





Annual Report 2015

individual actions, individual talents, individual identities. we all, however, share the same desire to offer a life filled with light and an everyday reality filled with energy

## The Electricity Authority of Cyprus

The Electricity Authority of Cyprus is an independent, Public Corporate corporation established under the Electricity Development Law Cap.171 of 1952 in order to exercise and perform functions relating to the generation, transmission, distribution, and supply of electric energy in Cyprus.

The above definition is used in Cyprus for corporations that are independent and that were established in accordance with the relevant Law, in order to render services in the utility field. Such corporations are governed by Authorities, the members of which are appointed by the Council of Ministers.

In case of the Electricity Authority of Cyprus, the government -through the Minister of Energy, Commerce, Industry and Tourism- is empowered to give directives to the Authority on matters appertaining to the general interest of the Republic.



...to provide our customers with the highest quality of safe and reliable services in the energy sector and in other activities at competitive prices, respecting society, the environment, and our people and contributing to the development of our country.



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# The Year in Brief

		2015	2014	% Increase (Decrease)
GENERATION				
Total units generated	million kWh	4 127,9	4 013,4	2,9
Maximum output capacity of power stations	MW	1 478,0	1 478,0	-
Maximum demand met	MW	939	860,0	9,2
Thermal efficiency of generation	%	36,5	37,0	(1,4)
SALES OF ELECTRICITY				
Sales	million kWh	4 036,1	3 915,5	3,1
Consumption in the turkish occupied area	million kWh	2,0	5,9	(66,1)
Average charge per kWh sold	€ cents	14 281	18 418	(22,5)
Consumers on 31 December	thousand	559,7	554,6	0,9
FINANCIAL ACTIVITY				
Total income	€ thousand	630.541	776.268	(18,8)
Operating costs	€ thousand	552.331	716.595	(22,9)
Other losses net	€ thousand	291	21	1.285,7
Operating profit	€ thousand	77.919	59.652	30,6
Finance costs	€ thousand	7.577	11.199	(32,3)
Tax	€ thousand	9.964	6.477	53,8
Net profit for the year	€ thousand	60.378	41.976	43,8
Remeasurement of Pension Plan Obligation	€ thousand	84.483	(244.317)	(134,6)
Capital expenditure	€ thousand	17.721	39.983	(55,7)
Average net assets employed	€ thousand	1.925.064	2.016.742	(4,5)
Return on average net assets employed	%	4,0	2,9	37,9
EMPLOYEES				
Permanent employees in service as at 31 December		1 999	2 137	(6,5)
Sales per employee	million kWh	2,02	1,83	10,4
Consumers per employee		280	260	7,7

# Board of Directors and Management

### THE AUTHORITY

From 1.1.2015 until 31.12.2015

### **CHAIRMAN**

Othon Theodoulou Businessman

**VICE CHAIRMAN** 

Demetra Karantokis Entrepreneur

**MEMBERS** 

Alexandra Pelaghias-Christodoulou Advocate

Charalambos Artemis Advocate

Michalis Hadjipantela Fellow Chartered Accountant

Nicolas Nicolaou Electrical Engineer &

Business Administration

Loizos Loizou Civil Engineer

Konstantinos Kosti Mechanical Engineer

Ioannis Stavrou Athienitis Businessman



O. Theodoulou Chairman



D. Karantokis Vice Chairman



A. Pelaghias-Christodoulou Member



Ch. Artemis Member



M. Hadjipantela Member



N. Nicolaou Member



L. Loizou Member



K. Kosti Member



I. S.Athienitis Member



A. Patsalis Deputy General Manager

### **MANAGEMENT**

### **Deputy General Manager**

Antonis Patsalis (from 19.5.2015) BSc (Eng), MIOSH

### General Manager

Stelios Stylianou (until 14.6.2015) BSc (Eng), PhD, MBA, MIMechE, CEng

### **Executive Manager (Networks)**

Vacant Post

### **Executive Manager (Power Generation and Supply)**

Antonis Patsalis (until 18.5.2015) BSc (Eng), MIOSH

### **Executive Manager (Finance)**

Harilaos Hadjiyerou (from 1.6.2005) FCA, MBA

### **Distribution System Owner Manager**

Adamos Kontos (from 2.3.2015, by assignment) BSc (Eng), MEng, PhD, MBA, MIEEE

### Distribution System Operator Manager

Anastasis Gregoriou (from 4.11.2014, by assignment) BSc (Eng), MBA, MIET, CEng

### Transmission System Owner Manager

Costas Gavrielides (from 2.3.2015, by assignment) BSc (Eng), MEng, MBA, CIPR, MIET, MCIPR

### **Power Generation Manager**

George Skarparis (from 1.7.2015, by assignment) BSc (Eng), MBA, MBA (Oil, Gas & Energy Management), MIET, CEng, MIMechE

### **Supply Manager**

Yiangos Frangoulides (from 2.3.2015, by assignment) BSc (Eng), MBA, MIEEE, MIEE

### **LEGAL ADVISERS**

Ioannides Demetriou LLC Lefkosia

### **AUDITORS**

Auditor General of the Republic KPMG, Lefkosia

## Chairman's Message



Yet another difficult year for the EAC and the whole country has ended, during which, despite the problems we had to deal with, we succeeded in carrying out our mission to provide a secure and reliable supply of electricity to every corner of Cyprus.

Two years have now passed passed, since we were appointed to the Board of Directors of the Organisation, and I can now publicly admit that we felt most intensely the burden of responsibility of not only managing what is perhaps the biggest industrial organisation in the country - to which it has made a multi-faceted, multi-dimensional contribution - but also of reshaping and modernising it.

Today, the EAC contributes 5% to Cyprus' GDP and it is present in every business and household, even in the most isolated parts of the island. The successful (or unsuccessful) transformation of the Organisation and the broader energy sector will determine the future and prospects of the economy.

Given this great burden of responsibility, the Board showed its trust in the Organisation and its people from the outset. In close cooperation with the Management Team and the entire personnel, and with the approval of the Trade Unions, we proceeded to implement the regulatory decisions of the Cyprus Energy Regulatory Authority (CERA) concerning Operational Unbundling.

The timetable for compliance with the regulatory decisions was approved by CERA, while -in a recent decision- the Council of Ministers welcomed the EAC's efforts aimed at its efficient and productive operation, and called upon us to continue and complete this significant undertaking.

We have asked only two things of the State, which we consider self-explanatory. First, time to implement everything we have planned and second, for approval of the essential management positions, including that of General Manager, in order to create the right Management Team for the Organisation's new structure.

It is, however, broadly acknowledged that -apart from the EAC- the country as a whole requires time, given that important energy issues still remain unclear. Whether a solution is found to the Cyprus Problem, or Cyprus and Israel collaborate on energy matters and furthermore, whether or not third-party investments in power generation with conventional fuels will take place... these all are imponderables that can affect the optimal form and structure that the country's sole state energy producer should have today.

The Board's position -as expressed repeatedly in every forum and to all those responsible- is that, following the major and substantial changes the Organisation has undergone we should proceed slowly so as to allow time for everything to be tested in practice because, in a sector as significant as energy, we cannot afford to make mistakes. When an organisation that -that was used to work in a certain way for 63 years- finds itself in a completely new situation, it is only to be expected that a reasonable amount of time will be required for it to assimilate changes, deal with objections, and clarify any ambiguities that may arise.

On the basis of the above, the EAC is proceeding steadily with the implementation of the programme that it had begun, anticipating that all those involved will stand beside the Organisation but, even more importantly, we call on the EAC's personnel to give their full cooperation and solidarity since, by doing their very best, they will enable us to successfully achieve our objectives.

Among the statistics contained in the pages of this Annual Report are those that depict our Organisation's financial state. In spite of the fact that, global oil prices fell in 2015, fuel costs still represent 52% of the EAC's total expenses. This percentage illustrates, on the one hand, the long-term dependence of the Authority and the country on international oil prices and, on the other, the need to find an alternative fuel for electricity generation. At the same time, it is imperative to cultivate energy awareness among all age groups.

Revenue from billed sales of electricity for the year amounted to €576.379.000, a reduction of €144.757.000 or 20.1%. Total operating expenses amounted to €552.331.000, a reduction of €164.264.000 or 22.9%. Taking into consideration financing costs of €7.577.000, profit before tax was €70.342.000 compared to €48.453.000 the previous year. After a provision of €9.964.000 for tax, net profit for the year was €60.378.000 (2014: €41.976.000).

As you will see on the following pages, in 2015 the EAC completed a number of important infrastructure projects concerning Generation and Transmission/Distribution, with the aim of ensuring the uninterrupted supply of electricity to every part of Cyprus, projects of which the Authority is extremely proud.

To close my brief overview of the year, I wish to express particular thanks to the President of the Republic for the constructive meetings we had concerning the future of the EAC, to the Minister of Energy, Commerce, Industry & Tourism for his cooperation, and to all those working at his Ministry. I also thank the Government, the House of Representatives, the Auditor-General and the Accountant-General of the Republic, the Cyprus Energy Regulatory Authority, the Cyprus Transmission System Operator, all the government departments and local authorities with which the EAC has cooperated, as well as the representatives of the media for the publicity given to the EAC's work.

Finally, I would like to thank all my colleagues on the EAC Board, the former General Manager, Dr. Stelios Stylianou, the Acting General Manager Mr. Antonis Patsalis, the Management of the Organisation, the Trade Union leaders, and every member of staff for the services they provide to the EAC's customers.

Othon Theodoulou Chairman

## Deputy General Manager's Message



By continuing to provide high-quality service and a reliable electricity supply to every corner of Cyprus, the EAC succeeded in 2015 in carrying out its mission, as well as completing various projects included in its development plan. This plan will enable the Authority to offer its services throughout Cyprus for many years to come, benefiting the economy and, at the same time, reinforcing the Organisation's positive public image.

For the EAC, the years since the tragic events at Mari in 2011 and the subsequent financial crisis have been extremely hard. Yet, despite the difficulties, the Authority has managed to do everything required in order to continue the provision of electricity to its customers and to serve the Cypriot public in a responsible and reliable manner.

In 2015, the EAC continued on its positive course, a fact that is reflected both in the progress made in its development plan projects and in a 3,1% increase in sales over 2014.

The efforts that began 4-5 years ago to increase productivity, to improve and upgrade the services we provide, and to reduce the Organisation's operating costs have borne fruit, rendering the Authority a healthy, financially robust enterprise. The contribution and efforts of the entire personnel have been more than crucial to this development, and I would like to take this opportunity to express my personal thanks to each and every EAC employee.

Moreover, 2015 was marked by a meeting of minds among the Executive, Management, and Trade Unions in favour of the EAC remaining a vertically integrated public sector organisation. We are aware of the difficulties that we will have to face in the coming years, but I am convinced that -equipped with the know-how and experience of our personnel- together with their zeal and best efforts we shall be in a position to continue the work that the EAC has been doing for more than 63 years.

Let me mention some of the most significant projects that were implemented in 2015.

The "Seminary" 132/11kV Transmission Substation in Lefkosia, the "Commercial Centre" 132/11kV Substation in Larnaka, the "Ayios Nikolaos" 132/11kV Substation in the Ammochostos district, and the "Kofinou" 132/11kV Substation in Larnaka were all upgraded.

At the same time, in 2015 the "Kofinou-Pyrgos" and "Kofinou-Mari" 66kV transmission lines were dismantled, and work began on the undergrounding of the "Athalassa-Latsia" interconnection, which is due to be completed in Autumn 2016.

In February 2015, with a view to offering better and faster customer service while, at the same time, reducing operating costs at its Customer Service Centres (CSC), the EAC transferred the Strovolos CSC from Athalassa Avenue to a specially designed space inside the Head Office building. This new facility is bigger and more spacious, with easy access, and more parking space.

Also in February 2015, the EAC's laboratories at Vasilikos and Dhekelia Power Stations obtained ISO 17025 Certification for their lab testing and calibration.

At Vasilikos Power Station on 22 December 2015, the Minister of Transport, Communications & Works officially opened the Disaster Recovery Centre for the EAC's Data Systems, Technology, Electronic Systems, and Telecommunications, which also includes the Backup Energy Control Centre.

The EAC continued its social contribution in 2015, with the main pillars of its Corporate Social Responsibility programme being health, environmental protection, sport, the arts, dance, music, the promotion of cultural monuments, and support for the enclaved children of Rizokapaso. Through its CSR programme, the Organisation has helped hundreds of Associations active in these areas. The "Give Light to a Life" event organised jointly by the Cyprus Anticancer Association and the Electricity Authority of Cyprus every December, has become an institution that helps raise funds and realise the Society's goals. In December 2015, an EAC delegation led by Chairman Mr Othon Theodoulou visited schools in Rizokarpaso for the 12th consecutive year, taking gifts for the pupils and the Rizokarpaso education authority.

At this point, I wish to express particular thanks to the Chairman of the EAC Board, Mr Othon Theodoulou, Vice-Chairman Mrs Demetra Karantoki and the other members of the Board for the excellent collaboration that we have had since the day I was appointed Deputy General Manager.

I would also like to express my warm thanks to all my associates, in particular, the members of the Management Team with whom I exchange views and ideas on a daily basis with the sole aim of ensuring the best interests of the Organisation. It would be an omission if I were not to mention the excellent and fruitful cooperation of the EAC trade unions. I am certain that their contribution to maintaining the Organisation's leading role on the country's energy scene will prove to have been of crucial importance.

I believe that our Organisation -through the constant improvements to the services it provides to the public, but mainly thanks to the experience it has amassed throughout its years of service to Cyprus- will continue to play a leading role in the new, emerging electricity market environment.

Antonis Patsalis Deputy General Manager



# Operational

# Unbundling

Following the Cyprus Energy Regulatory Authority (CERA) Regulatory Decisions No. 02, 03 and 04/2014 for the Unbundling of EAC accounts and the Operational Unbundling, EAC implemented measures for its compliance.

Regarding the Operational Unbundling, EAC prepared a number of Policy Documents in 2015. These include the Basic Compliance Program, the 4 Compliance Programs of the Core Regulated Activities (CRA) Generation, Supply, Transmission and Distribution, the Corporate Governance Code, the Code of Conduct, the Code of Operation for the Common Services and the Code of Operation for the Non-Regulated Activities.

The Corporate Governance Code was approved by the Board of Directors on 3.3.2015, and it aims at ensuring the good governance of the Organisation, in agreement with the principles of transparency, consistency, impartiality, honesty, and reliability.

The Corporate Governance Code includes, amongst others, the Legal Framework of EAC's activities, a description of the role of the Board of Directors, the Internal Audit, as well as the Risk Management Policy and the Code of Practice of the Special Joint Subcommittees for Networks and Generation-Supply.

By implementing the above measures, EAC seeks to achieve exclusion of cross-subsidization and protection of competition to avoid "discrimination" and non-discriminatory behavior towards consumers, users of the system, and electricity market participants.

At the same time, EAC adopts measures to promote the Independence of Governance and Decision-Making between Competitive and Monopoly Activities, the Operational Independence, the separation of Information Systems, and the proper management of Confidential Information for the purposes of Operational Unbundling.

# business units and managements



## Power Generation

# and Supply Business Unit

### **GENERATION OF ELECTRIC POWER**

During the year 2015, the Electricity Authority of Cyprus continued the implementation of its operations which provided for the full utilisation and maintenance of the existing Vasilikos, Dhekelia and Moni Power Stations.

### **VASILIKOS POWER STATION**

Vasilikos Power Station, with an installed capacity of 868 MW (3 x 130 MW Steam Units, 2 x 220 MW CCGT Units and 38 MW Gas Turbine Unit), generated in 2015, 2 693 444 MWh, which corresponds to 65,25% of the total electricity generated from the Authority's Power Stations. During the same period the Station exported 2 546 322 MWh which corresponds to 65,18% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency for units generated, of the Steam Units 1, 2 and 3, reached 38,29%, for the CCGT Unit No. 4 reached 46,58%, while for the CCGT Unit No. 5 reached 47,79%.

Moreover, the thermal coefficient of efficiency for units exported, of the Steam Units 1, 2 and 3, reached 36,10%, for the CCGT Unit No. 4 reached 45,04%, while for the CCGT Unit No. 5 reached 45,09%.

### **DHEKELIA POWER STATION**

Dhekelia Power Station, with an installed capacity of 460 MW (6 x 60 MW Steam Units and 100 MW for Internal Combustion Engines (ICE1 & ICE2 Plants), generated in 2015, 1 422 964 MWh which corresponds to 34,47% of the total electricity generated from the Authority's Power Stations. During the same period, the Station exported 1 350 052 MWh which corresponds to 34,55% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the Steam Units, for units generated, reached 29,27%, whereas the corresponding thermal coefficient of efficiency for the Internal Combustion Plants reached 41,40%.

Moreover, the thermal coefficient of efficiency of the Steam Units, for units exported, reached 27,53%, whereas the corresponding thermal coefficient of efficiency for the Internal Combustion Plants reached 40,21%.

### MONI POWER STATION

The installed capacity of Moni Power Station is 150 MW  $(4 \times 37,5 \text{ MW Gas Turbine Units})$ . It is noted that since the 14/10/2013 Units 3, 4, 5 and 6 were withdrawn from the installed capacity of the Station and therefore the installed capacity of the thermal units has been reduced to 0 MW.

Moni Power Station generated in 2015, 11 467 MWh which corresponds to 0,28% of the total electricity generated from the Authority's Power Stations. During the same period, the Power Station exported 10 698 MWh which corresponds to 0,27% of the total electricity exported from the Authority's Power Stations.

The thermal coefficient of efficiency of the gas turbines for units generated reached 23,80% whereas the corresponding thermal coefficient of efficiency for units exported reached 22,21%.

### **ENVIRONMENTAL ISSUES**

For the protection of the environment and the continuous monitoring of the air quality, four mobile air quality units -two at each operating Power Stations (Vasilikos and Dhekelia)- were in continuous operation at selected sites in the vicinity of the Power Stations during 2015. These fully equipped units are capable of monitoring the ground level concentrations of dust, nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), carbon dioxide (CO) and ozone (O<sub>3</sub>). The units are also capable of measuring other meteorological data, such as wind speed and direction, air temperature and relative humidity.

### **STUDIES**

Officers of the Operational Generation Unit were involved in the procedures required for the Accession of Cyprus in the European Union and the effects these will have on EAC operations and especially in matters involving the environment and the generation of electricity.

The Operational Generation Unit prepared the verification report with calculations of the carbon dioxide (CO<sub>2</sub>) emissions for the period January-December 2014, based on the greenhouse gas Emissions Trading Directive. This report was subsequently verified by an external consultant and submitted to the Ministry of Agriculture, Rural Development and Environment.

# Power Generation and Supply Business Unit

### SYSTEM OPERATION

### **Electricity supplied**

In 2015, the total number of units generated by the EAC's three Power Stations was 4 127 876 MWh, compared to 4 013 404 MWh in 2014, representing an increase of about 2,85% over the previous year.

Figure 2 (page 19) shows the total number of units generated annually from 2008 to 2015, as well as the predicted generation for the period 2016 - 2023.

### Generation, Transmission and Distribution Losses

Electricity consumption at the Power Stations amounted to about 5,35% of the total generation, compared to 5,11% the previous year.

Figure 3 (page 20) shows electricity generation and sales distribution for the various consumer categories.

### **Fuel Consumption**

The amount of heavy fuel oil consumed by the Power Stations totaled 857 868 Metric Tonnes, compared to 793 319 Metric Tonnes the previous year, representing an increase of 8,14%.

The total quantity of diesel fuel consumed by the Power Stations was 89 358 Metric Tonnes, compared to 123 584 Metric Tonnes consumed during 2014, representing a decrease of 27,70%.

The average calorific value of the fuel oil used was 43 017 kJ/kg, compared to 42 563 kJ/kg in 2014.

