the Industrial heritage (TICCIH).
- A newsletter was published about the PPC's Historical and Central Archives.
- Cooperation with the State General Archives and the National Research Foundation commenced on how to rescue and showcase historical archives.
- The history of Greece's electrification was presented at a series of conferences and events (a workshop held by the Maniatakion Foundation in Kalamata, and one by the Scientific Staff Association in Gazi, etc.).
- Materials on the history of the Testing, Research and Standards Centres was collected and presented and the relevant exhibits were created.



## Development of the old Faliro Steam Electric Plant

PPC has recently prepared a study to explore the potential for developing the old Faliro Steam Electric Plant and transforming it into an industrial heritage monument, a cultural and educational centre and home for the electricity historical archives. This proposal to showcase and manage the site will allow the PPC to open dialogue and in the long run develop a comprehensive cultural-education centre and museum.

## PPC employee choir

PPC's choir comprised of employees and pensioners from the Group took part in 8 musical events in 2014, performing works from the classical repertoire as well as modern Greek and foreign songs. It appeared in Megalopolis at the Municipality's Easter Concert, at the Karaiskaki Stadium before the Piraeus Olympiakos Oldtimers – PPC match, at the Athens Concert Hall at an event to mark the Fall of Constantinople featuring works by the composer Giannis Markopoulos, at the Athens Concert Hall alongside the San Jose Choir from California, USA, at the Odeon of Herodes Atticus Theatre performing works by G. Markopoulos, in Kozani at the 2nd Balkan Choir Meeting, jointly organised by PPC, HEDNO and the Spartacus Trade Union, in Nafplio and lastly at the Mun. of Argynroupoli Christmas festivities in Attica. These events were held as part of PPC's involvement in and contribution to cultural events.

## Internships

PPC allows students of universities and technical educational institutes, as well as students of Hellenic Manpower Employment Agency programmes, to complete their internships at the Corporation's plants and units. In 2014 PPC employed 23 university students as part of its life-long learning programme financed by the National Strategic Reference Framework (NSRF), 100 students from technological educational institutes under a programme financed by the Hellenic Manpower Employment Agency, and 69 students from the Hellenic Manpower Employment Agency's Vocational Apprenticeship Schools.

## Career guidance for young people from the Prefecture of Florina

In 2014 PPC ran a career guidance event for young people from the Prefecture of Florina. The event was designed to help young people get to know themselves, their own interests and abilities better, and to enable them to take decisions about their studies and careers. Career guidance is a process which looks at skills, professional interests, professional personality and work values.

In 2014 PPC's Training Department provided career guidance to around 50 senior high school pupils from the Municipalities of Florina and Amynteo.





# 9. Abbreviations

<b>IPTO</b>	Independent Power Transmission Operator S.A.
<b>RES</b>	Renewable Energy Sources
<b>GHG</b>	Greenhouse Gases
<b>HEDNO</b>	Hellenic Electricity Distribution Network Operator (DEDDIE in Greek)
<b>BoD</b>	The Board of Directors
<b>CSR</b>	Corporate Social Responsibility
<b>RAE</b>	Regulatory Authority for Energy
<b>EU ETS</b>	EU Emissions Trading Scheme
<b>HPP</b>	Hydroelectric Power Plant
<b>EURELECTRIC</b>	European Union of the Electricity Industry
<b>GRI</b>	Global Reporting Initiative



# 10. Guidelines on Preparing the Report

## 10.1 GRI Guidelines

### GRI Indicators Table

The following table links the contents of the 2014 PPC Corporate Social 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		
	<b>Strategy and Analysis</b>		
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	
	<b>Organisational Profile</b>		
2.1	Name	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 customer accounts	3.1	

GRI code	Description	Section	Comments / references			
EU4	Length of above and underground transmission and distribution lines by regulatory regime	3.1	<b>Interconnected network</b>			
				Length (km)		
				Overhead	Underground	Offshore
			Low voltage (0.4 kV)	94,294	13,610	2.4
			Medium voltage (15 - 20 kV)	85,820	9,601	506
			High voltage (150 kV)	0	200.3	0
				180,114	23,411.3	508.4
			<b>Non-interconnected network</b>			
				Length (km)		
				Overhead	Underground	Offshore
			Low voltage (0.4 kV)	15,756	838	0
			Medium voltage (15 - 20 kV)	13,280	899	494
			High voltage (150 kV)	739.4	5.2	0
				29,775.4	1,742.2	494
EU5	Allocation of CO <sub>2</sub> emissions allowances or equivalent, broken down by carbon trading framework	6.4				
	<b>Report Parameters</b>					
	<b>Profile Disclosure</b>					
3.1	Reporting period	2				
3.2	Date of most recent previous report	2				
3.3	Reporting cycle	2				
3.4	Contact point	2				
	<b>Scope and Boundary</b>					
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				
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				

GRI code	Description	Section	Comments / references
	<b>Table of GRI location of the Standard Disclosures in the report</b>		
3.12	Table identifying the location of the Standard Disclosures in the report	10.1	
	<b>Assurance</b>		
3.13	Policy and current practice with regard to seeking external assurance for the report	2, 11	
	<b>Governance, Commitments, and Engagement</b>		
	<b>Governance</b>		
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 recommendations or direction to the highest governance body	3.6	
4.5	Linkage between compensation for senior managers and the organisation'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	Corporation policies values, mission, codes of conduct, relevant to sustainable 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 performance	3.6	
	<b>Commitment to third party initiatives</b>		
4.11	Application of the preventative principle	3.9, 4.1, 5.6, 6.3, 6.5, 8.2	
4.12	Externally developed charters, principles or other initiatives to which the organisation subscribes or endorses	2, 4.5, 10	
4.13	Memberships in associations and organisations	4.5	
	<b>Stakeholder engagement</b>		
4.14	List of stakeholder groups engaged by the organisation	4.4	
4.15	Basis for identification and selection of stakeholders with whom to engage	4.4	
4.16	Approaches to stakeholder engagement	4.4	
4.17	Key topics and concerns that have been raised through stakeholder engagement	4.4	

GRI code	Description	Section	Comments / references
	<b>Part II: Management Approach</b>		
<b>DMA EC</b>	<b>Disclosures on Management Approach: Economic Performance</b>		
	Economic performance	3.10, 4.1, 4.7	
	Market presence	3.1, 4.1, 4.7, 7.1	
	Indirect economic impacts	3.10, 4.1, 8.2-8.5	
<b>EU6</b>	Availability and Reliability of electricity short- and long-term	4.1	
<b>EU7</b>	Demand-side management	4.1	
	System efficiency	3.1	
<b>EU8</b>	Research and Development	6.4, 6.6-6.7, 8.3	Data is available in the PPC capital expenditure plan (see 2014 Annual Report, pp. 25-31 and 131-135).
<b>EU9</b>	Provisions for decommissioning of nuclear power sites		This indicator is not relevant to PPC's operations
<b>DMA EN</b>	<b>Disclosures on Management Approach: Environment</b>		
	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	
<b>DMA LA</b>	<b>Disclosure on Management Approach: Labour Practices</b>		
	Employment	4.1, 5.1, 5.5	
<b>EU14</b>	Programmes and processes to ensure the availability of a skilled workforce	5.1, 8.3, 8.6	
<b>EU15</b>	Percentage of employees eligible to retire in the next 5 and 10 years	5.1	
<b>EU16</b>	Labour/management relations regarding health and safety of employees 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 opportunities	4.1, 5.1	
	Equal remuneration for women and men	4.1, 5.4	