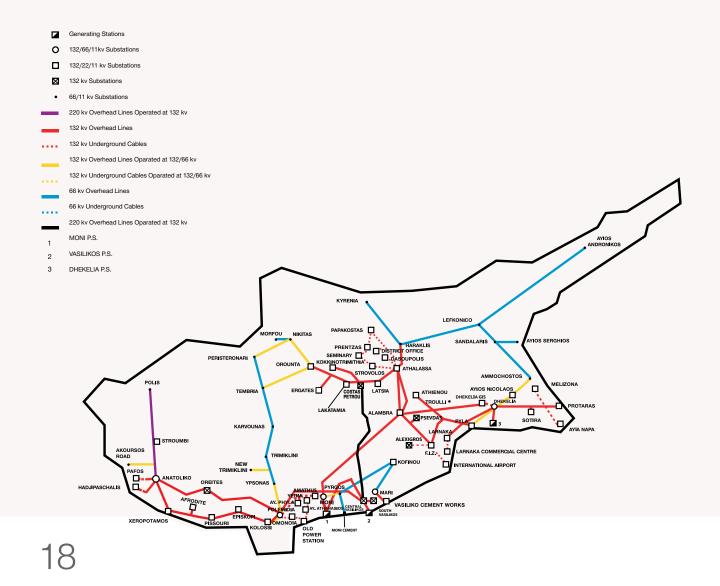
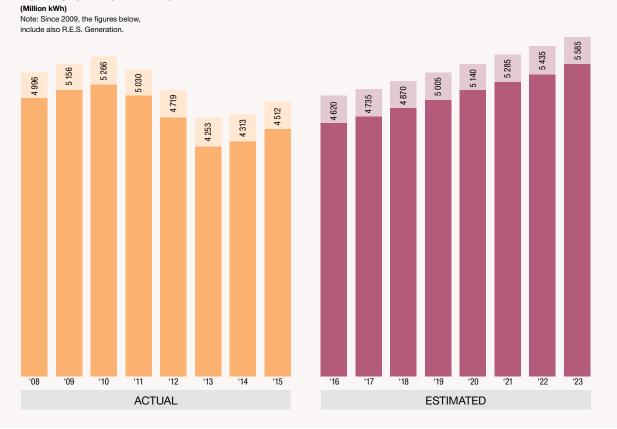




Figure 2

TOTAL SYSTEM GENERATION
(Million kWh)



# Power Generation and Supply Business Unit

### Plant Efficiency

The average generating system efficiency in 2015 -based on the total units generated by the EAC's three Power Stations- was 36,47%, compared to 37,02% in 2014. The heat rate per kWh generated was 10 429 kJ/kWh, compared to 10 247 kJ/kWh in 2014.

### **DEVELOPMENT PLAN OF EAC**

The Authority has taken the decision to install an SCR DeNOx System on No. 1 Internal Combustion Engines (ICE1) at Dhekelia Power Station, the operation of which is expected within 2016.

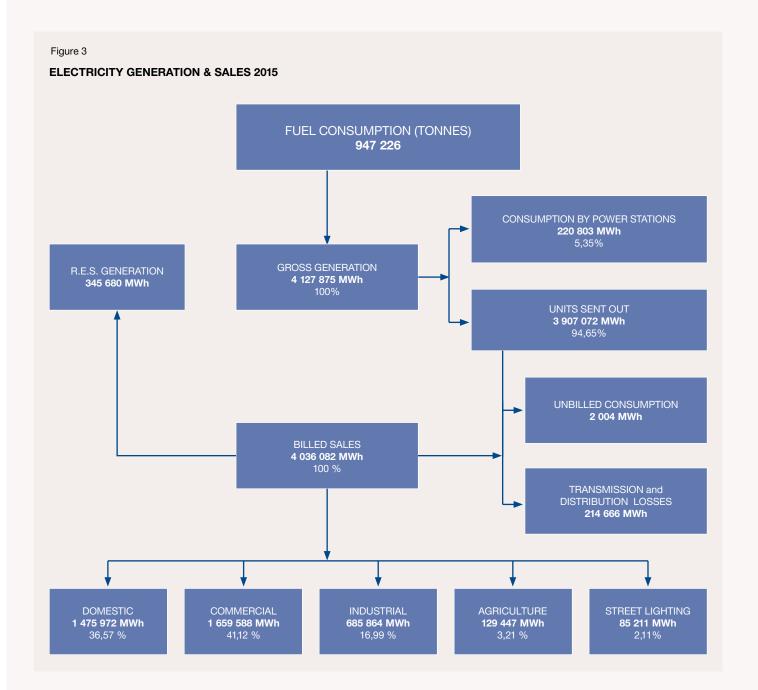
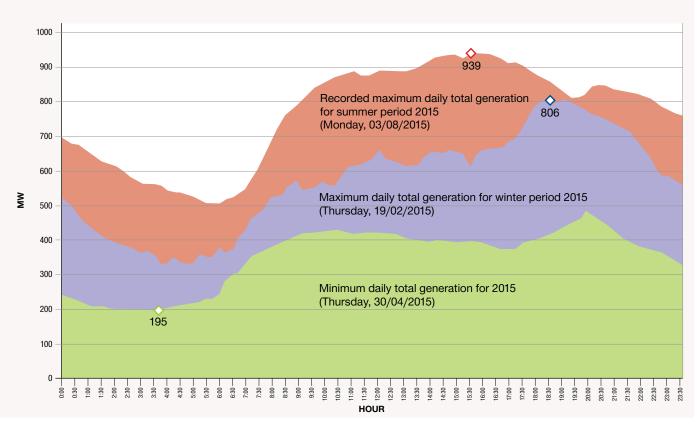
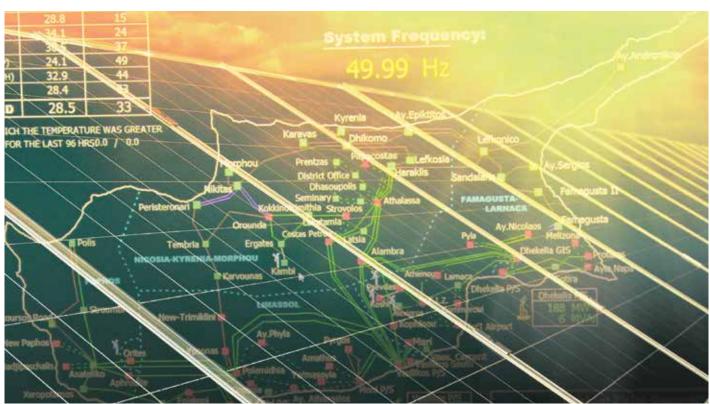


Figure 4

RECORDED MAXIMUM AND MINIMUM TOTAL GENERATION FOR WINTER AND SUMMER PERIOD OF 2015





### **SUPPLY MANAGEMENT**

### **CONSUMERS**

At the end of 2015, the total number of consumers in the government-controlled areas of Cyprus stood at 559 700: a net increase of 5 126 or 0,9%.

Table 1 below shows the number of consumers by category, as well as the percentage increase/decrease over the previous year.

Table 1

### NUMBER OF CONSUMERS

CONSUMER CATEGORY	AS AT 31.12.2015	AS AT 31.12.2014	CHANGE %
Domestic	437 577	433 072	1,0
Commercial	85 525	85 188	0,4
Industrial	9 712	9 836	(1,3)
Agricultural	15 748	15 536	1,4
Street Lighting	11 138	10 942	1,8
TOTAL	559 700	554 574	0,9

### **BILLED SALES OF ELECTRICITY**

Billed sales of electricity in the government-controlled areas amounted to 4 036,1 GWh, compared to 3 915,5 GWh the previous year, representing an increase of 3,1%.

Table 2 below shows the allocation of billed sales of electricity by consumer category, as well as the percentage increase over the previous year.

Table 2

### BILLED SALES OF ELECTRICITY (MWh)

CONSUMER CATEGORY	AS AT 31.12.2015	AS AT 31.12.2014	INCREASE %
Domestic	1 475 972	1 407 656	4,8
Commercial	1 659 588	1 630 789	1,8
Industrial	685 864	656 097	4,5
Agricultural	129 447	135 680	(4,6)
Street Lighting	85 211	85 257	(0,1)
TOTAL	4 036 082	3 915 479	3,1

Sales for the years 2013, 2014 and 2015 are shown in Fig. 5 (page 25).

Sales and revenue for 2015 are shown by consumer category and as a percentage of the EAC's total sales and revenue in Fig. 6 (page 25).

### **OFF-PEAK SUPPLIES**

Off-peak sales (Tariff Code 55) totalled 46 569 MWh, representing an increase of 7 231 MWh or 18,4% compared to 2014. This was due mainly to the fact, that the average per kWh charge for the off-peak tariff (Tariff Code 55) decreased from 12,55 cents in 2014 to 9,74 cents in 2015.

Consumers opting for the off-peak tariff totalled 20 970, representing a reduction of 91. Of these, 20 649 (96,9%) were domestic consumers with an average consumption of 2 186 kWh compared to 1 834 kWh in 2014.

### **TARIFFS**

In the context of the upgrading of the EAC's services and its efforts aimed at energy conservation, we once again sent out an annual statistical report to all our monthly billed customers. This report includes information on monthly consumption and peak demand for their premises, as well as monthly voltage and load indicators, which are directly linked to proper energy use and conservation.

In the framework of the special domestic tariff (code 08) for large and needy families, by the end of December 2015 some 15 971 customers were benefiting from this. The total benefit to customers in 2015 and, consequently, the reduction in revenue to the EAC as a result of this special tariff, was €2.511.982, compared to what it would have been if these customers had remained on tariff code 05.

The average selling price of electricity per kWh in all categories reduced from 18,418 cents in 2014 to 14,281 cents in 2015 or 22,5 %, as a result of the reduction of oil prices and the permanent reduction of 8% that CERA imposed to the basic price of EAC tariffs.

### LOAD RESEARCH AND CONTROL

In the context of its Load Research, the EAC uses a software programme by which meter data and customer load curves are obtained remotely and automatically. This programme enables the direct monitoring of customer loads, the automatic retrieval of data and the timely preparation of Load Research reports.

During 2015, the EAC continued to implement this Load Research method for all its corporate customers who are supplied at a high and medium voltage and for low-voltage commercial and industrial customers. The data obtained was analysed, processed and subsequently used in the drawing up of new tariff studies.

### **CUSTOMER SERVICE AND BILLING SYSTEM**

Since the implementation of this new system, the standard of EAC customer service and information has improved significantly. Moreover, the system facilitates and speeds up the day-to-day work of the EAC's Customer Service departments to a considerable degree. The entire system is the main tool and source of information for the EAC Contact Centre.

### CONTACT CENTRE

The Contact Centre enables the EAC to provide good quality service and information to consumers/customers quickly and efficiently, to promote a progressive and dynamic image and, in general, to respond to the expectations of consumers/customers.

### **Meter Reading Service**

One of the services provided by the Contact Centre is that of Meter Reading service. This service enables customers -whose meters have not been read because, for example, their premises were closed- to call the freephone number 80006000 at any time, and key in the 10-digit meter indication. In 2015, the Meter Reading Service received approximately 22 300 calls.

### **Billing Service**

The Billing Service enables customers to call the islandwide four-digit number 1800 and be automatically informed of the amount of their bill by keying in their bill number. They may also receive information and clarifications about bills, methods of settlement, connections, reconnections, disconnections, transfers, domestic tariffs, how to become a first-time customer, etc. In 2015, the Billing Service received approximately 142 000 calls.

### **Faults Reporting and Complaints Service**

The Contact Centre's Faults Reporting and Complaints Service has replaced and improved the services previously provided by the Islandwide Faults Reporting Centre (IFRC).

The aim of this service is to provide customers with a full, top quality telephone response during major faults causing lengthy power cuts as well as during daily, isolated faults on the EAC network, on customer premises and to street lighting.

Furthermore, customer complaints are recorded on issues concerning the EAC network such as tree pruning, street lighting problems, etc.

Customer calls are routed via the islandwide four-digit number 1800 to Customer Service Officers at the Contact Centre, where the faults are recorded automatically and subsequently reported to Area technical crews for repairs. In 2015, the Faults Reporting and Complaints Service received approximately 185 000 calls.

To improve the recording of faults and customer complaints, the EAC has devised a new software package "Prometheus", which was introduced in January 2014.

### **New Applications Service**

Customers can dial the islandwide four-digit number 1800 to be informed -either automatically or by a Contact Centre officerabout the documentation required to accompany an application for electricity supply and about what stage their application has reached. In 2015, the service received approximately 16 300 calls.

### "JOIN AND WIN" CAMPAIGN

Since December 2014 and throughout 2015, the Supply Management launched the campaign "Join and Win" giving the opportunity to customers to win supermarket vouchers worth €100. Specifically, customers who settle their account via bank order participate in a draw for 10 vouchers every six months, while customers who settle their account via bank order and also receive their electricity bill electronically participate in a draw for 10 coupons every three months.

### **SEND SMS TO CUSTOMERS**

Since Autumn 2015, the Supply Management in its effort to help even further its -customers who for any reason have delayed the payment of their electricity bill- adopted -as an additional reminder- the sending of SMS messages to customers for settling their bills, before EAC proceeds with disconnecting the electricity supply to their premises.

### RENEWABLE ENERGY SOURCES

EAC, always acting always under the strict framework of Cyprus' appropriately adapted and amended Laws and Regulations concerning the subject of Renewable Energy Sources (RES), continues and in 2015 to give all possible technical assistance and priority in the examination of customer's applications to install units for generating electricity

#### from RES.

In accordance with the provisions of European Directive 2009/28/EC (previously 2001/77/EC), issued during Cyprus' accession process and its compliance with the directives, legislation and regulations of the European Union, the Government proceeded with -among other things- the necessary legislative, regulatory and administrative measures for the promotion of the use of Renewable Energy Sources (RES) and, more generally, of energy conservation with the ultimate goal of increasing the contribution of RES to the country's energy balance.

In accordance with existing legislation and the relevant decisions of the Council of Ministers, the EAC is obliged to purchase electricity generated by Producers using Renewable Energy Sources who are registered with the Grants/Subsidies scheme of the Ministry of Energy, Commerce, Industry & Tourism and to distribute it on its grid at an avoidance cost price determined by the Cyprus Energy Regulatory Authority (CERA). To this end, an Electricity Purchase Agreement is signed between the Producer using RES and the EAC. In addition to the purchase price paid to the Producer by the EAC, the Producer receives a subsidy for the generated kilowatt hours of electricity from the Special Fund for Grants/Subsidies, having been approved/registered with the Special Fund for Grants/Subsidies.

By the end of 2015, a total of 1 914 photovoltaic systems had been installed (compared to 1 873 photovoltaic systems at the end of 2014, i.e. an increase of 2,2%) and were producing up to 50 458 kW, with a total installed voltage (compared to 45 727 kW at the end of 2014, i.e. an increase of 10,3%) and total production of 86 843 452 kWh (61 302 746 kWh at the end of 2014, i.e. an increase of 41,7%). It should also be noted that by the end of 2015, some 14 Generation Units using biomass/biogas were in operation with a total installed capacity of 9 714 kW and a total production of 37 407 950 kWh. In April 2015, a new Wind Park of 10,8 MW starts its commercial operation increasing the installed capacity of Winds Park in Cyprus to 157,5 MW. The six Wind Parks operating on the island generated 221 428 315 kWh in 2015.

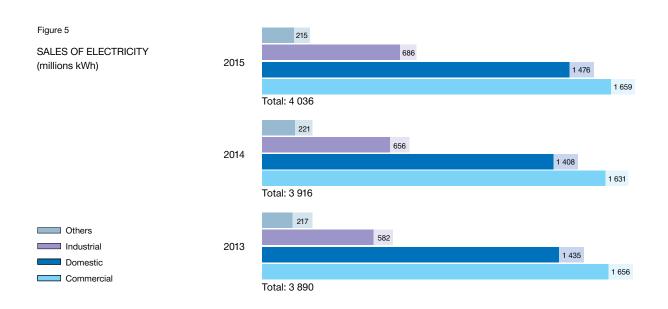
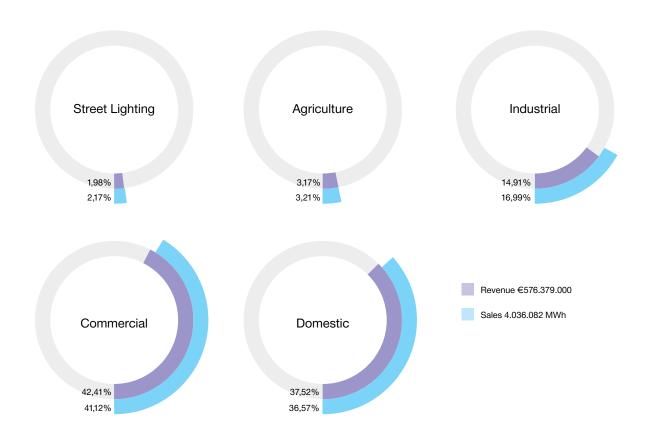


Figure 6
ELECTRICITY SALES & REVENUE BY CONSUMER CLASS





## Networks

# Business Unit

The Networks Business Unit (NBU) is the EAC's largest Unit and is responsible for the development, operation, maintenance and management of the National Transmission and Distribution Networks.

Transmission and Distribution System operation, ownership of the Distribution System, the four EAC Area Offices, as well as the Electronics and Communications, Civil and Building Works and the GIS Network Data System Sections are all part of the NBU.

### TRANSMISSION SYSTEM OWNER MANAGER

The Transmission Network is the backbone of the EAC's system, connecting the Power Stations to the load centres.

Development works to respond to the ever-increasing demand for electricity and, at the same time, increase the reliability of the Transmission System.

During the year under review, the installed capacity of the transmission Substations increased by 159.5 MVA.

### **CONSTRUCTION PROJECTS**

In 2015, the following development and upgrading works were carried out on the Transmission Network:

### **Upgrading/Dismantling of Substations**

### Seminary 132/11kV Substation in Lefkosia

In March 2015, work was completed on replacing a faulty 31.5 MVA transformer with a new 40 MVA one.

### Commercial Centre 132kV Substation in Larnaka

In May 2015, work was completed on the installation of a third 31.5 MVA transformer, thereby increasing its guaranteed capacity to 63 MVA.

### Ayios Nikolaos 132/11kV Substation in the Ammochostos District

In July 2015, work was completed on the upgrading of the Substation to a 2 X 31.5 MVA 132/11kV conventional type from 2 X 15 MVA 66/11kV.

### Kofinou 132/11kV Substation in Larnaka

In September 2015, work was completed on the upgrading of the Substation to a 2 X 31.5 MVA 132/11kV conventional type from 2 X 15 MVA 66/11kV.

### **Overhead Power Lines/Underground Transmission Cables**

### Dismantling of the Kofinou-Pyrgos and Kofinou-Mari transmission lines

Following the upgrade to the Kofinou Substation from 66kV to 132kV, dismantling work began on the old 66kV Kofinou-Pyrgos and Kofinou-Mari transmission lines, a total length of approximately 40km. Dismantling will be completed in 2016.

### Ypsonas-Trimiklini 132kV overhead power line

Work on the middle section of the line in the Lania area remains at a standstill.

### Vasilikos-Moni 132kV overhead power line

In 2015, the EAC published separate tenders for the provision of materials for the construction of the above interconnection. Work is due to start in 2016.

### Vasilikos-Mari-Kofinou overhead power line

In 2015, the EAC published separate tenders for the provision of materials for the construction of the above interconnection. Work is due to start in 2016.

### Undergrounding of the Athalassa-Latsia interconnection

The EAC awarded the tender for the undergrounding of the Athalassa-Latsia interconnection and work began at the end of 2015. It is due to be completed in autumn 2016.

### **Other Projects**

### Transmission System Reactive Power Compensation

 The tender was published for the purchase of 2x50MVAr 132kV variable inductors to be installed in the Tseri and Alambra Substations. They are expected to be commissioned in 2017.

### TRANSMISSION SYSTEM DEVELOPMENT STUDIES

In 2015 the following studies were prepared in collaboration with the Transmission System Operator (TSO):

### Lefkosia Area

The following studies are planned for Lefkosia and the district:

 Replacement of 132kV GIS equipment at the Strovolos Substation.

### Networks Business Unit

### **Lemesos Area**

The following studies were completed and approved for Lemesos and the district:

 Upgrading the Kolossi Substation to 32-22/11kV and the installation of a new primary Substation on the British Sovereign Base at Akrotiri.

The following studies are also planned:

- Transformation of the Pyrgos 66kV Substation into a primary Substation.
- Changing of the busbars at the Yermasoyia Substation to 22-11kV.
- · Vasilikos-Moni interconnection.