GRI code	Description	Section	Comments / references
<b>DMA HR</b>	<b>Disclosure on Management Approach for Human Rights</b>		
	Investment and procurement practices	4.1, 5.6, 7.5	
	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	4.1, 5.4, 5.6, 7.5	
	Remediation	5.4	
<b>DMA S0</b>	<b>Disclosures on Management Approach: Society</b>		
	Local communities	4.1	
<b>EU19</b>	Stakeholder participation in the decision making process related to energy planning and infrastructure development	6.7, 8.2	
<b>EU20</b>	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	
<b>EU21</b>	Contingency planning measures, disaster/ emergency management plan	3.9, 5.6	
<b>DMA PR</b>	<b>Disclosure on Management Approach to Product Responsibility</b>		
	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	
<b>EU23</b>	Programmes, including those in partnership with government, to improve or maintain access to electricity and customer support services	7.1-7.2	
<b>EU24</b>	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services	7.1-7.3	
	<b>Part III: Performance indicators</b>		
	<b>Economy</b>		
	<b>Economic performance</b>		
<b>EC1</b>	Direct economic value generated and distributed	3.10	
<b>EC2</b>	Financial implications and other risks and opportunities for the organisation's activities due to climate change	3.9, 4.1, 4.7, 6.4	2014 Annual Report, pp. 25-31, 97 and 131-135.
<b>EC3</b>	Coverage of the organisation's defined benefit plan obligations		2014 Annual Report, p. 92.

GRI code	Description	Section	Comments / references
EC4	Significant financial assistance received from government	3.2, 3.10	
	<b>Market presence</b>		
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	
	<b>Indirect economic impacts</b>		
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 extend of impacts	3.1, 5.1, 7.1, 8.2	
	<b>Availability and Reliability</b>		
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	6.4, 8.1	Data is available in the PPC capital expenditure plan (see 2014 Annual Report, pp. 25-31 and 131-135).
	<b>System efficiency</b>		
EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	3.1	
EU12	Transmission and distribution losses as a percentage of total energy		This indicator is not relevant to PPC's operations This data is the responsibility of IPTO and HEDNO
	<b>Environment</b>		
	<b>Materials</b>		
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.
	<b>Energy</b>		
EN3	Direct energy consumption by primary energy source	6.2	
EN4	Indirect energy consumption by primary energy source	6.2	
EN5	Energy savings	6.2, 6.4	
EN6	Initiatives to provide energy-efficient products and services		As a power generator, PPC is not involved in providing products and services other than the electricity it generates.
EN7	Initiatives to reduce indirect energy consumption.		This is not a material issue for PPC compared to direct energy consumption (for energy generation).
	<b>Water</b>		
EN8	Total water withdrawal by source	6.5	
EN9	Water sources significantly affected by withdrawal of water	6.5	

GRI code	Description	Section	Comments / references
EN10	Percentage and total volume of water recycled and reused	6.5	
	<b>Biodiversity</b>		
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	
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	6.7	
EN13	Habitats protected or restored	6.7	
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	6.7	
	<b>Emissions, effluents and waste</b>		
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	6.3, 6.4	
EN19	Ozone layer	6.3	
EN20	NO <sub>x</sub> , SO <sub>x</sub> , 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 discharges of water and runoff	6.5, 6.7	
	<b>Products and services</b>		
EN26	Initiatives to mitigate environmental impacts of products and services	6.3-6.7	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category		This is not a material indicator for PPC.
	<b>Compliance</b>		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	6.8	
	<b>Transport</b>		
EN29	Significant environmental impacts of transporting products	6.3	This is not a material indicator for PPC.
	<b>General</b>		
EN30	Environmental protection expenditures	6.1, 6.3	
	<b>Labour practices</b>		
	<b>Employment</b>		
EU14	Programmes and processes to ensure the availability of a skilled workforce	5.2, 8.3, 8.6	

GRI code	Description	Section	Comments / references
EU15	Employees eligible to retire in the next 5 and 10 years	5.1	
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	5.6	
LA1	Total workforce by employment type, employment contract, and region, broken down by gender	5.1	The total number of employees of contractors / subcontractors engaged by PPC in 2014 is not available to PPC.
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	5.1	Data about the length of time employees who left worked for PPC will be available from the next Report onwards.
EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities		PPC does not have access to this data.
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	5.6	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	5.5	
LA15	Return to work and retention rates after parental leave, by gender	5.1	
	<b>Employee/management relations</b>		
LA4	Percentage of employees covered by collective labour agreements	5.1	The relevant data on contractor employees is not available to PPC.
LA5	Minimum notice period for employees before major changes	5.1	
	<b>Occupational Health &amp; Safety</b>		
LA7	Rates of injury, occupational diseases, lost days, and absenteeism by region and gender	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	
	<b>Training and education</b>		
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 life-long learning	5.2, 5.5	
LA12	Percentage of employees receiving regular performance and career development reviews, by gender	5.3	
	<b>Diversity and equal opportunities</b>		
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	