### Ammochostos-Larnaka Area

The following studies were completed and approved for Ammochostos-Larnaka and the district:

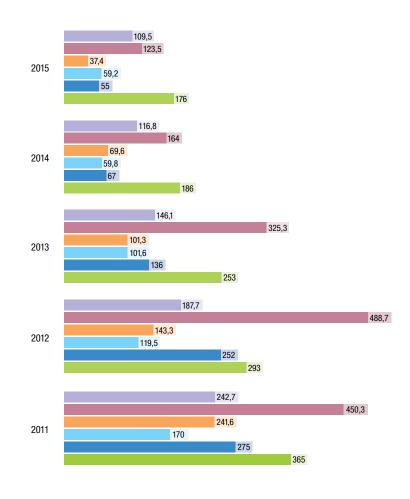
- Upgrading the Mari transmission Substation to 132kV GIS.
- Upgrading the Kofinou transmission Substation to 132kV.

The following studies are planned for the Ammochostos-Larnaka Area:

- New Vasilkos-Mari-Kofinou overhead power line (Rubus Twin).
- New Kofinou-Alambra overhead power line (Rubus Twin).

Figure 7

NEW DISTRIBUTION PROJECTS EXECUTED
IN THE LAST FIVE YEARS



L.V. O/H LINES (km)

L.V. U/G CABLES (km)

MV U/G CABLES (km)

G.M. TRANSFORMERS

MV O/H LINES (km)

P.M. TRANSFORMERS

#### **Pafos Area**

The following studies were completed and approved for Pafos and the district:

 Relocation of part of Kolossi-Aphrodite and Pissouri-Xeropotamos 132kV double circuit underground interconnection to the Aphrodite Hills Hotel in Pafos.

The following studies are planned for Pafos and the district:

 Transfer of the autotransformer at the Anatoliko Substation to the Akoursos Substation (Rubus Twin).

#### Other studies:

The following studies have also been completed:

 Ten-Year Transmission System Development Plan 2016-2025.

The following studies are also planned:

- Ten-Year Transmission System Development Plan 2017-2026.
- Continuous Modelling of the Transmission System and Equipment and System Analysis.
- · Transmission System Reliability for summer 2016.

All Transmission System studies are carried out in collaboration with the Cyprus Transmission System Operator (TSO) which is directly responsible for the operation and development of the Transmission System.

### TRANSMISSION NETWORK MAINTENANCE

In the framework of creating a Project Management Environment across the complete range of Network works, all Transmission Network maintenance work was planned, monitored and managed as a single, unified, annual major Network project. It was 77% implemented.

### **CIVIL AND BUILDING WORKS SECTION**

The Civil and Building Works Section is part of the Networks Business Unit but, over and above this, it deals with all the EAC's construction and technical projects, including those relating to the Transmission and Distribution Networks, Generation Development, buildings and other EAC infrastructure.

### **Transmission System Projects**

The Civil & Building Works Section is involved in all

transmission system development projects (substation buildings, overhead power line pylons) with the conducting of architectural/static studies, preparation of plans and documents for the issuing of the relevant permits, negotiations with the responsible authorities, preparation of specifications and documents for the issuing of tenders, project budgeting, assessment report, supervision of construction work, management of contracts, contractor demands and final bills. During the year under review, the Section dealt with the following transmission system projects:

- Preparation of studies and plans for the publication of a tender for the GIS transmission substation at Moni.
- Transmission substation maintenance work.
- Additional transmission substation extension work (study and contract supervision and management).
- Supervision of the construction of pylons for high voltage overhead power lines.
- · Overhead transmission line pylon maintenance.
- The study, preparation of plans, specifications and documentation for construction work related to the installation of transmission substation security systems.

### **Distribution System Projects**

For the distribution Substations, all the necessary paperwork and plans have been prepared and tenders published for construction and maintenance work. Contract management is carried out by the Civil and Building Works Section.

Also, under the Section's supervision, various building works have been undertaken, including:

- Transmission Substation construction.
- Distribution Substation maintenance.
- Supervision of EAC crews undertaking distribution Substation maintenance work.

### **Power Stations**

### Vasilikos Power Station

In 2015, preliminary studies were carried out and plans prepared, in coordination with the Power Generation and Supply Business Unit, in relation to infrastructure projects for the use of natural gas instead of conventional fuels.

The Section also provided specialist services regarding building maintenance work (assessing damage, preparing

### Networks Business Unit

technical specifications, publishing tenders and supervising contractors).

#### **Dhekelia Power Station**

In 2015, in collaboration with the Power Generation and Supply Business Unit, a tender was published and awarded for the construction of an SCR unit for the three Internal Combustion Engines (ICE 1).

The Section also provided specialist services regarding building work, storm damage repairs, the installation of a large fire pump for sea water, etc.

### Moni Power Station

The Civil and Building Works Section, in collaboration with the Power Generation and Supply Business Unit, obtained a positive Environmental Opinion for the demolition of the six steam turbines.

In 2015, it prepared the study, plans and documentation for the publication and awarding of the relevant tender for the construction of Moni Power Station (Gas Turbine Units) Control Centre. Construction work began at the end of the year and will last six months. Furthermore, a new distribution Substation was designed and built within the Power Station, and maintenance work was carried out on the three oil tanks supplying the four gas turbines.

### **Power Station Maintenance and Improvement Works**

The Civil & Building Works Section provided the necessary support for maintenance and improvement works on the Dhekelia, Vasilikos and Moni Power Stations. It is preparing a fixed duration contract for the efficient management of maintenance work at the Power Stations.

A study is under way and plans, specifications and documents are being prepared for construction work related to the installation of security systems in the Power Stations.

### Area Offices and Other Buildings

The Civil & Building Works Section is involved in the creation of new buildings, the design of new spaces in existing structures and the maintenance and preservation of existing buildings. It conducts the architectural/static studies, prepares the required plans and documentation for the issuing of the relevant permits, negotiates with the responsible authorities, prepares specifications and documents for the issuing of tenders, project

budgeting, assessment report, supervision of construction work, management of contracts, contractor demands and final bills.

During the year under review, the Section dealt with the following projects:

- Relocation of the Linopetra Customer Service Centre to new premises in Lemesos.
- Relocation of the Strovolos Customer Service Centre to the Head Office building in Lefkosia.
- Establishment of the the Disaster Recovery Centre for the EAC's Data Systems, Technology, Electronic Systems and Telecommunications at Vasilkos.
- The study was completed for the interior design and energy upgrade of the Lemesos Area Offices. The necessary documents, specifications and plans were drawn up for the issuing of the relevant tender.
- The study was completed for the maintenance/ refurbishment of the listed building adjacent to the Old Engine Room substation. The architectural and building plans were prepared.
- The study and publication of the tender of the refurbishment of the rest rooms at the Lemesos Area Offices.
- The provision of technical support to the Management of the Area Offices regarding current issues.
- A study was carried out on conserving resources and improving the functionality of existing owned and rented premises and another on the relocation of the Larnaka Area Offices to its own building.
- Management of final bills, demands of Study Consultants and Contractors for the Pafos Area Offices.

Studies are also under way for the following projects:

- Design of the Distribution System Control Centre at the Head Office building.
- Design of the EAC's IT, Technology and Electronic Systems and Telecommunications Centre at the Head Office building.

### **Distribution System Owner**

The Distribution System Owner (DAO) deals with the entire range of work relating to the expansion, reinforcement and maintenance of the Power Distribution System with the aim of responding to the present-day needs of the Electricity Authority and, more generally, the needs and demands of the country's economy and society.

#### Construction

Distribution Network development projects are implemented and monitored by the responsible departments of the Area Offices.

The cost of construction work for the expansion and development of the Distribution System in 2015 amounted to some €15 million, corresponding to 2,766 construction files/studies.

Specifically, in 2015 131 kilometres of Medium Voltage and Low Voltage overhead power lines were installed, together with 152 kilometres of Medium Voltage and Low Voltage underground cables. Some 151 overhead transformers were installed and 44 distribution substations established.

### Maintenance

In the framework of implementing a Project Management environment across the entire network workload, all distribution network maintenance work was planned, monitored and managed as a single major annual Network project.

For the maintenance of the Low Voltage Network in 2015, patrols and tree pruning took place along a total low voltage line length of 3,875km. For the maintenance of the Medium Voltage Network, a total of 5,609km of medium voltage power lines were patrolled, pruning took place and vegetation was cleared along a total of 5,774km of medium voltage power lines. Additionally, 692 equipment earthing systems were inspected and 199 were repaired, while simple equipment maintenance was carried out in a further 196 cases.

As regards transmission substation maintenance, annual work was carried out on 542 substations, twice-yearly maintenance took place in 828 substations and ten-year maintenance was carried out on 239 transmission substations.

### **Technology, Specifications and Code of Practice**

Among the responsibilities of the DAO are the monitoring of developments in power distribution technology, the drawing

up and updating of technical specifications for all Distribution Network equipment and materials. The DAO is also responsible for the preparation of Codes of Practice and Construction Methods as well as Distribution Network Technical Manuals and Processes.

These technical specifications are under constant revision due to changes into international standards, improvements in technology, or alterations in the use of materials. There are, in total, 266 approved technical specifications concerning 1,731 materials, 55 technical instructions and 27 Distribution Network procedures. In 2015, 30 technical specifications were revised.

At the same time, the DAO provides technical support on issues of cooperation with strategic partners and of connections for producers using RES and other distributed generation to the Distribution Network.

### **Supply Chain Management**

In order to satisfy the need for expansion, upgrading and maintenance of the Distribution Network, the DAO maintains stocks of materials and equipment.

The single Distribution Supply Chain consists of the Distribution Network Materials Management Team, the Central Distribution Store and the Area Stores.

The operation of the Central Distribution Store and a centralised system of replacement of stocks by the DAO has contributed substantially to a reduction of the accumulated Distribution Network material stocks held by the EAC. Stocks are now regulated dynamically according to the needs for Distribution Network materials over the past 12 months.

As of 31/12/2015, the total value of Distribution Network Material stocks (Central Store, Area Stores and MRTC) amounted to €16,624,995.

### **Evaluation of Tenders and Contract Management**

During 2015, the DAO was involved in the evaluation of four large international tenders and 35 smaller ones. It managed 49 materials procurement contracts, four service provision contracts and 19 project contracts related to both small- and large-scale projects and the provision of materials and services.

For these contracts, quality control is carried out on materials in accordance with European and International Standards, type and design testing takes place in independent testing

### Networks Business Unit

laboratories, routine and acceptance tests are held at the manufacturers' labs, materials are checked upon delivery to the stores and network testing is also carried out.

### Area Offices - Construction and Maintenance (DAO)

The Distribution Network Construction & Maintenance Sections at the EAC's Area Offices fall under the jurisdiction of the DAO.

The objective of the Area Offices (DAO) is to offer the best possible customer service with the ultimate aim of providing an uninterrupted, reliable, high-quality supply of electricity.

The responsibilities of the DAO at Area Office level include the expansion, reinforcement, improvement and maintenance of the Distribution Network, the installation of overhead power lines, the construction of overhead and underground feeders for connecting consumers, meter installation, cable laying/connection, the construction and commissioning of distribution substations, monitoring and supervision of contracted distribution project work, the installation of street lighting in new network development or expansion areas, and the disconnection and reconnection of consumers at the request of the Distribution System Operator.

At Area Office level, the DAO is also responsible for the detection, investigation and reparation of faults. Furthermore, the Area Offices (DAO) undertake the annual/twice-yearly maintenance of distribution substations, the maintenance of the overhead distribution network, tree pruning and the checking and repairing of equipment earthing systems. It also manages the fleet of vehicles at a local level.

### **Electronic Systems and Telecommunications**

The Electronic Systems and Telecommunications section deals with the design, installation, operation, maintenance, repair and upgrading of the EAC's electronic, telecommunications, fire detection, fire extinguishing and protective security systems, and with maintaining strategic telecommunications partnerships, as well as technical support for other units of the EAC and the Cyprus TSO.

Regarding the work carried out in 2015, the following is a summary:

• The EAC's optical fibre network interconnects its transmission substations, power stations, offices, stores and other Authority premises. In 2015, the optical fibre network was extended to two more places, while at the same time, its technical support continued with the repair of faults wherever necessary. Following the award of a tender, a three-year contract was signed with a private company to support the EAC on optical cable monitoring and connection work. The Authority also continued to provide optical fibre circuits to its two strategic partners in telecommunications; Primetel and Cablenet.

- The EAC's SDH/PDH Optical Fibre Telecommunications System uses digital multiplexers to interconnect transmission substations, power stations and the Authority's offices with the objective of catering to the requirements of the SCADA/EMS systems, Transmission Line Teleprotection, Telephony, Load Management (Ripple Control), IT and other services. In 2015, technical support for the system continued with fault repairs, planning for new telecommunications channels, etc. At the same time, upgrades to five units of the system are planned for early 2016.
- The IP/MPLS Optical Fibre Telecommunications System is a fast, new generation telecommunications network which responds to the EAC's data transfer requirements via its own optical fibre network. In 2015, technical support for the system continued, new channels were planned -mainly for the requirements of the IT and SCADA/EMS systems- and work began on extending the system to the Authority's Disaster Recovery Centre, which is in the pipeline.
- In 2015, the Metro Ethernet Optical Fibre
  Telecommunications System was extended with the
  installation of equipment at four more places, in response
  to the telecommunications needs of the SCADA/EMS
  system, the Protective Security, Telephony and IT systems,
  etc. The process started for the upgrading of the system's
  network management station (NMS).
- The Supervisory Control and Data Acquisition and Energy Management System (SCADA/EMS), which was implemented in 1997, controls the Generation, Transmission and Primary Distribution Network systems via the Energy Control Centre (ECC) and the Area Control Centres. In 2015, technical support for the SCADA/EMS system continued, with the provision of telecommunications services and repairs and upgrades to Remote Terminal Units and other equipment. In the framework of the planned gradual upgrade of the old RTUs, two were upgraded and four more are due for upgrades in 2016.
- The Load Management System (Ripple Control) for controlled load management on customer premises (solar heaters, centralised climate control systems, water pumps, street lighting, etc.) uses the Transmission and Distribution Networks as a telecommunications tool. In 2015, technical support continued with system maintenance, fault repairs, programming and operation. The process was begun for the upgrading of coupling equipment at the Anatoliko Substation.



- The M2M Wireless Communication System is used for secure wireless communication via GPRS/3G by the monitoring units of the generators of the Virtual Power Plant, Electric Vehicle Charging Points, smart meters and remote SCADA/EMS terminals. In 2015, 400 more monitored points were added to the system.
- Work continued on the installation of security systems, access monitoring systems, alarm systems and monitoring with cameras at high-risk installations, including transmission/distribution substations, power stations, stores, offices and EAC Customer Service Centres.
- New fire detection and fire extinguishing systems were installed in EAC buildings. Existing fire systems continued to be maintained.

- Technical support continued to be provided for telephone systems, connections of the existing telephone network and systems of the Contact Centre and for the internal networking of the EAC's telephone systems.
- In support of the Civil Defence and the Civil Emergency Planning Service, monitoring and regular testing of telecommunications links continued in agreement with the directives and recommendations of the relevant ministries. Drills were held and all relevant Civil Defence and National Guard support plans were updated.
- Work was completed on the EAC's Disaster Recovery Centre.

### Networks Business Unit

### **Distribution System Operator**

The Networks Business Unit is, according to the recent review of Cypriot legislation, the owner of the Transmission Network and Owner/Operator of the Distribution Network. The particular responsibilities, rights and obligations concerning the Distribution Network Operator (DSO) -arising from Cyprus' legislation- create special requirements for their optimal, strict and effective implementation for the benefit of consumers and the economy. A particular characteristic of the Unit is that it deals with what is, by its very nature, the monopolistic part of the EAC's work and this creates a need for monitored regulation, so that the objectives laid down by the EU and the Republic of Cyprus concerning the functioning of the electricity market are achieved.

The Networks Business Unit has long aimed at finding the best technological solutions which can bring about the most reliable supply of electricity at the lowest possible cost. Now, in particular, with the arrival of distributed generation and the development of two-way communication between consumers and network monitoring points through a modern, reliable telecommunications infrastructure, everything is in place for the creation of a smart network with all the benefits that come with it.

It is clear from the above that the work of the DSO is the development of the Electricity Distribution Network in a new environment, the efficient operation of the power distribution network in Cyprus and the provision of transparent, impartial access to consumers and, in general, all network users. It aims at securing a reliable power supply to consumers, the quality of the voltage and making constant improvements to the quality of service, as well as the smooth operation of the electricity market, since almost all producers, suppliers, consumers and prosumers are users of the Distribution Network.

On the basis of the provisions of the law presently in force, the work carried out by the DSO concerns:

### 1. Responding to applications from users

- · New connections for consumers and producers.
- · Increased capacity of existing connections.
- Network transfers.

### 2. Network Development

- Network reinforcement, improvement and modernisation.
- Construction of Distribution Centres and the necessary interconnecting network.

### 3. Distribution Network Operation and Use

- Distribution Network operation.
- Network user service.
- · Provision of ancillary services.
- · Consumption measurement.
- Support to the Cyprus TSO for the operation of the System, providing all the necessary elements for the operation of the country's interconnected electricity system.

### 4. The smooth and efficient operation of the Electricity Market at Distribution level

- The management of information on the interconnected Distribution Network, with the implementation of a smart network and smart meter architecture for the benefit of all stakeholders in the electricity market.
- Supporting distributed generation through net metering, demand forecasting, etc.
- Serving consumers through demand management systems for the optimum use of the distribution infrastructure, so as to satisfy the needs of consumers in the most economical way.
- Providing the necessary ancillary services for the efficient operation of all active elements connected to the Distribution Network.

During the year in review, among other things in the framework of its role as Distribution System Operator, the Networks Business Unit:

 Managed the penetration of the following Photovoltaic Systems:

Photovoltaic Systems	Number of Producers	Total Installed Capacity (kW)
Net Metering	8 045	24 160
Autoproducers	47	1 930
Other systems through the purchase of electricity	1 914	50 458

- Undertook the management of the GREEN+ proposal which
  was submitted by Cyprus and approved by the European
  Commission in the context of the NER 300 project. It is an
  ambitious proposal which, if implemented as a project, will
  be a pioneering application of smart networks and distributed generation in environmentally sensitive areas, mainly in
  the Troodos region.
- Proceeded with the trial installation of smart meters with 3,000 consumers. It is expected that in 2016 an automatic smart meter management system will be in place, with a broad range of functions. The project is at the tender award stage.
- Installed electric vehicle charging points with the aim of encouraging the use of electric cars in Cyprus. For the project, 18 charging points have been selected in collaboration with municipalities and local authorities. During the year in review, 16 chargers were installed. Also, the whole system for checking and monitoring electric vehicle charging points was installed and brought into operation. Furthermore, in 2014 the EAC developed the E-Charge service with the aim of providing charging services to the owners of electric vehicles throughout Cyprus. Proposals have been submitted to various stakeholders for expanding the charging infrastructure with additional points in Lefkosia and fast charging points on highways.
- Participated in the LIFE+ SmartPV research project, which aims at optimising the net metering system for all stakehold ers. The objective is the best use - from a cost-efficiency standpoint - of photovoltaic technology and its greater penetration into the national electricity grid and the smart management of consumer demand. Through the project, a tool has been devised that predicts the amount of electricity generated by photovoltaic systems.

#### SCADA/DMS (DISTRIBUTION MANAGEMENT SYSTEM)

It is especially worth mentioning that, in 2015, the EAC proceeded to appoint consultants with the aim of designing and implementing an open diagnostic process for an integrated SCADA/DMS (Distribution Management System). The project will include the essential hardware and software, as well as the establishment of the National Distribution Monitoring Centre (DMC) which will provide the Authority, as Distribution System Operator (DSO), with the necessary tools for integrated Distribution Network management for day-to-day working, as well as in the case of faults.

#### **DISTRIBUTION SYSTEM DEVELOPMENT STUDIES**

Distribution Network Development Studies are carried out and monitored by the relevant departments in the Area Offices.

In order to expand and develop the distribution system, 3,304 studies were completed by the Area Office study sections in 2015 compared with 4,201 in 2014.