GRI code	Description	Section	Comments / references
	<b>Equal remuneration for women and men</b>		
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	5.4	
	<b>Human rights</b>		
	<b>Investment and procurement practices</b>		
HR1	Screening of investment agreements that include human rights clauses	7.5	Presidential Decree 178/2002 on the protection of employee rights is taken into account in major investment agreements.
HR2	Human rights screening of suppliers	5.6, 7.5	
	<b>Non-discrimination</b>		
HR4	Total number of incidents of discrimination and corrective actions taken	5.4	
	<b>Freedom of association and collective bargaining</b>		
HR5	Freedom of association and collective bargaining	5.1	
	<b>Child Labour</b>		
HR6	Child Labour	5.4	
	<b>Forced and compulsory labour</b>		
HR7	Forced and compulsory labour	5.4	
	<b>Security practices</b>		
HR8	Percentage of security personnel trained in aspects of human rights		After 2 successive years of training, in 2014 PPC ran a certified training course for security staff / guards of PPC facilities.
	<b>Indigenous Rights</b>		
HR9	Total number of incidents of violations involving rights of indigenous people	5.4	
	<b>Assessment</b>		
HR10	Reviews or risk assessments about human rights	4.1, 5.4, 5.6, 7.5	
	<b>Remediation</b>		
HR11	Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms	5.4	
	<b>Society</b>		
	<b>Local communities</b>		
S01	Local community engagement and development programmes, impact assessments	6.7, 8.2	
EU22	Number of people physically or economically displaced and compensation, broken down by type of project.	8.2	
S09	Operations with significant potential or actual negative impacts on local communities	6.3, 6.7, 8.2	
S010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	6.3, 6.7, 8.2	

GRI code	Description	Section	Comments / references
	<b>Corruption</b>		
S02	Percentage and total number of business units analysed for risks related to corruption.	3.8	
S03	Percentage of employees trained in organisation's anti-corruption policies and procedures		In 2014 PPC did not provide its employees with anti-corruption training.
S04	Actions taken in response to incidents of corruption.	5.8	
	<b>Public policy</b>		
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	5.1, 8.3	
	<b>Anti-competitive behaviour</b>		
S07	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	7.6	
	<b>Compliance</b>		
S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	5.8	Administrative fines of € 621,000 were paid. In a total of 4 cases municipalities imposed fines of € 415,311.36 on PPC. All those amounts were assessed in 2014 and PPC has filed the relevant administrative appeals before the administrative courts.
	<b>Product responsibility</b>		
	<b>Customer health and safety</b>		
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 concerning health and safety impacts of products and services	7.6	
EU25	Number of injuries and fatalities to the public involving company assets	5.6	There were no final or pending cases involving PPC relating to third party health and safety issues during 2014.
	<b>Product and Services Labelling</b>		
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 voluntary codes concerning product and service information and labelling	7.6	
PR5	Customer satisfaction	7.2	
	<b>Marketing Communications</b>		
PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	7.4	
PR7	Total number of incidents of non-compliance with regulations relating to marketing practices	7.4	

GRI code	Description	Section	Comments / references
	<b>Customer Privacy</b>		
PR8	Complaints regarding breaches of customer privacy and customer data.	7.6	
	<b>Compliance</b>		
PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.	7.6	
	<b>Access</b>		
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	
EU28	Power outage frequency (SAIFI)		This indicator refers to data for which HEDNO is responsible. The data for this indicator was provided by HEDNO. System Average Interruption Frequency Index (SAIFI) ≈ 1.6 interruptions
EU29	Average power outage duration (SAIDI)		This indicator refers to data for which HEDNO is responsible. The data for this indicator was provided by HEDNO. System Average Interruption Duration Index (SAIDI) ≈ 93 minutes
EU30	Average plant availability factor by energy source and by regulatory regime	3.1	

## GRI Application Level

The Report was prepared in line with the Global Reporting Initiative G3.1 Guidelines for Application level A+.