#### **USER ASSISTANCE/INSPECTION OF INSTALLATIONS**

The main work of the Section includes the following:

- Providing assistance to Network Users regarding electrical/ technical issues.
- Providing assistance to Network Users regarding the quality of supply.
- On-site inspections for connections to the Low Voltage Network.
- Revenue Protection/Monitoring meter precision/ Investigating meter faults.
- Tampering/Theft/Recording Damage to meters.
- Inspection/Re-checking of electrical installations of consumers and producers.
- Compliance with current legislation regarding the inspection, connection and availability of electricity from Renewable Energy Sources.
- Compliance with the terms & conditions governing access to and use of the Distribution Network and with the Distribution Network market rules.
- Informing the Operations Section of problems on the Distribution Network.

#### GIS NETWORK DATA MANAGEMENT SYSTEM (GeoDiaS)

GeoDiaS, with the corporate GIS system at its core, constitutes the infrastructure, within which the dynamic management of the planning, energising, operation and connections of the electricity network takes place.

Network updates to the GIS are made through the constant and systematic work of the technical sections across the whole network, thereby securing its dynamism and electrical function. With the full operation of GIS systems, a large volume of data is entered easily and quickly on a daily basis.

# Networks Business Unit

Work is carried out in the framework of the strict operating processes of the GeoDiaS system, including the certification and monitoring of the quality of the Network data updates, and the strict workflow management system.

The updating of the Medium Voltage Network and the substations on the Distribution system was completed. The task of recording and updating Low Voltage Network data for both the overhead and underground transmission network is ongoing at an intensive rate. Furthermore, the GIS was updated regarding the location (plot) and network connection of approximately 15% of customers, and this work is continuing. Additionally, systematic work is taking place to enter data from all the photovoltaic systems regarding their technical/operational characteristics, their location (plot) and network connection. Through special applications, the GIS also records applications received by the EAC, views expressed to government services and the process for establishing new distribution Substations.

For the Transmission System, all transmission Substation premises and monitoring buildings, the route and circuits of the overhead power lines and underground cables, together with their connections, have been registered. Improvements to various parts of the Transmission System -such as the overhead and underground networks and the substations- are continuing at a rapid pace.

#### **AREA OFFICES**

All-Area Offices activity, apart from supplies, falls under the jurisdiction of the Networks Business Unit and its purpose is to provide a complete range of services related to the network. The objective of the Area Offices is to offer the best possible customer service with the ultimate aim of providing an uninterrupted, reliable, high-quality supply of electricity and connecting new customers.

For better quality customer service, the Area Offices have obtained ISO 9001 Quality Certification and have a commitment to CERA to maintain a Customer Charter with guaranteed services.

The EAC's Area Offices are the following:

• Lefkosia-Keryneia-Morfou

- Lemesos
- Ammochostos-Larnaka
- Pafos

The Area Offices are organised into Sections which fall under the jurisdiction of the three Divisions of the Networks Business Unit as follows:

- Studies/Planning/ Connection Terms & Conditions (DSO).
- · User Assistance/Inspection of Installations (DSO).
- · Construction & Maintenance (Distribution System Owner).
- · Substation Maintenance (Transmission System Owner).

The Supplies Section is also active in the Area Offices and reports to the Supplies Division.

#### Studies & Planning Section

The Studies & Planning Section comprises the Studies Department, the Planning Department and the Department issuing Connection Terms & Conditions. The main work of the Studies Department is the management of customer or producer applications for connections to the EAC network and all related tasks, studies, obtaining government approval and consent and the issuing of terms and conditions

#### Construction and Maintenance Section

The Construction & Maintenance Section is divided into the following departments:

- Ground Constructions, which deals with the expansion and upgrading of the Underground Distribution Network and the construction of underground supply lines to premises.
- Overhead Line Constructions, which deals with the expansion and upgrading of the Overhead Distribution Network, maintenance of the Transmission Network and the construction of overhead supply, installation of meters and the construction of the Street Lighting network.
- Emergency Crews, in charge of emergency Network fault reparation and customer complaints, handling on a 24-hour basis.

# Non-Regulated Services

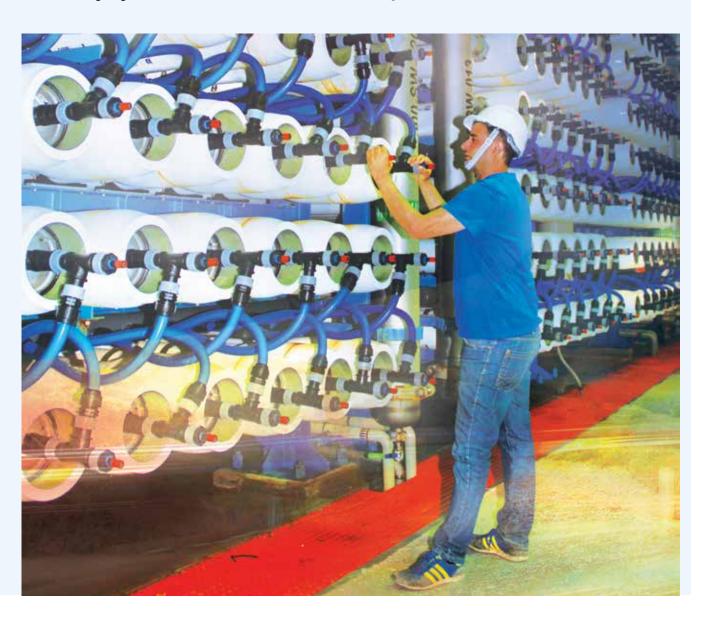
# Management

Based on the Cyprus Energy Regulatory Authority Operational Unbundling decision 04/2014, the Authority has proceeded with the formation of the Non-Regulated Services Management, comprising all non-regulated activities of EAC. The non-regulated services of EAC will be operating in a clear manner, separately from its Core Regulated services and their pricing will be done in a fair and transparent way.

The Non-Regulated Services cover a wide range of services, including the Installation Inspection, the Vasiliko Desalination Plant, Street Lighting Maintenance, Meters Calibration and

testing from MRTC, the design, supply and installation of Photovoltaic Systems for other parties, other contracting works, e.g. cable laying or maintenance facilities for third parties, the usage / exploitation of telecommunications infrastructure for commercial activities other than the needs of the energy network, provision of energy services through ESCO AHK Ltd, the operation of the Photovoltaic Park at Tseri, as well as any other non-regulated activities.

The Non-Regulated Services Manager reports to the General Manager of EAC.



# Internal

# Audit Management

The internal audit at EAC is conducted by the Internal Audit Unit which is directly responsible to the Audit Committee.

The basic activities of the Internal Audit Unit are as follows:

#### 1. Assurance activity

The internal auditor assures the President and the Members of the Audit Committee, the General Manager, Executive Business Unit Managers and Managers at Area Offices and Power Stations that:

- Rules
- Regulations
- Procedures
- · Decisions of the Members of the Board and Management
- · EAC legislation, etc.

are implemented without any delay and effectively.

#### 2. Consulting activity

The internal auditor makes suggestions which aim to:

- · Improve the Organisation's operations
- · Add value
- Bring a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance process.

### MAIN ACTIVITIES OF THE INTERNAL AUDIT UNIT FOR 2015

During 2015, the following main activities were carried out:

### Supply of Heavy Fuel Oil at Vasilikos and Dhekelia Power Stations

Members of the Internal Audit Unit attended in 84 cases the supply of heavy fuel oil at Vasilikos and Dhekelia Power Stations. The process included sample testing and calculation of the quantity received.

It was established, that the process for the supply of heavy fuel oil was carried out as per instructions and regulations.

#### Payments for the supply of heavy fuel oil

All payment calculations for the supply of heavy fuel oil were checked by the Internal Audit Unit and found to be correct. In addition, the monthly fuel average price calculations were checked and found to be correct.

In addition, the following planned in advance audits and surprise audits were carried out in all Areas, Power Stations and Head Office:

- Surprise cash surveys;
- Physical inventory taking at EAC stores based on sampling audit;
- · Issuing of terms for the supply of electricity;
- Reports on illegal connections and damages to EAC meters and cut outs;
- Electricity bills in arrears;
- · Local tenders for the supply of materials and services;
- Open tenders at EAC Head Office for the supply of materials, equipment and services.

In general, the audit results for the above audits were satisfactory. In a few cases, where weaknesses in the system of internal control were found, suggestions were made for corrective action.

# General Management

## Office

#### **PUBLIC RELATIONS**

The Public Relations Department is responsible for planning integrated PR campaigns aimed at upgrading the EAC's image, consolidating its corporate identity, improving its relations with various sections of the public, involving it in society and ensuring that people are fully aware of the Authority's activities and services and improving the EAC's image.

During the year the Public Relations Department of EAC organised events and press conferences that prove once again in practice that protecting the environment is a priority for the EAC. Also, the opening of the Disaster Recovery Centre for the EAC's Data Systems, Technology, Electronic Systems and Telecommunications took place, which also includes the Backup Energy Control Centre at Vasilikos Power Station.

The EAC continued to provide advisory services to all its customers on matters of interest to them in 2015. The general terms governing the provision of electricity, the EAC's charging policy on electrification, tariffs and general information are topics that are always of interest. As happens every year, during 2015 lectures were given to organised groups and to EAC customer groups on issues concerning energy saving, the safe use of electricity, new tariffs and electromagnetic fields.

During the course of the year, EAC Public Relations officers visited various primary and nursery schools to talk to the children about the importance of saving energy and the dangers of the unsafe use of electricity. Visits also took place at Vasilikos Power Station, the Desalination Plant at Vasilikos and the Tseri Photovoltaic Park by students, university students and other organised groups.

In the framework of improving relations among personnel, the Organisation publishes the quarterly magazine EAC News which is now distributed online to EAC personnel and retired members of staff, as well as to various other groups and to media.

The "Give Light to a Life" event, jointly organised every December by the Cyprus Anti-Cancer Society and the Electricity Authority of Cyprus, has become a firmly established institution, providing financial support and helping the Society to achieve its aims. In December 2015, Christmas events were again held in all the island's towns, during which the EAC/Cyprus Anti-Cancer Society's Christmas tree lights were switched on.

Another event that has become an institution is the SavEnergy exhibition organised jointly with the Employers and Industrialists Federation with the aim of promoting products that contribute to energy conservation as well as to raising public awareness of environmental protection issues.

In 2015, the EAC also continued its support of the Greek Cypriots enclaved in the Karpas Peninsula, in particular students and pupils, for the eleventh successive year. We consider it a duty and a privilege to be able to support the efforts of our heroic enclaved fellow-citizens to remain in the place of their birth in the occupied part of Cyprus. Beginning of every year an EAC delegation visits schools in Rizokarpaso, providing support to all students and enclaved university students who study in the free areas.

#### LEGAL SERVICES DEPARTMENT

The mission of the Legal Services Department is to provide legal advice and support to the Executive and Management as well as to the Area Offices on all issues arising from the Electricity Authority of Cyprus (EAC)'s activities.

In cooperation with the EAC's legal advisers, the Legal Services Department handles all cases against EAC in the relevant courts and legal action by EAC against third parties.

#### **Legal Cases Management**

In this context, during 2015 the Legal Services Department dealt with the following cases:

- Appeals against EAC by members of staff regarding promo tions, appointments, transfers and other demands.
- Third Party Appeals against EAC regarding the installation of EAC network on their immovable property.
- Third Party Legal action against EAC demanding mandatory orders, or special, or general damages regarding the placing and/or installation of network equipment (pylons, poles and other low or high voltage lines) on their immovable property.
- Third Party Legal action by EAC over unpaid final electricity bills.
- Legal action by EAC against third parties who have caused damage to its property and refuse to pay the amount required to repair it.
- Third Party Referrals against EAC regarding compensation that has either already been paid but the landowners have received it with all rights reserved, or not yet been paid for their immovable property which, according to the due process, was expropriated and requisitioned by EAC.

#### **Expropriations/Leasing/Property Disputes**

The Legal Services Department maintains an archive of all EAC's property regarding its Offices, Stores, Power Stations, Transmission and Distribution Substations.

# General Management Office

When the expropriation of land is deemed necessary for reasons of public interest, the Legal Services Department is responsible for the entire process; from the preparation of a detailed report for approval by EAC's Board of Directors to the publication of the relevant expropriation notices and requisition orders.

The Legal Services Department obtains evaluation reports from private valuers, regarding the amount of compensation payable by EAC, to landowners whose property is affected by its network (pylons and high-voltage power lines).

#### **Insurance Department**

In the framework of securing its property and the interests of its Human Resources, the Electricity Authority of Cyprus insures its movable and immovable property and its employees' interests.

Further to the above, the Insurance Department deals with cases of accidents involving EAC personnel, damage to property belonging to third parties and to EAC, the insuring of goods imported/exported by EAC, insurance cover for its vehicles and for employees travelling abroad on EAC business.

#### **Legal Support and Advisory Services**

In addition to the above, the Legal Services Department provides legal support, through participation in Evaluation and Working Groups, to all EAC Departments/Services, regarding the drafting of contracts and Memoranda of Cooperation with energy companies and/or other companies in the energy sector, confidentiality agreements for the optimum legal coverage of EAC, and agreements regarding outstanding amounts owed to the EAC as well as other projects.

The Legal Services Department provides everyday legal support and advice, both verbal and written, to EAC's Basic Regulated Activities (Generation, Supply, Distribution, Transmission) as well as to all Non-Regulated Activities and other EAC Units, on legal matters pertaining of customer complaints addressed to EAC, to CERA and the Ombudsman, applications for damages, obtaining of consent, customer disconnections, connections and transfers, meter relocations, the provision of customer information and illegal tampering with meters, among other issues.

In addition to the above, the Legal Services Department carries out disciplinary investigations in accordance with EAC's Code of Discipline, it is responsible for the dissemination of new law and legal amendments within EAC and it is also responsible for the legal drafting of new Legislation concerning energy law.

#### **ADMINISTRATION SECTION**

The mission of the Administration Section is to provide swift, reliable, professional and efficient logistic responsibility for the management of building and office facilities of the EAC. Mission of the Administration Section, is the management of the Central Archive, the stationery supplies and cleaning items throughout the EAC.

Within this framework, the Administration Section deals with:

#### Contract Management

- Agreements concerning the lease of buildings, parking lots as well as warehouses for the needs of the EAC over Cyprus.
- · Canteen management agreements.
- · Maintenance agreements for the building of the Head Office.

#### **Publication of Announcements/Notices**

Announcements/Notices concerning tenders, job vacancies, interruptions to the power supply, etc. are published in the local press and the Official Gazette of the Republic and are sent to the CyBC for broadcast.

#### **Head Office Building Maintenance**

Maintenance of the Head Offices involves:

- · Ensuring that the building is clean.
- Functionality regarding electrical/ mechanical issues, repairs and office operations.
- The Building Monitoring System (B.M.S.).
- · Photovoltaic system monitoring.
- · Access Cards.

#### **Telephony Support**

This involves carrying out all the necessary procedures concerning the Authority's telephone connections, telephone lines installation, transfers, obtaining GSM cards, etc.

#### **Head Office Archive Operations**

This concerns the computerisation of incoming and outgoing correspondence for daily distribution and archiving.

#### **Purchase and Supply of Stationery and General Provisions**

This relates to the supply of the Authority's Units/Sections, Area Offices and Power Stations with the necessary stationery and general supplies provisions.

# Human Resources

# Management

#### The Authority's staff

The number of employees in post and their distribution by category is shown in the table below.

	2015	2014
Professional	211	237
Clerical	336	360
Technical	1 452	1 541
Other	47	49
Total	2 046	2 187

«Other» employee refers to 46 employees, who their conditions of employment are regulated by a certain Collective Agreement and one employee with a Contract of indefinite duration.

#### The Authority's pensioners

The total number of pensioners at the end of the year who received a pension was 1 321 (including nine missing persons since the Turkish invasion of 1974), compared to 1 213 at the end of the previous year. In addition, 329 pensions were paid to widows and orphans of deceased pensioners/employees compared to 313 at the end of the previous year.

#### **Workforce indicators and Productivity**

Variations in productivity are shown in Figure 8 which indicates the relationship between the Authority's Workforce, the total units billed and the number of consumers during the ten year period 2006-2015.

Absenteeism due to sickness and/or industrial accidents was 3,6% or 13,2 days per EAC employee compared to 3,4% or 12,3 days per employee at the end of the previous year, while comparing the 2014 and 2015 sick leave totals, that is 26 979 and 27 456 days respectively, there is a 2% (477) increase.

#### **INDUSTRIAL RELATIONS**

The-all through the year 2015-constantly changing labour relations scene was calling for action and EAC's Human Resources Management had a key role in dealing with a number of labour related issues, as well as maintaining at the same time a stable labour relations environment.

In particular, Human Resources Management continued during 2015 to actively participate in the implementation of EAC's functional unbundling in compliance with the relevant regulatory decisions issued by the Cyprus Energy Regulatory Authority (CERA), by convening meetings of the professional staff's schemes of services committee for examining schemes of service affected by operational unbundling.

Furthermore, the Human Resources Management arranged to receive the Trade Unions views on EAC's new Organizational Chart and the new management structure, which were formed according to CERA's regulatory decisions.

It is worth noting that among the revised schemes of services, was the scheme of service for EAC's General Manager position which received the Authority's formal approval and was forwarded to the Ministry of Energy, Commerce, Industry and Tourism in order for the Ministry to arrange for the necessary final approval by the Parliament.

In parallel, the Human Resources Management completed on time all the legal processes for the appointment of a Deputy General Manager, effected from the day that the position would become vacant, until the appointment of a new General Manager.

Other important actions taken by EAC's Human Resources Management had to do with the orderly retirement of 123 employees who opted for the voluntary Early Retirement Scheme, minimising any problems arising from strike measures, the renewal of the agreement with the Trade Unions for Reducing EAC's Operating Expenses and Allowances as well as a number of employee issues.

Finally, noteworthy is the reference on the successful EAC's certification as an Equality Employer by the Ministry of Labour, Welfare and social security awarded in June 2015; an issue managed by EAC's Human Resources Management.

#### **HUMAN RECOURSES DEVELOPMENT**

#### **Education and Training**

During 2015, 1 265 members of the staff attended 74 inhouse courses and seminars, organised by the Authority's Training School, which covered a wide range of topics. We had 190 more participations from employees in various open

## Human Resources Management

educational programmes and training courses, organized by local educational institutions and organisations, whilst eight members of the professional staff attended training courses or participated in conferences and seminars abroad. In total 1 463 participants attended training courses at an overall cost of €38,37 per employee (without taking into consideration the HRDA subsidy). The in-house training courses and the training courses abroad were subsidised by the HRDA with an approximate amount of €81.000.

#### **Recruitment / Promotions**

During 2015, EAC's vacant post remained as such, since amendingLaw 202(1)/2014 prohibited any new recruitments or promotions.

#### **Retirements / Termination of Employment**

During the year eight employees reached the retirement age limit and retired, 123 employees took advantage of the early retirement scheme, two employees opted for early retirement, one employee terminated his services, two employees retired for health reasons and two employees were deceased.

#### SAFETY, HEALTH AND WELFARE

#### **Medical Care**

During the year the EAC contributed €7.537.695,59 (€7.459.613,04 in 2014) to EAC Employees Medical Fund, as well as €51.260,00 to the Special Medical Fund set up to cover expenses incurred in the treatment of serious cases, in Cyprus and abroad. The beneficiaries of the Fund, as at 31 December 2015 were 8 515 (2 007 employee-members, 1 305 pensioners and 5 203 dependents).

#### **Benevolent Funds**

The EAC's Employees Benevolent Funds continued to function satisfactorily during the year. The financial aid offered to needy members, pensioners or members of their families, exceeded the sum of €250.000. This sum includes the monthly financial assistance offered by the EAC to ex-employees who retired prior to 1978 with Provident Fund benefits as well as to their widows. It also includes the financial assistance to other exemployees due to the recognition of their previous service with

the ex-private Electricity Companies after their works were undertaken by the EAC. The members of the Funds, as at 31 December 2014 were 1924.

#### **Welfare Funds**

EAC Employees' Welfare Funds continued to provide good service to their members and their families throughout the year, by offering accommodation facilities and other services.

#### Long Service Certificates and Awards

The following Awards were presented:

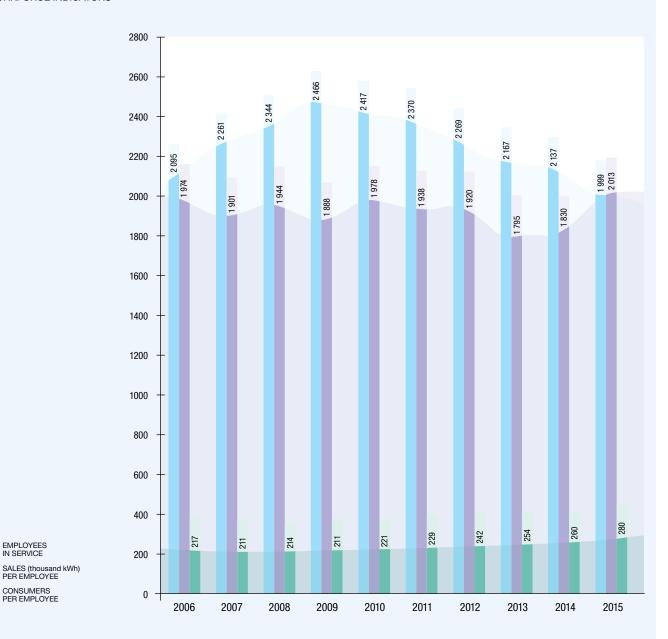
- The EAC's Long Service Certificates were awarded to 131 employees, who retired during 2015 upon completing more than 20 years of service.
- The EAC's silver metals were awarded to 21 employees who had completed 30 years of service.

#### **OCCUPATIONAL HEALTH AND SAFETY**

#### **Health and Safety Management**

The Electricity Authority of Cyprus pledges to achieve high levels of safety standards, continuous improvement of Health and Safety performance indicators and compliance to applicable legislative provisions, for the prevention of accidents. Towards achieving this goal, the Company developed and implemented an effective and appropriate Health & Safety Management System (HSMS) which is an important management tool for the implementation of the health and safety procedures in the Organisation. The Health & Safety Management System (HSMS) is uploaded on the EAC portal server and is accessible to all EAC's staff aiming to become a useful tool in the workplace. An introductory course on the implementation of the "Health and Safety management system", which aims at the continuous development and improvement on occupational health and safety matters within the Organisation, has been organised by the Safety Officers in collaboration with the EAC's Area District offices and Power Stations management.

Figure 8 WORKFORCE INDICATORS



#### Health and Safety in the working environment

EMPLOYEES IN SERVICE

The Safety Committees held regular meetings during the year adhering to legislation requirements and gave their professional views to EAC's Management for dealing and solving various problems concerning health and safety issues.

In order to ensure compliance with the health and safety legislation and good practice, the Health and Safety Management System (HSMS) helped to perform internal

auditing in order to identify and remedy any shortfalls in health and safety performance. The Safety Officers of the Organisation, in addition to their general tasks, performed -in their work-related, investigated working accidents- dangerous occurrences and hazardous malfunctions, monitored the implementation of the Safety Management System (HSMS), studied Health and Safety plans submitted by the contractors, and made recommendations for their completeness and

## Human Resources Management

functionality, as far as the legislation requirements are concerned. Furthermore, they performed on-site safety audits which covered all the works carried out by the Electricity Authority and gave consultation on health and safety matters to the personnel. Additional audits were also carried out on subcontracted projects to ensure, that they comply with the health and safety rules and legislations.

#### **Education/Training**

The technical personnel who use mobile man lift equipment or mobile cranes have been trained and certified according to the Cyprus legislation. Furthermore, a complete refreshing training course on working with safety at height was delivered successfully to members of the technical staff who work in the overhead construction of EAC District Area offices. Additional training for safe working on roofs was organized for the staff, working on the installation of solar systems.

Further training and seminars on Health and Safety issues have been organised during the year by the Safety Officers according to the needs of the Organisation. Furthermore, during the «Safety Week», fire drills have been organised in all District Areas and Power Stations.

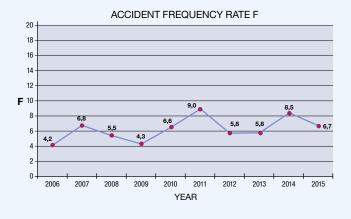
#### Accidents

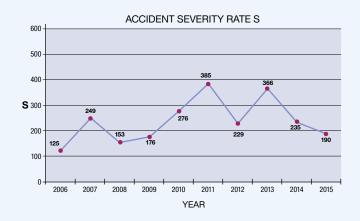
There were 27 reported occupational accidents in 2015. Only four of these accidents were road accidents. All the accidents have been investigated and evaluated by the Safety Officers and appropriate measures were taken for prevention purposes.

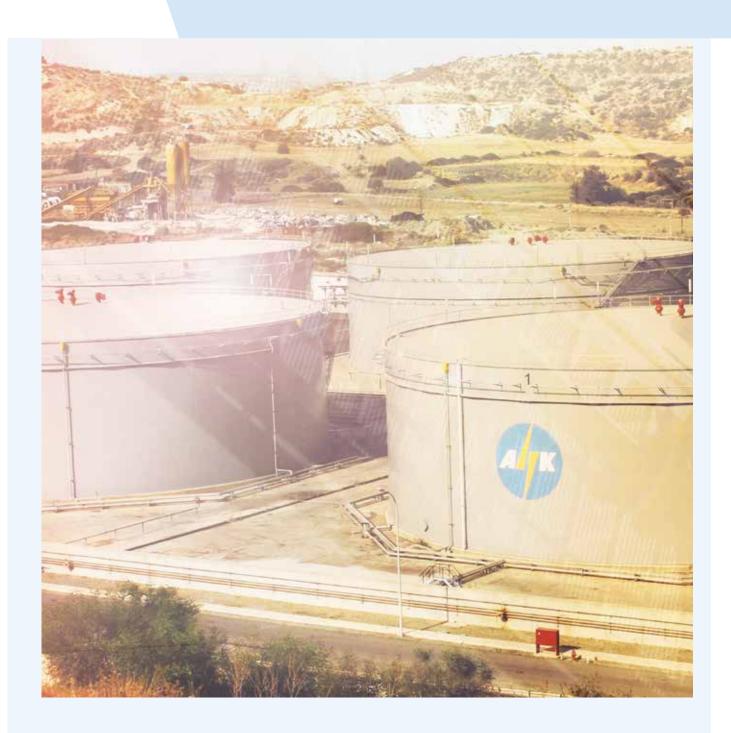
The graphs below show the variation of the three indexes, Frequency Index (F), Severity Index (S) and Frequency of Occurrence (FO) for the period 2006 to 2015. The Frequency index shows the number of accidents in relation to the total worked hours in the Organisation, the Severity Index shows the days lost in relation to the worked hours in the Organisation and the Occurrence Index shows the number of accidents in relation to the number of employees.

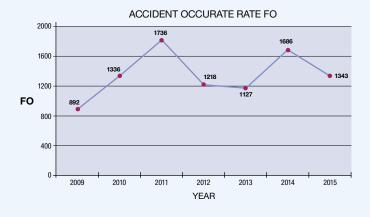
In relation to the previous year, the Frequency Index (F), the Occurrence Index (FO) and the Severity Index (S) have been improved as follow:

The Frequency Index (F) from 8,5 to 6,7 ,the Occurrence Index (FO) 1686 to 1343 and the Severity Index (S) from 235 to 190.









#### Safety Week and Fire drill exercises

The EAC's «Safety Week» was once more organised with success from the 16th to the 20st of March 2015. During the «Safety Week», various events were organised, including lectures on occupational health and safety issues, fire drills and evacuation exercises, all in cooperation with the Fire Department. These activities gave the opportunity to EAC's staff to get familiar with the issues of occupational health and safety.

# Information Technology

## Department

The mission of the Information Technology (IT) Department is to select, provide and support IT Systems, to ensure that Information Technology is used as a strategic tool to achieve the EAC's business aims in a reliable, fast and efficient manner, and to cultivate in the Authority's personnel a modern mentality that is fully in tune with IT.

In this framework, the IT Department deals with:

- · The provision of information services.
- · IT services for internal customers.
- The development, implementation and maintenance of IT software and systems.
- · Technical infrastructure services.
- · Security services and Administration.

During the period January - December 2015:

- Legal regulations/changes for the Payroll system were successfully completed and implemented in the following:
  - > Redesigning of the Employees Contributions Report IR63.
  - Redesigning of the Employees Contributions Report IR7 (XML format).
  - > Negative tax concerning previous years.
- Regulations/changes for the Human Resources Module were successfully completed and implemented in the following:
  - > The design and the setting up of a structure in the SAP-OM module (organisational management) to cater for the hierarchical submission, check and approval of employees' leaves and benefits.
  - > The printing of Employee's Card through SAP with all the relevant processes.
- The operations/processes concerning all technical Infrastructure in an SQL Server Environment (databases) were completed and successfully implemented in the areas of:
  - > Timesheets system Software.
  - > The Back-Up environment (SQL Server Cluster Recovery) and the automation of the relevant processes.
- The old type Hand Held Terminals (TRx) were replaced with new ones (FC300) in the Lemesos Area Office.

- The files of bank orders (SEPA-single Euro Payments Area) which are sent to bank institutions were successfully converted from text files to XML files, in accordance with the provisions of (EU) Regulation 260/2012 of the European Parliament and the European Council of the 14th of March 2012
- A software system was developed and implemented successfully permitting the Area Offices as well as the Call Centre to identify the consumer accounts of the vulnerable groups of customers, based on the Ministry of Energy, Commerce, Industry and Tourism criteria, so as not to disconnect their electricity supply during critical periods.
- Software was developed and implemented successfully, covering the information needs of the EAC's Area Offices and of the Call Centre, for cost details of the electricity accounts' transfers, from one consumer to another based on the tariff category of the consumers.
- Changes in the EAC's Software Systems to accommodate the Unbundling of Accounts were being carried out throughout the year.
- The development of new software for the management of Service Level Agreements (SLAs)/ Staff Secondment Agreement (SSA) among Departments/Divisions of the EAC commenced and is in progress.
- The development of new software for the Timesheets of the EAC personnel commenced and is in progress.
- The Integrated Management System's platform was successfully upgraded from SharePoint 2007 to SharePoint 2013.
- The upgrading or the replacement of all PC's with Windows XP operating system to Windows 7 commenced and continued during the year.
- The upgrading of Microsoft System Centre Configuration Manager from version SCCM 2010to Version SCCM 2012 was completed successfully.
- The following sub-modules of the GIS system were upgraded successfully:
  - > SDE from Version 9.3.1. to Version 10.2.1.
  - > ArcFM Geodatabase Manager from version 9.3.1 to version 10.2.1.
  - > ArcFM Replication Server from version 9.3.1 to version 10.2.1.

- > Data Interoperability (Safe FME) from version FME2012 to version FME2015.
- > GeoDiaSLic (ArcGIS &ArcFM License Server) from version 9.3.1 to version 10.2.1
- In the case of users' PC's (clients), ArcGIS was upgraded to Version 10.2.1 and ArcFM to Version 10.2.1b.
- The upgrade from version 9.3.1 to version 10.2.1 of ArcGIS server started on a test basis aiming at the provision of geographical data, of particular interest, to other organisations.
- The development of MPLS backbone network continued aiming at faster communication speeds between Area Offices/Power Stations and the EAC's Data Centres.
- The setting up of the Disaster Recovery Centre at Vasilikos Power Station to cater for the EAC IT and Technology Systems, as well as the Energy Management System, was completed successfully. The project was funded by the E.U.
- The infrastructure of the Disaster Recovery Unit of the Security systems was installed successfully.
- The upgrade and the extension of the Wi-Fi network were completed successfully.
- The following directives concerning the Administration and Security were reviewed:
  - > Use of Internet.
  - Seneral Policy for the Security Systems of the IT Department.
  - > Management of Security Policies.
  - The Management of IT Users' Rights for Accessing the Internet.
- Within the context of the Users Security Awareness Training, a number of seminars were carried out at various EAC offices covering the subjects of "Cyber terrorism" and "Smart Devices-Challenges and Threats".
- The specifications for the issuing of a tender for "Endpoint Security Encryption" were prepared during the year.
- Parallel to the rehousing of the Strovolos Customer Service Centre in the Head Office, the Queuing System was successfully re-installed.

# Quality assurance &

# Business Excellence

#### **QUALITY ASSURANCE & BUSINESS EXCELLENCE**

The Electricity Authority of Cyprus (EAC), as the Organisation responsible for the generation, transmission, distribution and supply of electricity in Cyprus, fully understands its obligations and responsibilities towards the Cypriot consumer. For this purpose, the EAC is striving continuously towards improving the quality of services it provides, while at the same time minimising the unwanted effects of its activities on the environment. To this effect the, EAC is implementing Quality and Environmental management systems, certified to ISO 9001:2008 and ISO 14001:2004 standards, respectively.

Following the relevant decisions by the Board of Directors in July 2015, a new Business Unit was created called Systems Management Business Unit. Its mission is the implementation of the Quality, Environment and Health and Safety Management Systems within the EAC, under an integrated Management System.

Main objectives focus on:

- · Reducing the operational cost,
- · Increasing productivity,
- Creating an environment of good health & safety procedures for EAC's personnel,
- Reducing EAC's environmental fingerprint,

fully aware of the EAC's responsibility towards society and within the context of EAC's strategic objective towards sustainable development.

During the year 2015, in the context of continuous improvement, the following actions were carried out:

#### **Integrated Management System**

In April, an audit of the Integrated Management system of the EAC was carried out by the Cyprus Certification Company (CCC). The Audit confirmed that EAC's management system satisfies fully both the ISO 9000:2008 and the ISO 14001:2004 standards.

### Cyprus Energy Regulator Authority (CERA) Performance Indicators

The results of the system measuring all performance indicators related to  $K.\Delta.\Pi$  571/2005 (legislation regarding Custom

Service) are calculated and sent on an annual basis both to CERA and to EAC's top management. These results show that EAC is sensitive and cares about its customer's needs aiming continuously for further improvement.

#### **Internal Audits**

Internal audits were conducted, according to the annual Audit plan, which covered most of the Critical processes of the EAC. The aim was to identify areas for improvement and minimising the operational cost. The audit results were presented to the key process owners and the relevant corrective and preventive actions were agreed.

#### **SAP Performance indicators system**

A new system for measuring process performance indicators via the SAP system has been implemented. The new system allows for the process flowcharts to be documented, so as to aid the understanding of how the processes work and what actions need to be taken for every process. In addition, the new system makes performance indicator comparisons between Area Offices more accurate and reliable, as it ensures that the indicators range (start-finish) is the same for all Area Offices.

#### **Updating of records in Intranet Portal**

As part of the EAC's continuous improvement system, the systematic updating of records and documents of the Management system is continuing in the Intranet portal; after all, the necessary approvals by the Key process owners are completed.

#### **Target setting**

The procedure for target setting for EAC's key performance indicators has been completed and the targets for all indicators have been approved by the Management Team. All Key Process owners are in the process of finalising their key-own process indicators, which are necessary to achieve the Corporate key process indicators and targets.

All work has been done in line with EAC's medium term strategic objectives. In this way, all indicators for all EAC processes and procedures will be aligned, aiming towards achieving the targets set by the top management for the following year. In total, thirty four indicators have been selected and these indicators now form the General Manager's scorecard. These indicators are divided into five dimensions: Customer, Financial, Processes, Learning and Environment.

#### **Management Reviews**

Three Management reviews have been completed and presented to the Management Council. These reviews include all business results for 2014, as regards the Integrated Management system of EAC.

#### Corporate Social Responsibility (CSR)

The EAC has decided to implement a CSR system to cover all operations in the Area Offices, Head Office and Power Stations. As a result, project teams were identified and a relevant plan of action was devised and approved by the General Manager. The project is expected to be completed by September 2016.

#### **Health and Safety**

The project, aiming to integrate the Health and Safety system with the current EAC Management system (Quality and Environment), has begun in September 2014. In addition to the integration, the aim is the certification of the Health and Safety system with the OHSAS 18001standard, by the end of September 2016, as a way to control the OH&S risks and align them with the Organisational OH&S policy and objectives.

#### Design of EAC's corporate strategy

Within this continuously evolving environment, due to the enforcement of the memorandum by Troika, the liberalisation of the energy market in Cyprus as well as the market competition the EAC is continuously monitoring the implementation level of its strategic and business planning using the balanced scorecard.

#### RESEARCH AND DEVELOPMENT

During 2015, EAC has continued its active participation in two research projects, LIFE+ SmartPV and SEOP. LIFE+ SmartPV is funded by the LIFE+ Environment Policy and Governance and SEOP is funded by the Lifelong Learning Program.

Brief description of the above two research projects is given below:

 LIFE+ SmartPV Research Project: "Smart net metering for promotion and cost-efficient grid-integration of PV technology in Cyprus". The main objective of this project is the investigation of smart net metering schemes in Cyprus and their optimisation as a means of replacing costly government RES subsidies. The project will aim to highlight and

- understand the impact of smart net metering implementation on the cost and benefit implications for network owners and operators in Cyprus.
- SEOP Research Project: "Social electricity online platform". The main objective of this project is the development of a social information and communication technology platform that allows European citizens to be educated about energy-saving practices and techniques and the crucial importance of energy conservation for the society and the environment, through the use of the internet. Through this application, people may become aware of their electrical energy con sumption by means of comparisons with the corresponding electrical consumption of their friends as well as with the total consumption in the street, neighbourhoo, village, city, country, where they live. By effective and realistic comparisons, the consumers may perceive their energy behaviour and take steps to reduce their electricity and carbon foot print in their everyday lives.

The Research and Development unit of the EAC provided support to the Activities of the EAC with its participation in different Working Groups in matters such as the new electricity market and the new electricity tariffs methodology.

# Financial Services

#### **FINANCIAL STATEMENTS**

The financial statements of the EAC for the year 2015, together with the supporting statements are set out on pages 56 to 99. The principal financial statistics for the ten-year period 2006-2015 are summarised in pages 52 to 55.

Table 3 Consolidated income statement for the year ended 31 December 2015 and changes from previous year

	2015	Increase
	€000	(Decrease) €000
INCOME		
Revenue from Sale of electricity	576.792	(144.345)
Consumers' capital contributions	21.447	328
Income from Desalination	9.098	(5.402)
Other operating income	17.494	22
Finance income	5.710	3.670
	630.541	(145.727)
Other losses net	(291)	(270)
OPERATING COSTS	(552.331)	164.264
Operating profit	77.919	18.267
Finance costs	(7.577)	3.622
Profit before tax	70.342	21.889
Tax	(9.964)	(3.487)
Net profit for the year	60.378	18.402
Sales of electricity (million kWh)	4.036,1	120,6

#### **FINANCIAL RESULTS**

The financial results for the year and the changes from the previous year are shown in Table No. 3 above. The income from sales of electricity for the year, totalled to €576.792.000 showing a decrease of €144.345.000 or 20,0%. The total operating costs were €552.331.000 showing a decrease of €164.264.000 or 22,9%. After accounting for finance costs amounting to €7.577.000, there was a profit before tax of €70.342.000 compared to a profit of €48.453.000 in the previous year. After the deduction of tax amounting to €9.964.000, the net profit was €60.378.000 (2014: €41.976.000).

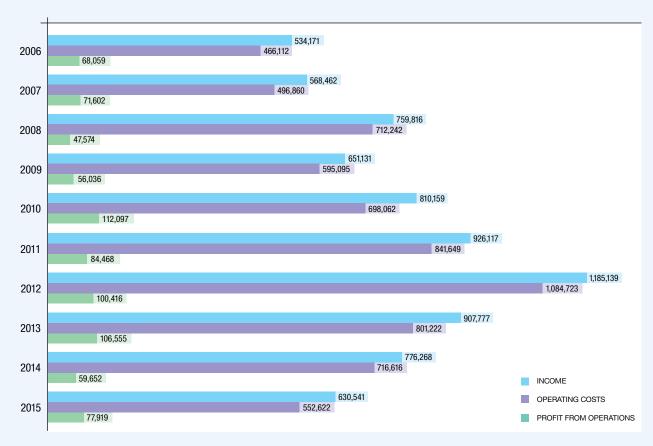
#### **ANALYSIS OF OPERATING COSTS**

Table 4 (page 51) gives an analysis of the operating costs according to each category. The principal factors underlying the changes are reviewed below:

The average cost of fuel oil used by the EAC power stations decreased by 37,5% to €304,71 per metric tonne. The consumption increased by 3,3% to 947,2 thousand metric tonnes. As a result of the above, the fuel oil bill decreased by €158.343.000 to €288.632.000.