REPORT APPLICATION LEVEL		C	C+	B	B+	A	A+
Standard Disclosures	<b>G1 PROFILE DISCLOSURES</b> 	Report on: • 1.1 • 2.1-2.10 • 3.1-3.8, 3.10-3.12 • 4.1-4.4, 4.14-4.15		Report on all criteria listed for level C plus: • 1.2 • 3.9, 3.13 • 4.5-4.13, 4.16-4.17		Same as requirement for Level B	
	<b>G3 MANAGMENT APPROACH DISCLOSURES</b> 	Not Required	<b>REPORT EXTERNALLY ASSURED</b>	Management Approach Disclosures for each indicator Category	<b>REPORT EXTERNALLY ASSURED</b>	Management Approach Disclosures for each indicator Category	<b>REPORT EXTERNALLY ASSURED</b>
	<b>G3 PERFORMANCE INDICATORS &amp; SECTOR SUPPLEMENT PERFORMANCE INDICATORS</b> 	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social and Environmental.	<b>REPORT EXTERNALLY ASSURED</b>	Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human rights, Labor, Society, Product Responsibility.	<b>REPORT EXTERNALLY ASSURED</b>	Report on each of core G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission	<b>REPORT EXTERNALLY ASSURED</b>

\* Sector supplement in final version.

## 10.2 The AA1000 Accountability Standard

The Corporation follows the principles in the AA1000 APS Accountability Standard (2008) in identifying, prioritising and responding to sustainability issues. More specifically:

- **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 Corporate Social 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.

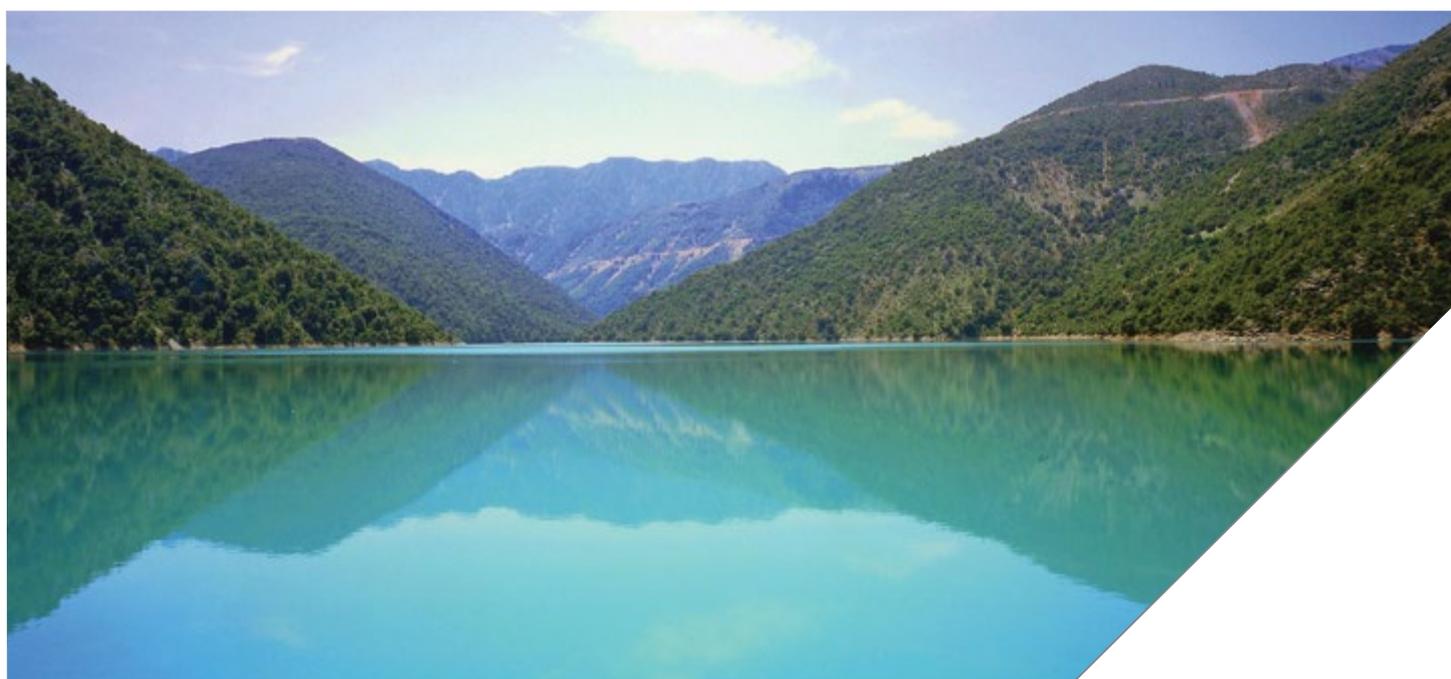
The table below shows how the content of the PPC's 2014 Corporate Social Responsibility & Sustainability Report matches the principles of the AA1000 standard.

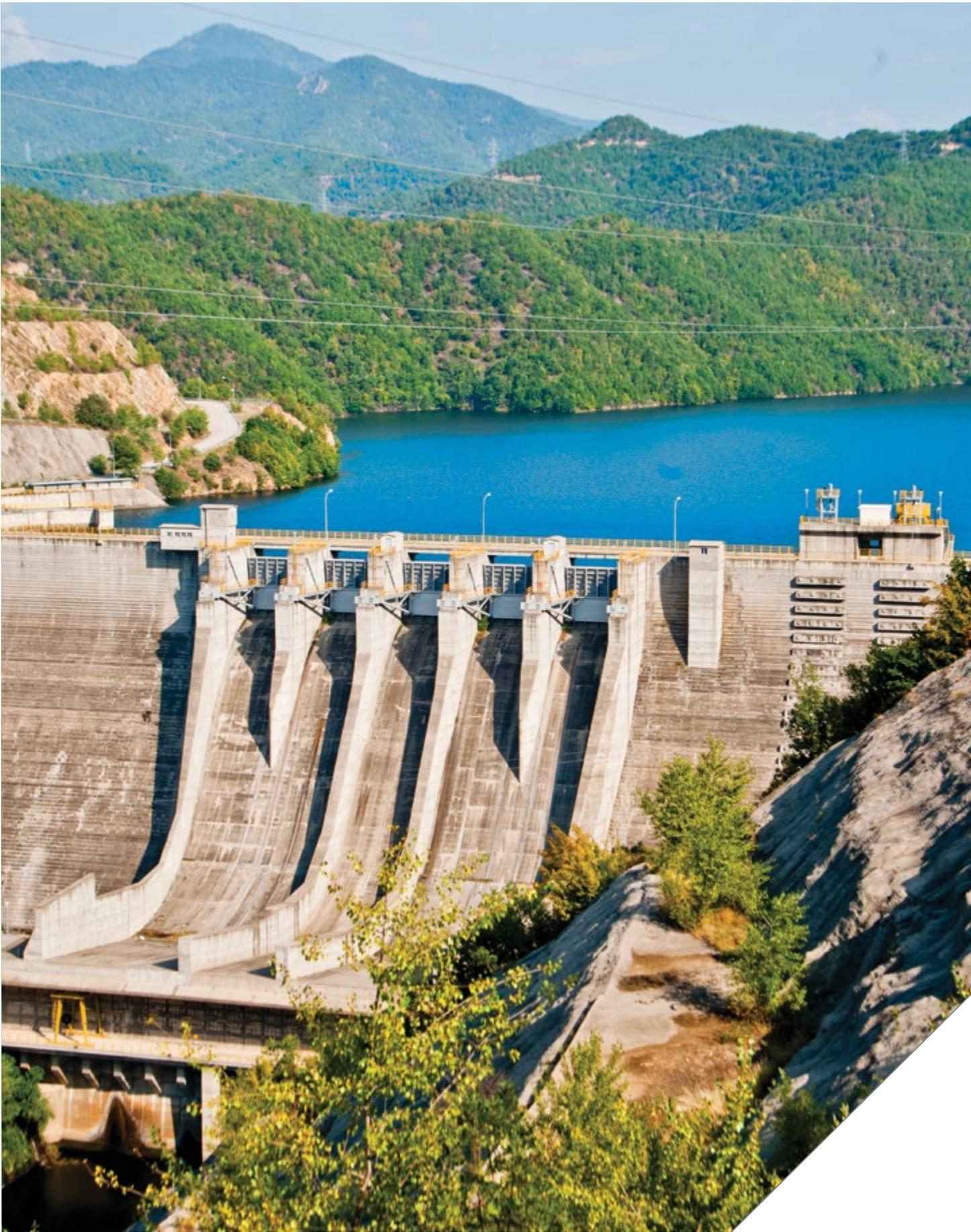
Principle	Section of the Report
Inclusiveness	4.3-4.4
Materiality	4.3-4.4
Responsiveness	4-8