The purchase of electricity from third parties €26.191.000 decreased by 17,7% due to the decrease in fuel oil price.

Figure 9
INCOME, OPERATING COSTS & PROFIT FROM OPERATIONS (Euro Thousand)



The total salaries and related costs amounted to €93.793.000, out of which €4.091.000 was capitalised in fixed assets and work in progress. The amounts capitalised relate to expenditure for development projects executed by the Authority's employees during the year. An amount of €89.702.000 or 95,6% was charged to the income statement. The increase of €4.108.000 or 4,6% to the total salaries and related costs charge is mainly due to the increase in pension fund contribution.

Materials services and other expenditure were €28.503.000 (decrease of €7.648.000 or 21,2%).

The depreciation charge was €93.230.000 (decrease of €2.014.000 or 2,1%).

Table 4
Analysis of Operating costs

	20	)15		(Decrease) r 2014
	€000	%	€000	%
Fuel	288.632	52,3	(158.343)	(35,4)
Purchase of Electricity from third parties	26.196	4,7	(5.635)	(17,7)
Staff costs	89.702	16,2	4.749	5,6
Repairs and maintenance	11.124	2,0	(4.317)	(28,0)
Compensation for early retirement	8.754	1,6	8.754	-
Transmission System Operator Cyprus fee	4.471	0,8	164	3,8
Cyprus Energy Regulatory Authority fees	1.719	0,3	26	1,5
Materials, services and other expenditure	28.503	5,2	(7.648)	(21,2)
Depreciation	93.230	16,9	(2.014)	(2,1)
TOTAL	552.331	100,0	(164.264)	(22,9)

## Financial Services

#### CAPITAL REQUIREMENTS AND SOURCES OF FINANCE

Capital expenditure during the year amounted to €17.721.000 compared with €39.983.000 in 2014 (decrease of €22.262.000).

The amount paid for taxation during the year 2015 amounted to €1.243.000 (2014: €12.288.000).

Loan and bank overdraft repayments amounted to €29.480.000 (2014: €114.507.000).

The total financing requirements of €48.444.000 were covered from internal sources and consumers contributions. Table 5 below shows the financing requirements during the year and the sources of finance.

Table 5
Financing Requirements and Sources of Finance

	20	)15	20	014
	€000	. %	€000	%
FINANCING REQUIREMENTS				
Tax	1.243	2,5	12.288	7,3
Capital expenditure	17.721	36,6	39.983	24,0
Loan repayments/bank overdraft	29.480	60,9	114.507	68,7
	48.444	100,0	166.778	100,0
SOURCES OF FINANCE				
Profit before tax	70.342	145,2	48.453	29,1
Depreciation less consumers' contributions	71.783	148,2	74.125	44,4
Proceeds from disposal of fixed assets	85	0,2	2.048	1,2
Consumers' contributions	14.139	29,2	15.064	9,0
Working Capital changes	(107.905)	(222,8)	27.088	16,3
	48.444	100,0	166.778	100,0

#### FINANCIAL POSITION AT END OF YEAR

The historical cost of the assets employed at 31 December 2015 was €3.013.834.000 and the accumulated depreciation was €1.248.496.000 or 58,6% of the historical cost. The total net assets at 31 December 2015 were €1.980.690.000. Finance derived from loans (€441.596.000 or 22,3%), other long-term liabilities (€495.247.000 or 25,0%), and the balance (€1.043.847.000 or 52,7%) from own sources.

O. THEODOULOU CHAIRMAN

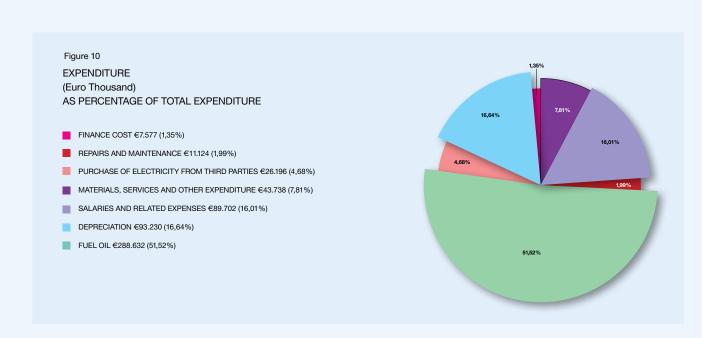
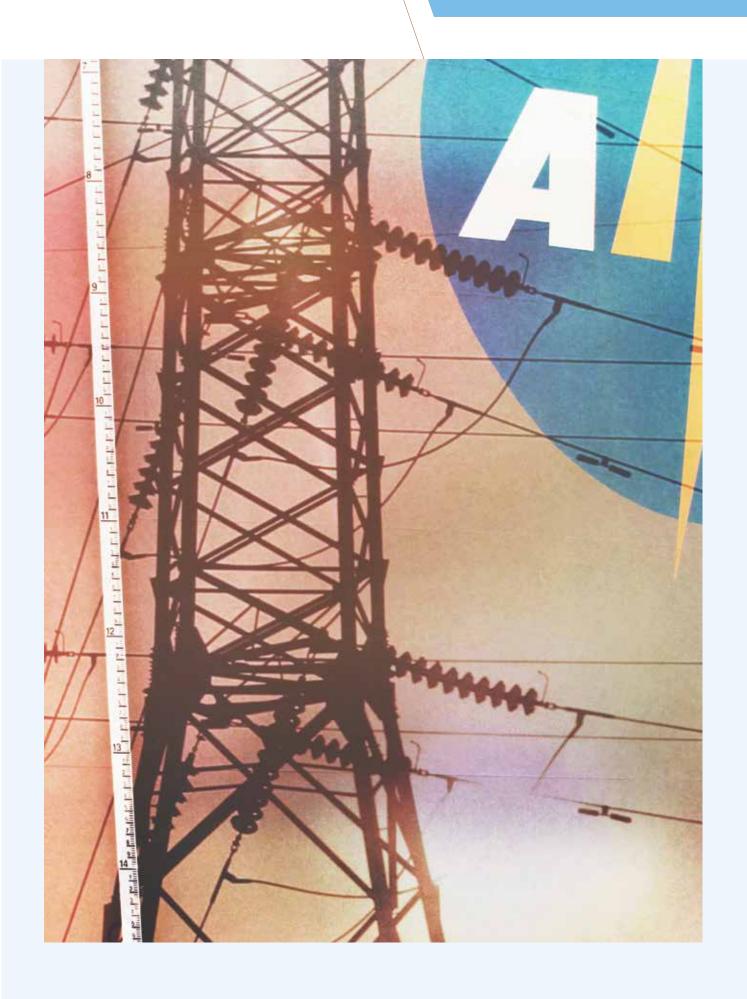


TABLE 6
PRINCIPAL FINANCIAL STATISTICS 2006-2015

DURING THE FINANCIAL YEAR TO 31 DECEMBER	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Units sold (million kWh)	4.135	4.298	4.556	4.656	4.782	4.595	4.356	3.890	3.915	4.036
Consumption in the turkish occupied area (million kWh)	7	8	9	8	8	7	7	6		2
Total units (million kWh)	4.142	4.306	4.565	4.664	4.790	4.602	4.363	3.896	3.921	4.038
Installed capacity (MW)	988	1.118	1.168	1.388	1.438	965	1.493	1.598	1.478	1.478
INCOME (€ THOUSAND)										
Sales of electricity	513.105	546.737	736.215	627.253	776.390	857.776	966.552	796.930	721.137	576.792
Consumers capital contributions	13.085	14.241	15.389	16.655	17.855	19.047	19.973	20.698	21.119	21.447
Temporary Generators Cost Recovered by the Republic of Cyprus	-	-	-	-	-	17.229	31.702	-	-	-
Compensation from insurance	-	-	-	-	-	-	89.301	61.790	1.000	-
Temporary surcharge	-	-	-	-	-	19.858	61.680	8.047	-	-
Other operating income	3.182	4.869	5.575	5.846	15.174	10.628	14.129	18.298	30.972	26.592
Finance income	4.799	2.615	2.637	1.377	740	1.579	1.802	2.014	2.040	5.710
Total Income	534.171	568.462	759.816	651.131	810.159	926.117	1.185.139	907.777	776.268	630.541
OPERATING COSTS (€ THOUSAND)										
Other losses net	-	-	-	-	-	-	76	3.324	21	291
Operating costs	411.365	438.661	652.539	523.569	622.669	747.364	830.561	659.626	620.328	458.870
Temporary Generators Cost	-	-	-	-	-	17.229	35.302	-	-	-
Provision for the non recoverability of temporary generators cost	-	-	-	-	-	-	24.465	-	-	-
Repairs at Vasilikos power station	-	-	-	-	-	-	104.508	43.867	1.023	231
Depreciation	54.747	58.199	59.703	71.526	75.393	77.056	89.811	94.405	95.244	93.230
Total operating costs	466.112	496.860	712.242	595.095	698.062	841.649	1.084.723	801.222	716.616	552.622
Operating profit	68.059	71.602	47.574	56.036	112.097	84.468	100.416	106.555	59.652	77.919
Finance costs	(13.182)	(14.779)	(19.310)	(10.757)	(10.243)	(8.991)	(13.960)	(12.594)	(11.199)	(7.577)
Profit before tax	54.877	56.823	28.264	45.279	101.854	75.477	86.456	93.961	48.453	70.342
Tax	(16.251)	(16.802)	(7.933)	58.305	(10.440)	(7.788)	(8.935)	(20.970)	(6.477)	(9.964)
Provision as a result of the Tax Council Decision	-	-	-	-	(18.239)	1.896	-	-	-	-
Net profit for the year	38.626	40.021	20.331	103.584	73.175	69.585	77.521	72.991	41.976	60.378
RATIOS TO TOTAL INCOME (on the total of income)										
Profit from operations (%)	12,7	12,6	6,3	8,6	13,8	9,1	8,5	11,7	7,7	12,4
Profit before tax (%)	10,3	10,0	3,7	7,0	12,6	8,1	7,3	10,4	6,2	11,2



## Financial Services

#### CONSOLIDATED BALANCE SHEET AT 31 DECEMBER

ASSETS (€THOUSAND) Non current assets	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Property, plant and equipment	1.185.076	1.285.124	1.387.312	1.583.500	1.789.271	1.926.871	1.936.747	1.898.029	1.840.916	1.765.338
Trade and other receivables	2.860	1.898	1.800	1.845	2.302	2.028	2.242	1.702	631	322
Trade and other receivables	1.187.936	1.287.022	1.389.112	1.585.345	1.791.573	1.928.899	1.938.989	1.899.731	1.841.547	1.765.660
Current assets	293.755	280,641	325.719	259.762	329.501	372.388	518.233	460.411	406.043	506.460
Total assets	1.481.691	1.567.663	1.714.831	1.845.107	2.121.074	2.301.287	2.457.222	2.360.142	2.247.590	2.272.120
RESERVES AND LIABILITIES (€THOUSAND)										
Reserves										
Revenue reserve	642.456	682.478	702.809	806.393	879.568	943.913	1.021.516	1.084.727	1.126.703	1.183.363
Actuarial loss reserve	-	-	-	-	-	-	22.063	4.763	(239.554)	(155.071)
Capital reserve	15.555	15.555	15.555	15.555	15.555	15.555	15.555	15.555	15.555	15.555
	658.011	698.033	718.364	821.948	895.123	959.468	1.059.134	1.105.045	902.704	1.043.847
Non current liabilities										
Borrowings	243.396	265.372	334.773	300.750	451.597	403.608	432.447	564.002	472.648	441.596
Deferred tax liabilities	84.036	91.042	98.056	38.402	24.479	27.762	36.103	51.596	57.066	65.804
Deferred income	332.807	356.580	382.973	406.250	428.704	441.808	447.544	443.403	437.020	429.443
	660.239	712.994	815.802	745.402	904.780	873.178	916.094	1.059.001	966.734	936.843
Current liabilities	163.441	156.636	180.665	277.757	321.171	468.641	481.994	196.096	378.152	291.430
Total liabilities	823.680	869.630	996.467	1.023.159	1.225.951	1.341.819	1.398.088	1.255.097	1.344.886	1.228.273
Total reserves and liabilities	1.481.691	1.567.663	1.714.831	1.845.107	2.121.074	2.301.287	2.457.222	2.360.142	2.247.590	2.272.120

Figure 11
PRICES PAID FOR FUEL OIL & AVERAGE PRICES USED FOR TARIFF PURPOSES (Fuel adjustment clause)



Auditor's Report and Financial
Statements

# Report and Consolidated Financial Statements 31 December 2015

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## Electricity Authority of Cyprus

#### **Board of Directors and other officers**

#### **Board of Directors**

Chairman: Othonas Theodoulou

Vice Chairman: Demetra Karantoki

Members: Alexandra Pelagia Christodoulou

Charalambos Artemi Michalis Hadjipantelas

Nikolas Nikolaou Loizos Loizou

Constantinos Costi Giannos Athienitis

#### Legal Advisers:

Ioannides Demetriou, Nicosia

#### Auditors:

Auditor General of the Republic KPMG Limited

## Electricity Authority of Cyprus

#### Report of the Board of Directors

 The Board of Directors presents its report together with the audited consolidated financial statements of the Authority and its subsidiaries Elektriki Ltd, EAC LNG Investments Company Ltd and EAC Solar Thermal Power Ltd (together the "Group") for the year ended 31 December 2015.

#### **Principal activities**

2. The principal activities of the Authority, which have not changed since last year, are the generation, transmission, distribution, and supply of electricity in Cyprus. Following an amendment to the Law on 24 November 2000, the Authority has been empowered to engage in activities that are relevant to the exploitation and development of its assets, technical capabilities, installations, services and know-how.

#### Review of business developments, position and performance of the Authority's business

3. The profit of the Group for the year ended 31 December 2015 was €60.378 thousand (2014: €41.976 thousand). On 31 December 2015 the total assets of the Group were €2.272.120 thousand (2014: €2.247.590 thousand) and the net assets were €1.043.847 thousand (2014: €902.704 thousand). The financial position of the Group as presented in the consolidated financial statements is considered satisfactory. The Board of Directors is not anticipating any significant changes in the activities of the Group in the near future.

#### Main risks and uncertainties

4. The main risks and uncertainties faced by the Group are disclosed in notes 3 and 26 of the consolidated financial statements.

#### **Future developments of the Group**

5. The Board of Directors of the Authority does not expect any major changes or developments in the operations, financial position and performance of the Group in the foreseeable future.

#### Results

6. The results of the Group for the year are presented on page 62. The net profit for the year is transferred to reserves.

#### **Board of Directors**

- 7. The members of the Board of Directors as at 31 December 2015 and at the date of this report are presented on page 58.
- 8. There were no changes in the assignment of responsibilities and remuneration of the Board of Directors.

#### Events after the reporting period

9. There were no material events after the reporting period, which have a bearing on the understanding of the consolidated financial statements.

#### **Branches**

10. The Group did not operate through any branches during the year.

#### **Independent Auditors**

11. The Independent Auditors, KPMG Limited, have expressed their willingness to continue in office.

#### By order of the Board of Directors

#### **Othonas Theodoulou**

Chairman

31 May 2016 Nicosia

## Independent Auditor's report To Electricity Authority of Cyprus

#### Report on the consolidated financial statements

We have audited the accompanying consolidated financial statements of Electricity Authority of Cyprus (the ''Authority'') and its subsidiaries (together with the Authority, the ''Group'') on pages 62 to 99, which comprise the consolidated statement of financial position as at 31 December 2015, and the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### Board of Directors' responsibility for the consolidated financial statements

The Board of Directors is responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union, the requirements of the Electricity Development Law Cap. 171, the Public Corporate Bodies (Audit of Accounts) Laws of 1983-2007 and the requirements of the laws Regulating the Electricity Market of 2003 2015, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Independent auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation of consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified audit opinion.

#### Basis for qualified opinion

The impairment to the value of property, plant and equipment of the Vasilikos Power Station of €103,6 million caused by the event of 11th July 2011 at Mari has not been recognised in the consolidated financial statements for the year ended 31 December 2011. On the contrary, a total amount of €142,606 million spent for the years 2011 until 2015 for the restoration of the property, plant and equipment of Vasilikos Power Station (out of which an amount of €1 million and €231 thousand recognised in 2014 and 2015 respectively), has been included in the consolidated statement of profit or loss as operating expenses.

This accounting treatment, in our opinion, does not comply with the requirements of IAS 16 "Property, plant and equipment" and IAS 36 "Impairment of Assets". As a result of the above, the operating costs before the depreciation charge for the years ended 31 December 2015 and 2014, should have been reduced by €231 thousand and €1 million respectively and the depreciation charge for the years ended 31 December 2015 and 2014 should have been increased by €4,3 million each year.

As a result of the above, the net book value of property, plant and equipment as at 31 December 2015 and 2014 should have been amounted to €1.796 million and €1.875 million respectively, and the reserves as at 31 December 2015 and 2014 should have been amounted to €1.074 and €937, million respectively.

Furthermore, for the above mentioned event, the Authority received as compensation from the insurance companies an amount of €152,1 million which was recognised in the consolidated statement of profit or loss. The underlying amount should have been included in the consolidated statement of financial position as deferred income and depreciated, using the same method applied to the rest of fixed assets.

#### **Qualified opinion**

In our opinion, except for the effect on the consolidated financial statements of the matter referred to in the basis for qualified opinion paragraph, the consolidated financial statements give a true and fair view of the financial position of the Group as at 31 December 2015, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of the Electricity Development Law Cap. 171 and the requirements of the laws regulating the Electricity Market of 2003-2015.

#### Report on other legal requirements

Pursuant to the additional requirements of the Auditors and Statutory Audits of Annual and Consolidated Accounts Laws of 2009, L.42(I)/2009, as amended from time to time ("Law 42(I)/2009"), we report the following:

- We have obtained all the information and explanations we considered necessary for the purposes of our audit.
- In our opinion, proper books of account have been kept by the Group, so far as appears from our examination of these books, except as explained in the basis for qualified opinion paragraph.
- · The consolidated financial statements of the Group are in agreement with the books of account.
- In our opinion, and to the best of our information available to us and according to the explanations given to us, the consolidated financial statements give the information according to the requirements of the laws regulating the Electricity Market of 2003-2015, in the manner so required, except as explained in the basis for qualified opinion paragraph.
- In our opinion, the information given in the report of the Board of Directors on pages 2 to 3 is consistent with the consolidated financial statements.

#### Other matter

This report, including the opinion, has been prepared for and only for the Board of Directors of Electricity Authority of Cyprus, as a body, the Minister of Commerce, Industry and Tourism, the House of Representatives and the Auditor General of the Republic in accordance with the requirements of the Electricity Development Law Cap. 171, the Public Corporate Bodies (Audit of Accounts) Laws of 1983-2007, the Laws Regulating the Electricity Market of 2003-2015 and Section 34 of the law L.42(I)/2009 and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whose knowledge this report may come to.

#### Christos V. Vasiliou, FCA

Certified Public Accountant and Registered Auditor for and on behalf of

KPMG Limited Chartered Public Accountants and Registered Auditors 14 Esperidon Street 1087 Nicosia Cyprus

31 May 2016

#### Report of the Auditor General of the Republic to the Electricity Authority of Cyprus

I have examined the foregoing report on the consolidated financial statements on pages 8 to 55, of the Electricity Authority of Cyprus for the year ended 31 December 2015, submitted by the appointed auditors in accordance with section 3(1) of the Public Corporate Bodies (Audit of Accounts) Laws and I am satisfied that it is appropriate.