## 10.3 The Iso Standard 26000

The table below links the content of the 2014 PPC Corporate Social 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 “2014 Corporate Social Responsibility and Sustainability Report” (referred to as “the Report”) of the Company for the reporting period 1 January 2014 - 31 December 2014.

Management is responsible for the preparation and presentation of the Report in accordance with the Sustainability Reporting Guidelines (G3.1) of the GRI and own internal guidelines as well, 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 "liabilities", the "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<sub>2</sub>)", KPMG's work was limited to the reliability check of the transfer of these data from the published / approved "Financial report 2014" or the "Annual report 2014" 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 2014 - 31 December 2014 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, 8 October 2015**

2014 Corporate Social Responsibility and Sustainability Report was prepared by the PPC CSR Section, by the PPC CSR team.

Photography: Dimitris Rizos, Ioannis Kouvopoulos

Advisory Services for Report Preparation



Design and Layout



Translation



Translation from the Greek original which remains the definitive and prevailing version

# 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.

## Which PPC stakeholder group do you belong to?

- |   |  |
|---|--|
| <input type="checkbox"/> Employee               | <input type="checkbox"/> Competitor  |
| <input type="checkbox"/> Shareholder / Investor | <input type="checkbox"/> Region / Local Government Authority / Local Community |
| <input type="checkbox"/> Public/Statutory body  | <input type="checkbox"/> Non-governmental organisation                         |
| <input type="checkbox"/> Customer               |  |
| <input type="checkbox"/> Associate / Supplier   | <input type="checkbox"/> Other:  |

## What is your overall impression of this Report?

	Very Good	Good	Average	Poor
It covers key issues relating to the Corporation's activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The quantitative data are comprehensive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The texts are comprehensive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Images and graphics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The various sections are well-balanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## What is your opinion on the following sections of the Report?

	Very Good	Good	Average	Poor
About The Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPC Profile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustainable Development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market and customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution to Society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Are there sections which in your view should be longer?

---

## Are there any comments or proposals for improvement you would like to make?

---

### Personal details (optional):

Name-surname: \_\_\_\_\_  
 Organisation/Corporation: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Tel./Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

Please fill in and forward the questionnaire to the address below:  
 Corporate Social Responsibility Section  
 Strategy Department  
 Public Power Corporation S.A.  
 29, Chalkokondyli St., Athens GR-10432  
 Tel.: 210 5218629, Fax: 210 5218626  
 E-mail: e.sarikaki@dei.com.gr

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



This printout bears FSC® certification.

This certification makes it even more environmentally friendly.

Learn more at [www.fsc.org/pc](http://www.fsc.org/pc).



Energy for everyone

30 Chalkokondyli - 104 32 Athens,  
Tel.: +30 210 52 30 301,  
[www.dei.gr](http://www.dei.gr)