Dr Odysseas Ph. Michaelides

Auditor General of the Republic

Nicosia

## Consolidated Financial Statement 31 December 2015

Consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2015

	Note	2015 €000	2014 €000
Revenue	5	576.792	721.137
Other operating income - net	6	53.749	55.131
Other losses - net	7	(291)	(21)
Operating costs	8	(552.331)	(716.595)
Operating profit		77.919	59.652
Finance costs	10	(7.577)	(11.199)
Profit before tax		70.342	48.453
Tax charge	11	(9.964)	(6.477)
Profit for the year		60.378	41.976
Other comprehensive income/ (expense)			
Items that will not be			
reclassified to profit or loss:			
Remeasurement of defined benefit obligation	9	84.483	(244.317)
Total comprehensive income/ (expense) for the year		144.861	(202.341)

Other comprehensive income/ (expense) is presented after tax. The tax relating to each item of other comprehensive income is shown in Note 11.

#### Consolidated statement of financial position at 31 December 2015

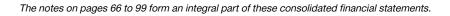
	Note	2015 €000	2014 €000
Assets			
Non current assets			
Property, plant and equipment	15	1.765.338	1.840.916
Trade and other receivables	16	322	631
		1.765.660	1.841.547
Current assets			
Inventories	17	91.398	108.370
Trade and other receivables	16	89.057	113.081
Greenhouse gasses emission allowances			966
Financial assets at fair value through			
profit or loss	12	671	978
Tax receivable	18	4.287	4.270
Short term deposits	19	301.772	145.336
Cash and cash equivalents	20	19.275	33.042
		506.460	406.043
Total assets		2.272.120	2.247.590
Reserves and liabilities			
Reserves		1.043.847	902.704
Total equity		1.043.847	902.704
Non current liabilities			
Borrowings	21	441.596	472.648
Deferred tax liabilities	22	65.804	57.066
Deferred income	23	429.443	437.020
		936.843	966.734
Current liabilities			
Trade and other payables	24	102.015	109.231
Net defined benefit obligation	9	132.930	217.995
Tax liability	18	3.718	-
Borrowings	21	31.051	29.479
Deferred income	23	21.716	21.447
		291.430	378.152
Total liabilities		1.228.273	1.344.886
Total reserves and liabilities		2.272.120	2.247.590

These consolidated financial statements are signed today, 31 May 2016, as a result of approval and decision of the Board of Directors.

O. THEODOULOU Chairman

A. PATSALIS
Acting General Manager

H. HADJIYEROU Executive Manager Finance



## Consolidated statement of changes in equity for the year ended 31 December 2015

	Note	Capital reserve €000	Actuarial losses reserve €000	Revenue reserve €000	Total €000
Balance at 1 January 2014		15.555	4.763	1.084.727	1.105.045
Comprehensive income					
Profit for the year		-	-	41.976	41.976
Other comprehensive expenses					
Remeasurement of defined benefit obligation	9	_	(244.997)	-	(244.997)
Deferred tax	11	-	680	-	680
Total other comprehensive expenses		-	(244.317)	-	(244.317)
Total comprehensive expenses for the year		-	(244.317)	41.976	(202.341)
Balance at 31 December 2014		15.555	(239.554)	1.126.703	902.704
Balance at 1 January 2015		15.555	(239.554)	1.126.703	902.704
Comprehensive income					
Profit for the year		-	-	60.378	60.378
Other comprehensive income					
Remeasurement of defined benefit obligation	9		84.483		84.483
Total other comprehensive income		-	84.483	-	84.483
Total comprehensive income for the year		-	84.483	60.378	144.861
Transactions with owners					
Contributions and distributions					
Defence contribution on deemed dividend distr	ribution	-	- 1	(3.718)	(3.718)
Total contributions and distributions		-	-	(3.718)	(3.718)
Balance at 31 December 2015		15.555	(155.071)	1.183.363	1.043.847

- (1) The Capital Reserve represents a government grant.
- (2) Organizations which do not distribute 70% of their profits after tax, as defined by the Special Contribution for the Defence of the Republic Law, during the two years after the end of the year of assessment to which the profits refer, will be deemed to have distributed this amount as dividend. Special contribution for defence at 15% will be payable on such deemed dividend at the end of the period of two years from the end of the year of assessment to which the profits refer. Special contribution for Defence was increased to 17% for the taxable year 2009 and 20% for taxable years 2010-11 and decrease to 17% for taxable years 2012 onwards. The amount of this deemed dividend distribution is reduced by any actual dividend paid out of the profits of the relevant year at any time. This special contribution for defence is paid by the Authority on behalf of the Government of Cyprus.
- (3) The actuarial losses reserve represents the cumulative losses from the Defined Benefit Plan that were recognized in the Consolidated Statement of other comprehensive income/ (expenses). The actuarial losses arise from changes in the present value of defined benefit obligation resulting from experience adjustments and the consequences of changes in actuarial assumptions.

## Consolidated statement of cash flows for the year ended 31 December 2015

	Note	2015 €000	2014 €000
Cash flows from operating activities			
Profit before tax		70.342	48.453
Adjustments for:		70.042	10.100
Depreciation of property, plant and equipment	15	93.230	95.244
Amortization of consumers' capital contributions	23	(21.447)	(21.119)
Profit from the sale of property, plant and equipment	7	(16)	(196)
Interest expense and unrealised exchange loss		(,	
on borrowings	10	6.353	9.671
Interest income	6	(5.710)	(2.040)
		142.752	130.013
Changes in working capital:			
Inventories		16.972	44.465
Trade and other receivables		25.168	21.777
Greenhouse gasses emission allowances		966	562
Financial assets at fair value through profit or loss	7	307	218
Trade and other payables		(7.184)	(5.194)
Defined benefit obligation		(582)	(4.070)
Cash generated from operations		178.399	187.771
Tax paid		(1.243)	(12.288)
Net cash from operating activities		177.156	175.483
Cash flows from investing activities			
Acquisition of property, plant and equipment	15	(17.721)	(39.983)
Short term deposits		(156.436)	(41.277)
Proceeds from sale of property, plant and equipment		85	2.048
Additions to consumers' capital contributions	23	14.139	15.064
Interest received		4.875	2.157
Net cash used in investing activities		(155.058)	(61.991)
Cash flows from financing activities			
j		(20, 490)	(110.220)
Repayments of long term borrowings  Interest paid		(29.480) (6.385)	(110.320) (9.899)
Net cash used in financing activities		(35.865)	(120.219)
Net decrease in cash and cash equivalents  Cash and cash equivalents/bank overdrafts at beginnin	og.	(13.767)	(6.727)
of the year	9	33.042	39.769
Cash and cash equivalents/bank overdrafts at end of the year	20	19.275	33.042

# Notes to the consolidated financial statements for the year ended 31 December 2015

#### 1. General Information

Electricity Authority of Cyprus is a Public Corporate Body which was established in Cyprus under the Electricity Development Law Cap.171 of 1952. It is managed by a Board of Directors, consisting of a Chairman, Vice Chairman and seven members, who are appointed by the Council of Ministers.

The address of the Authority's Head Office is at 11 Amfipoleos Street, Strovolos, P.O.Box 24506, 1399 Nicosia, Cyprus.

Electricity Authority of Cyprus, pursuant to the above Law, is engaged in the generation, transmission, distribution and supply of electricity. Following an amendment to the Law on 24 November 2000, the Authority has been empowered to engage in activities that are relevant with the exploitation and development of its assets, technical capabilities, installations, services and know-how.

With the accession of Cyprus to the European Union and the opening up of the electricity market to competition, Electricity Authority of Cyprus -in preparing for its harmonisation with the European Union- has taken all the necessary steps in order to conform with Directive 2003/54/EC of the European Parliament and of the Council of 19th December 1996, concerning common rules for the internal market in electricity.

The Group prepares separate financial statements for the activities of generation, transmission, distribution and supply of electricity and other activities, in accordance with Laws regulating the Electricity Market of 2003-2015 and the relevant resolutions of the Cyprus Energy Regulatory Authority (CERA) regarding the functional and accounts unbundling.

#### Operating environment of the Group

The Cyprus economy has been adversely affected during the last few years by the economic crisis. The negative effects have to some extent been resolved, following the negotiations and the relevant agreements reached with the European Commission, the European Central Bank and the International Monetary Fund (IMF) for financial assistance, which was dependent on the formulation and the successful implementation of an Economic Adjustment Program. The agreements also resulted in the restructuring of the two largest (systemic) banks in Cyprus through a "bail-in".

The Cyprus Government has successfully completed earlier than anticipated the Economic Adjustments Program and exited the IMF program on 7 March 2016, after having recovered in the international markets and having only used €7.25 of the total €10 billion earmarked in the financial

bailout. Under the new Euro area rules, Cyprus will continue to be under surveillance by its lenders with bi-annual post programme visits until it repays 75% of the economic assistance it received.

Although there are signs of improvement, especially in the macroeconomic environment of the country's economy, significant challenges remain that could affect the estimates of the Group's cash flows and its assessment of impairment of financial and non-financial assets.

The Group's management has assessed:

- (1) Whether any impairment allowances are deemed necessary for the Group's financial assets carried at amortised cost by considering the economic situation and outlook at the end of the reporting period. Impairment of trade receivables is determined using the "incurred loss" model, required by International Accounting Standard 39 "Financial Instruments: Recognition and Measurement". This standard requires recognition of impairment losses for receivables that arose from past events and prohibits recognition of impairment losses that could arise from future events, no matter how likely those future events are.
- (2) Whether the net realisable value of the Group's inventory exceeds cost.

#### 2. Summary of Significant accounting policies

The principal accounting policies adopted in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all years presented in these consolidated financial statements, unless otherwise stated.

#### **Basis of preparation**

The consolidated financial statements of the Electricity Authority of Cyprus have been prepared in accordance with International Financial Reporting Standards (IFRSs), as adopted by the European Union (EU), the requirements of the Electricity Development Law, Cap. 171 and the Laws regulating the Electricity Market of 2003-2015.

The consolidated financial statements have been prepared under the historical cost convention, except in the case of financial assets at fair value through profit or loss which are shown at their fair value and the defined benefit obligation which is recognised as plan assets, less the present value of the defined benefit obligation.

The methods used for determining fair values are explained in detail in Note 3. Financial assets and liabilities and non financial assets and liabilities which are valued at historic cost, are stated at amortised cost or historic cost, as appropriate, net of any relevant impairment.

The preparation of consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates and requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

### Adoption of new and revised International Financial Reporting Standards (IFRS) and interpretations

During the current year, the Group adopted all the new and revised International Financial Reporting Standards (IFRS) that are relevant to its operations and are effective for accounting periods beginning on 1 January 2015. This adoption did not have a material effect on the accounting policies of the Group.

#### Standards and interpretations that are not yet effective

The following Standards, Amendments to Standards and Interpretations have been issued but are not yet effective for annual periods beginning on 1 January 2015. The Board of Directors expects that the adoption of these financial reporting standards in future periods will not have a material effect on the consolidated financial statements of the Group, with the exception of IFRS 9: "Financial Instruments" for which, at present stage, the Group is considering the implications of the adoption of this standard to the consolidated financial statements. The Group does not intend to adopt the following prior to their effective date.

- (i) Standards and Interpretations adopted by the European Union
- IAS 19 (Amendments) "Defined Benefit Plans: Employee Contributions" (effective for annual periods beginning on or after 1 February 2015)

These amendments clarify the requirements that relate to how contributions from employees or third parties that are linked to service should be attributed to periods of service. In addition, they permit a practical expedient if the amount of the contributions is independent of the number of years of service. The amendments are intended to provide relief, in that entities are allowed to deduct contributions from service cost in the period in which the service is rendered.

#### Annual Improvements to IFRSs 2010 2012 (effective for annual periods beginning on or after 1 February 2015).

These amendments impact seven standards. The amendments to IFRS 2 amend the definitions of 'vesting condition' and 'market condition' and add definitions for 'performance condition' and 'service condition' that previously formed part of the definition of 'vesting condition'. The amendments to IFRS 3 clarify that contingent consideration -which is classified as an asset or liability- should be measured at fair value at each reporting date. The amendments to IFRS 8, require disclosure of judgments made by management in applying the aggregation criteria to operating segments. They also clarify that an entity is only required to provide reconciliations of the total of the reportable segments' assets to the entity's assets if the segment assets are reported regularly. Amendments to IFRS 13 clarify that issuing IFRS 13 and amending IFRS 9 and IAS 39 did not remove the ability to measure shortterm receivables and payables with no stated interest rate at their invoice amounts without discounting if the effect of not discounting is immaterial. The amendments to IAS 16 and IAS 38 clarify that when an item of property, plant and equipment or an intangible asset is revalued, the gross carrying amount is adjusted in a manner that is consistent with the re-valuation of the carrying amount. Finally, the amendments to IAS 24 clarify that when an entity is providing key management personnel services to the reporting entity or the parent of the reporting entity, it is considered a related party of the reporting entity.

 IAS 27 (Amendments) "Equity method in separate financial statements" (effective for annual periods beginning on or after 1 January 2016)

The amendments will allow entities to use the equity method to account for investments in subsidiaries, joint ventures and associates in their separate financial statements.

 IAS 1 (Amendments): Disclosure Initiative (effective for annual periods beginning on or after 1 January 2016)

The amendments introduce changes in various areas. In relation to materiality, the amendments clarify that information should not be obscured by aggregating or by providing immaterial information, that materiality considerations apply to all parts of the financial statements, and even when a standard requires a specific disclosure, materiality considerations do apply. In relation to the statement of financial position and statement of profit or loss and other comprehensive income, the amendments clarify that the list of line items to be presented in these statements can be disaggregated and aggregated as relevant and provide additional guidance on subtotals in these statements. They also clarify that an entity's share of other comprehensive income of equity-accounted associates and joint ventures should be presented in aggregate as single line items based on whether or not it will subsequently

# Notes to the consolidated financial statements for the year ended 31 December 2015

be reclassified to profit or loss. In relation to the notes to the financial statements, the amendments add additional guidance of ordering the notes, so as to clarify that understandability and comparability should be considered when determining the order of the notes in order to demonstrate that the notes need not be presented in the order so far listed in paragraph 114 of IAS 1.

 Annual Improvements to IFRSs 2012–2014 Cycle (effective for annual periods beginning on or after 1 January 2016).

The amendments impact four standards. IFRS 5 was amended to clarify that change in the manner of disposal (reclassification from 'held for sale' to 'held for distribution' or vice versa) does not constitute a change to a plan of sale or distribution, and does not have to be accounted for as such. The amendment to IFRS 7 adds guidance to help management determine whether the terms of an arrangement to service a financial asset which has been transferred constitute continuing involvement, for the purposes of disclosures required by IFRS 7. The amendment also clarifies that the offsetting disclosures of IFRS 7 are not specifically required for all interim periods, unless required by IAS 34. The amendment to IAS 19 clarifies that for post-employment benefit obligations, the decisions regarding discount rate, the existence of a deep market in high quality corporate bonds, or which government bonds to use as a basis, should be based on the currency that the liabilities are denominated in and not the country where they arise. IAS 34 will require a cross-reference from the interim financial statements to the location of 'information disclosed elsewhere in the interim financial report'.

 IAS 16 and IAS 38 (Amendments) "Clarification of acceptable methods of depreciation and amortization" (effective for annual periods beginning on or after 1 January 2016).

In this amendment, the IASB has clarified that the use of revenue-based methods to calculate the depreciation of an asset is not appropriate because revenue generated by an activity that includes the use of an asset generally reflects factors other than the consumption of the economic benefits embodied in the asset. However, in relation to intangible assets, the IASB stated that there are limited circumstances when the presumption can be overcome. This is applicable when the intangible asset is expressed as a measure of revenue and it can be demonstrated that revenue -and the consumption of economic benefits of the intangible asset- are highly correlated.

 IFRS 11 (Amendments) 'Accounting for acquisitions of interests in Joint Operations'" (Amendments) (effective for annual periods beginning on or after 1 January 2016).

This amends IFRS 11 such that the acquirer of an interest in a joint operation in which the activity constitutes a business, as defined in IFRS 3, is required to apply all of the principles of business combinations accounting in IFRS 3 and other IFRSs with the exception of those principles that conflict with the guidance in IFRS 11.

 IAS 16 and IAS 41 (Amendments) "Bearer plants" (effective for annual periods beginning on or after 1 January 2016).

The amendments change the financial reporting for bearer plants, such as grape vines, rubber trees and oil palms, which now should be accounted for in the same way as property, plant and equipment because their operation is similar to that of manufacturing. Consequently, the amendments include them within the scope of IAS 16, instead of IAS 41. The produce growing on bearer plants will remain within the scope of IAS 41.

- (ii) Standards and Interpretations not adopted by the European Union
- IFRS 14 "Regulatory Deferral Accounts" (effective for annual periods beginning on or after 1 January 2016).

IFRS 14 is expected to specify the financial reporting requirements for regulatory deferral account balances that arise when an entity provides goods or services to customers at a price or rate that is subject to rate regulation. IFRS 14 will permit an entity which is a first-time adopter of International Financial Reporting Standards to continue to account, with some limited changes, for "regulatory deferral account balances", in accordance with its previous GAAP, both on initial adoption of IFRS and in subsequent financial statements.

 IFRS 10, IFRS 12 and IAS 28 (Amendments) "Investment Entities: Applying the Consolidation Exception" (effective for annual periods beginning on or after 1 January 2016).

The amendments will address issues that arose in the context of applying the consolidation exception for investment entities. The amendments confirm that the exemption from preparing consolidated financial statements for an intermediate parent entity is available to a parent entity that is a subsidiary of an investment entity, even if the investment entity measures all of its subsidiaries at fair value. In addition, it clarifies that

a subsidiary that provides services related to the parent's investment activities should not be consolidated if the subsidiary itself is an investment entity. Furthermore, it is clarified that when applying the equity method to an associate or a joint venture, a non-investment entity investor in an investment entity may retain the fair value measurement applied by the associate or joint venture to its interests in subsidiaries. Finally, it confirmed that an investment entity measuring all of its subsidiaries at fair value is required to provide disclosures relating to investment entities as required by IFRS 12.

 IAS 7 (Amendments) "Disclosure Initiative" (effective for annual accounting periods beginning on or after 1 January 2017).

The amendments are intended to clarify IAS 7 and improve information provided to users for an entity's financing activities. The amendments will require that the following changes in liabilities arising from financing activities are disclosed (to the extent necessary): (a) changes from financing cash flows; (b) changes arising from obtaining or losing control of subsidiaries or other businesses; (c) the effect of changes in foreign exchange rates; (d) changes in fair values; and (e) other changes.

 IAS 12 (Amendments) "Recognition of Deferred Tax Assets for Unrealised Losses" (effective for annual accounting periods beginning on or after 1 January 2017).

The amendments will give clarifications in relation to the recognition of a deferred tax asset that is related to a debt instrument measured at fair value. Additionally, it clarifies that the carrying amount of an asset does not limit the estimation of probable future taxable profits and that estimates for future taxable profits exclude tax deductions resulting from the reversal of deductible temporary differences. Finally, it clarifies that an entity assesses a deferred tax asset in combination with other deferred tax assets. Finally, where tax law restricts the utilisation of tax losses, an entity would assess a deferred tax asset in combination with other deferred tax assets of the same type.

 IFRS 15 "Revenue from contracts with customers" (effective for annual periods beginning on or after 1 January 2018).

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognized. It replaces existing revenue recognition guidance, including IAS 18 Revenue, IAS 11 Construction Contracts and IFRIC 13 Customer Loyalty Programs.

 IFRS 9 "Financial Instruments" (effective for annual periods beginning on or after 1 January 2018). IFRS 9 replaces the existing guidance in IAS 39. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, a new expected credit loss model for calculating impairment on financial assets, and new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39.

 IFRS 16 "Leases" (effective for annual periods beginning on or after 1 January 2019).

IFRS 16 will supersede IAS 17 and related interpretations. The new standard will bring most leases on-balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases. Lessor accounting, however, will remain largely unchanged and the distinction between operating and finance leases is retained.

#### Subsidiary undertakings

A subsidiary undertaking is an entity controlled by the Group. Control exists where the Group is exposed or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The subsidiary undertaking is consolidated from the date on which control is transferred to the Group and is no longer consolidated from the date that control ceases. All intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated as is also the case with unrealized losses unless cost cannot be recovered.

The purchase method of accounting is used to account for the acquisition of subsidiaries by the Group. The cost of an acquisition is measured as the fair value of the assets given and equity instruments issued and liabilities incurred or assumed at the date of exchange. Costs directly attributable to the acquisition are recognised in the profit or loss. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the statement of profit or loss.

#### Revenue recognition

Revenue comprises the fair value of consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities. Revenue is shown net of value added tax.

The Group recognises revenue when the amount can be reliably estimated, it is probable that future economic benefits will flow to the entity and when specific criteria have been met for each of the Group's activities, as described below:

# Notes to the consolidated financial statements for the year ended 31 December 2015

#### (a) Sales of electricity

Sales of electricity represent amounts receivable, based on consumption recorded by meters, net of V.A.T. Sales also include an estimate of the value of units supplied to consumers between the date of the last meter reading and the year end, and this estimate is included in receivables in the consolidated statement of financial position.

#### (b) Interest Income

Interest income is recognised on a time proportion basis using the effective interest method.

#### (c) Consumers' capital contributions

The Group accepts applications for extension of its network in areas not yet covered by the existing network by individuals and legal entities. Furthermore, the Group accepts applications for additional load from the existing network. In both cases, the Group charges the applicants with the construction cost.

The fact that the cost is recovered from applicants, results in not having to be recovered by consumers through electricity tariffs. Otherwise, this cost would have been included in tariffs and consumers would have been billed for the consumption of electricity with higher prices. All network extension applicants are charged with capital contributions and all consumers are billed with the same tariffs.

Applicants are ensured of the right of permanent access to the network for an unlimited period of time. The Group is committed to providing access for an unlimited period of time. Capital contributions represent the price for this continuous service and hence, income is shown as deferred income and is gradually released to the consolidated statement of profit or loss over a period identical to that of the assets constructed/acquired for this purpose, and which have an average life of 33 1/3 years. This period is considered a reasonable approximation for calculating the period of the customer relationship.

Subsidies from the Group in respect of such capital contributions are deducted from the amounts receivable when there is objective evidence that the Group will not be able to collect these amounts and charged in the consolidated statement of profit or loss at the time granted.

#### (d) Revenue from Desalination

Revenue from Desalination represents the sale of desalinated water to the Water Board Authority in accordance with the supply, as recorded by meters net of VAT. Sales also include an estimate of the value of metric tonnes supplied between

the date of the last invoice and the end of the year and this estimate is included in receivables in the consolidated statement of financial position.

#### **Government grants**

Government grants are recognised at their fair value when there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants relating to costs are deferred and recognised in profit or loss over the period necessary to match them with the costs that they are intended to compensate.

#### Foreign currency translation

#### (a) Functional and presentation currency

Items included in the Group's consolidated financial statements are measured using the currency of the primary economic environment in which the Group operates ("the functional currency"). The consolidated financial statements are presented in Euro (€), which is the Group's functional and presentation currency.

#### (b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

All foreign exchange gains and losses are presented in profit or loss within "finance costs".

#### **Employee benefits**

The Group operates a defined benefit plan, comprising of a lump sum amount at the termination of employees services and post-employment benefits, and various other defined contribution plans, the assets of which are held in separate trustee administered funds. These plans are mainly funded by the Group.

The net expense/(income) from interest and current service cost is charged to the statement of profit or loss over the period of the expected service lives of the employees and is estimated annually by independent actuaries, using the

projected unit method, in order to create sufficient reserves. The Group determines the net interest expense/(income) on the net defined benefit obligation (asset) for the period, by applying the discount rate used to measure the defined benefit obligation (asset), taking into account any changes in the net defined benefit obligation (asset) during the period as a result of contributions and benefit payments. Remeasurements of the net defined benefit obligation, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in other comprehensive income.

A provision for the contribution to the defined benefit scheme is made on a monthly basis so that adequate reserves are created during the working life of the employees. Additionally, from 2015 a recovery plan was effected, non-current provides that an annual deficit payment should be made to the Pension Plan. From October 2011 under the first package of austerity measures, the members of the defined benefit plan are making contributions amounting to 3%.

IAS 19 does not specify whether an entity should distinguish current and non-current portions of assets and liabilities arising from post-employment benefits. The Group recognises the net defined benefit obligation as a current liability because a distinction between current and non current portion arising from defined benefit plans may sometimes be arbitrary.

The Group's contributions to the defined contribution plans are charged to the consolidated statement of profit or loss in the year to which they relate.

#### Current and deferred income tax

The tax expense for the period comprises current and deferred tax including interest and penalties. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income. In this case, the tax is also recognised in other comprehensive income.

The current income tax is calculated on the basis of the tax laws enacted or substantively enacted at the reporting date in the country in which the Group operates and generates taxable income. The Group periodically evaluates positions taken in tax returns with respect to situations in which applicable, tax regulation is subject to interpretation. If applicable tax regulation is subject to interpretation, it establishes provision, where appropriate, on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that -at the time of the transaction-affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates and laws that have been enacted or substantially enacted to the reporting date and are expected to apply when the related deferred income tax asset is recognised or the deferred income tax liability is settled.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be recognised.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on the Authority, where there is an intention to settle the balances on a net basis.

#### Property, plant and equipment

All property, plant and equipment are stated at historical cost less depreciation. Historical cost includes expenditure that is directly related to the acquisition of property, plant and equipment. For projects carried out by external contractors, cost is based on the value of work executed and certified by engineering consultants. For projects carried out by the Group's own staff, cost comprises of materials, labour and related overheads

Major spare parts and stand by equipment are accounted for as property, plant and equipment when the Group expects to use them during more than one period.

Land is not depreciated. Depreciation on other property, plant and equipment is calculated using the straight line method to allocate their cost to their residual values, over their estimated useful lives. The estimated useful lives of the major elements of property plant and equipment are as follows:

	Years
Power station buildings	30
Other buildings	35
Power station, plant and machinery	25
Other plant and machinery	25-30
Lines and cables	35-40
Meters	15
Motor vehicles	7
Furniture, fixtures and office equipment	10
Tools and instruments	10
Computer Hardware	5
Computer Software	3

There is no depreciation on freehold land.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Expenditure for repairs and maintenance of property, plant and equipment is charged to the consolidated statement of profit or loss of the year in which they were incurred. The cost of major renovations and other subsequent expenditure are included in

the carrying amount of the asset or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

Gains and losses on disposal of property, plant and equipment is determined by comparing proceeds with the carrying amount and these are included in "other gains/losses net" in the consolidated statement of profit or loss.

#### Greenhouse Gas Emission Allowances

Based on the Cyprus Law for the Scheme of Greenhouse Gas Emission Allowance Trading, N.132(I)/2004, greenhouse gas emission allowances are allocated to the various operators (companies) with the objective of reducing the level of pollution in the environment.

Each operator, whose annual emissions exceed the number of emission allowances allocated for the specific year, is obliged to buy as many emission allowances as required to cover the shortage and in addition to pay a penalty fee for each echo of excess emission.

Granted CO2 emission allowances are initially recognised at nominal value (nil value) when the Group is able to exercise control over these rights. Purchased CO2 emission allowances are initially recognised at cost (purchase price) within intangible assets. A liability is recognised when the level of emissions exceeds the level of allowances granted. The liability includes the total cost of the purchased allowances and any additional deficit at the current market value of the allowances as at the reporting date. Movements in the liability are recognised in the consolidated statement of profit or loss.

The intangible asset is surrendered at zero value at the end of the compliance period reflecting the consumption of economic benefit. Surplus emission allowances can be carried forward and off-set future shortages (up to the end of the compliance period) or be sold. Proceeds from the sale of surplus emission allowances are recognised upon the sale of these rights.

#### Impairment of non-financial assets

Assets that have an indefinite useful life, including goodwill, are not subject to amortisation and are tested annually for impairment. Assets (except inventory and deferred tax) that are subject to depreciation or amortisation are reviewed for impairment, whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels, for which

there are separately identifiable cash flows (cash generating units). Non financial assets, other than goodwill, that have suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

Impairment loss is recognized in the consolidated statement of profit or loss.

#### **Financial assets**

#### (i) Classification

The Group classifies its financial assets as financial assets at fair value through profit or loss and loans and receivables. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of financial assets at initial recognition.

#### · Financial assets at fair value through profit or loss

This category has two sub categories: financial assets held for trading and those designated at fair value through profit or loss at inception. A financial asset is classified as held for trading if acquired principally for the purpose of selling in the short term. Financial assets designated as at fair value through profit or loss at inception are those that are managed and their performance is evaluated on a fair value basis, in accordance with the Group's documented investment strategy. Information about these financial assets is provided internally on a fair value basis to the Group's key management personnel. Assets in this category are classified as current assets if they are either held for trading or are expected to be recognized within twelve months of the reporting date.

### Loans and receivables

Loans and receivables are non derivative financial assets with fixed or determinable payments that are not quoted in an active market and for which there is no intention of trading the receivable. They are included in current assets, except for maturities greater than twelve months after the reporting date. These are classified as non current assets. The Group's loans and receivables comprise trade and other receivables and cash and cash equivalents in the consolidated statement of financial position.

#### (ii) Recognition and measurement

Regular way purchases and sales of financial assets are recognised on the trade date, which is the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognised as fair value and transaction costs are

expensed in profit or loss. Financial assets are derecognisedd when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred all risks and rewards of ownership substantially.

Loans and receivables are carried at amortised cost using the effective interest method.

Gains or losses arising from changes in the fair value of the 'financial assets at fair value through profit or loss' category are presented in profit or loss within 'other gains/(losses) net' in the period in which they arise. Dividend income from financial assets at fair value through profit or loss is recognised in the profit or loss as part of other income when the Group's right to receive payments is established.

#### (iii) Impairment of financial assets

The Group assesses at each reporting date whether there is objective evidence that a financial asset, other than financial assets at fair value through profit or loss, or a group of financial assets, other than financial assets at fair value through profit or loss, is impaired.

Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation, and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

For loans and receivables category, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount of the loss is recognised in the profit or loss. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in the profit or loss.

#### Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight line basis over the period of the lease.

#### Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average cost method. Cost includes purchase cost, transport and handling costs. It excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business less applicable variable selling expenses. Provision is made for damaged, deteriorated, obsolete and unusable items where appropriate.

#### Trade receivables

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business. If a collection is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non current assets.

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost, using the effective interest method, less provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or delinquency in payments are considered indicators that the trade receivable is impaired. The amount of the provision is the difference between the carrying amount and the recoverable amount, being the present value of estimated future cash flows, discounted at the effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss within operating costs. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against operating costs in profit or loss.

#### **Provisions**

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

#### Cash and cash equivalents

Cash and cash equivalents include cash in bank and in hand, short term deposits held at call with banks with average maturity up to 90 days and bank overdrafts. Short term bank deposits with maturity of 3-12 months are included in short term bank deposits and within investing activities for cash flow purposes. In the consolidated statement of financial position, bank overdrafts are shown within borrowings in current liabilities.

#### **Borrowings**

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption value is recognised in profit or loss over the period of the borrowings, using the effective interest method, unless they are directly attributable to the acquisition, construction or production of a qualifying asset, in which case they are capitalised as part of the cost of that asset.

Borrowing costs are interest and other costs that the Group incurs in connection with the borrowing of funds, including interest on borrowings, amortisation of discounts or premium relating to borrowings, amortisation of ancillary costs incurred in connection with the arrangement of borrowings, finance lease charges and exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset, being an asset that necessarily takes a substantial period of time to get ready for its intended use or sale, are capitalised as part of the cost of that asset, when it is probable that they will result in future economic benefits to the Group and the costs can be measured reliably.

Borrowings are classified as current liabilities, unless the Group has an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

#### Trade payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of a group from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the group if longer). If not, they are presented as non-current liabilities.

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

#### Comparatives

Where necessary, comparative figures have been adjusted to conform to changes in presentation in the current year.

#### 3. Financial risk management

#### Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and cash flow interest rate risk), credit risk and liquidity risk.

The Group's risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. Risk management is carried out by a central treasury department under policies approved by the Board of Directors. The treasury department identifies, evaluates and hedges financial risks in close co operation with the Group's operating units.

#### (i) Financial risks management

#### **Market Risk**

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments.

The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

#### **Currency risk**

Foreign currency risk is the risk that the value of financial instruments will fluctuate due to changes in foreign exchange rates. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated

in a currency that is not the Group's functional currency. The Group is exposed to foreign exchange risk arising from various currency exposures with respect to the US Dollar, Pound Sterlings and Swiss Franks but believes that any change in foreign exchange rates will not have a material effect on its results.

Management monitors the exchange rate fluctuations on a continuous basis and acts accordingly.

The net foreign exchange difference debited/credited to the consolidated statement of profit or loss amounts to €1.224.000 (2014: €1.528.000) and relates to operating and financing activities (Note 10).

The Group's exposure to foreign currency risk was as follows:

31 December 2015	United States Dollars \$000	31 December 2014	United States Dollars \$000
Assets		Assets	
Short term deposits	12.553	Short term deposits	10.629
	12.553		10.629
Liabilities		Liabilities	
Suppliers	(23.561)	Suppliers	(17.196)
Amount available for interpleader proceedings	(13.631)	Amount available for interpleader proceedings	(11.897)
	(37.192)		(29.093)
Net foreign currency exposure	(24.639)	Net foreign currency exposure	(18.464)

#### Sensitivity analysis

A 10% strengthening of the Euro against the following currencies at 31 December 2015 would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant. For a 10% weakening of the Euro against the relevant foreign currency, there would be an equal and opposite impact on the equity and profit or loss.

	Equity		Profit or loss
2015	2014	2015	2014
\$000	\$000	\$000	\$000
2.464	1.846	2.464	1.846
2.464	1.846	2.464	1.846

United States Dollars

#### Cash flow interest rate risk

Interest rate risk is the risk that the value of financial instruments will fluctuate due to changes in market interest rates. The Group's income and operating cash flows are dependent on changes in market interest rates.

The Group's interest rate risk arises from long term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk.

At 31 December 2015, if interest rates on Euro denominated borrowings had been 0,1% higher/lower with all other variables held constant, post tax profit for the year would have been €472.167 (2014: €501.609) lower/higher, mainly as a result of higher/lower interest expense on floating rate borrowings.

At the reporting date the interest rate profile of interest-bearing financial instruments was:

	2015 €000	€000
Fixed rate instruments		
Financial assets	301.772	145.336
Financial liabilities	(480)	(518)
Variable rate instruments		
Financial liabilities	(472.167)	(501.609)
	(170.875)	(356.791)

#### Sensitivity analysis

A decrease of 100 basis points in interest rates at 31 December 2015 would have increased/ (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. For a decrease of 100 basis points there, would be an equal and opposite impact on the equity and profit or loss.

	Equity		Profit or loss
2015	2014	2015	2014
€000	€000	€000	€000
4.722	5.016	2.722	5.016
4.722	5.016	2.722	5.016

Variable rate instruments

#### Credit risk

Credit risk arises when a failure by counter parties to discharge their obligations could reduce the amount of future cash inflows from financial assets on hand at the reporting date. The Group has no significant concentration of credit risk.

The carrying amount of financial assets represents the maximum credit exposure.

Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions.

Sales to customers are settled in cash, direct debits, or using major credit cards. See Note 16 for further disclosure on credit risk.

Management does not expect any losses from non performance by these counterparties.

#### · Liquidity risk

Liquidity risk is the risk that arises when the maturity of assets and liabilities does not match. An unmatched position potentially enhances profitability, but can also increase the risk of losses.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

Less than 1 year €000	Between 1 and 2 years €000	Between 2 to 5 years €000	More than 5 years €000
34.140	38.576	151.374	387.940
91.551	-	-	-
125.691	38.576	151.374	387.940
38.466	39.784	143.506	322.491
95.224	-	-	-
133.690	39.784	143.506	322.491
	than 1 year €000  34.140 91.551 125.691  38.466 95.224	than 1 and 2 years €000 €000  34.140 38.576  91.551 - 125.691 38.576  38.466 39.784  95.224 -	than 1 and 2 2 to 5 1 year years years €000 €000 €000  34.140 38.576 151.374  91.551 125.691 38.576 151.374  38.466 39.784 143.506  95.224

<sup>\*</sup>Excluding statutory liabilities and deferred income.

The Group has procedures with the object of minimising such losses, such as maintaining sufficient cash and other highly liquid current assets and by having available an adequate amount of committed credit facilities.

## (ii) Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern and to maintain an optimal capital structure to reduce the cost of capital.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including 'current and non current borrowings), as presented in the consolidated statement of financial position less short term deposits and cash and cash equivalents. Total capital is calculated as 'equity' ('Reserves' and 'Deferred Income', as shown in the consolidated statement of financial position) plus net debt.

During 2015, the Group's strategy, which was unchanged from 2014, was to maintain the gearing ratio within 10% to 30%. The gearing ratio at 31 December 2015 and 2014 was as follows:

	2015 €000	2014 €000
Total borrowings (Note 21)	472.647	502.127
Less: Short term deposits (Note 19)	(301.772)	(145.336)
Cash and cash equivalents (Note 20)	(19.275)	(33.042)
Net debt	151.600	323.749
Total equity	1.495.006	1.361.171
Total Capital as defined by Management	1.646.606	1.684.920
Gearing ratio	9%	19%

# (iii) Fair value estimation

The fair values of the Group's financial assets and liabilities approximate their carrying amounts at the reporting date.

The table below analyses financial instruments measured in the consolidated statement of financial position at fair value by valuation method. Different levels are defined as follow:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1).
- Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (Level 2).
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (Level 3).

Assets	Level 1 2015 €000	Level 1 2014 €000
Financial assets at fair value through profit or loss:		
Equity securities	671	978
Total financial assets measured at fair value	671	978

The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in Level 1. Instruments included in Level 1 comprise primarily equity investments listed on the Cyprus Stock Exchange classified as trading securities.

The fair value of financial instruments that are not traded in an active market (for example, unlisted equity securities) is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.
- Adjusted comparable price to book value multiples
- · Other techniques, such as discounted cash flow analysis.

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

## 4. Critical accounting estimates and judgements

The preparation of consolidated financial statements in accordance with IFRSs requires from Management the exercise of judgment, to make estimates and assumptions that influence the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. The estimates and underlying assumptions are based on historical experience and various other factors that are deemed to be reasonable based on knowledge available at that time. Actual results may deviate from such estimates.

The estimates and underlying assumptions are revised on a continuous basis. Revisions on accounting estimates are recognised in the period during which the estimate is revised, if the estimate affects only that period, or in the period of the revision and future periods, if the revision affects the present as well as future periods.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

#### (i) Deferred income

The Group accepts applications for extension of its network in areas not yet covered by the existing network by individuals and legal entities. Furthermore, the Group accepts applications for the additional load from the existing network. In both cases, the Group charges the applicants with the construction cost. The assets remain under the control of the Group that performs all necessary repairs and maintenance. Construction cost is recognised in property, plant and equipment.

The fact that the cost is recovered from applicants results in not having to be recovered by consumers through electricity tariffs. Otherwise, this cost would have been included in tariffs and consumers would have been billed for the consumption of electricity with higher prices. All network extension applicants are charged with capital contributions and all consumers are billed with the same tariffs.

Applicants are ensured of the right of permanent access to the network for an unlimited period of time. The Group is committed to providing access for an unlimited period of time. Capital contributions represent the price for this continuous service and hence, income is shown as deferred income and is gradually released to the consolidated statement of profit or loss over a period identical to that of the assets constructed/acquired for this purpose, and which have an average life of 33 1/3 years. This period is considered a reasonable approximation for calculating the period of the customer relationship.

Subsidies from the Group in respect of such capital contributions are deducted from the amounts receivable and charged in the consolidated statement of profit or loss at the time granted.

### (ii) Tax

Significant judgment is required in determining the provision for income taxes. These are transactions and calculations for which the ultimate tax determination is uncertain. The Group recognses liabilities for anticipated tax issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred income tax assets in the period in which such determination is made.

Where the actual final outcome differs by 10% from Management's estimates, then the Group would need to increase its current tax liabilities by €51.400 (2014: €291.100) if the final outcome was not in the Group's favour.

#### (iii) Defined Benefit Plan

The present value of the Defined Benefit Plan obligation, depends on several factors that are determined based on the actuarial valuation by using various assumptions and estimates. The assumptions and estimates used for determining the defined benefit cost and the obligation/asset, includes the discount rate, the expected increase in salaries and pensions. Such assumptions and estimates are subject to considerable uncertainty due to the long term nature of the plan.

### 5. Revenue from sale of electricity

Sale of electricity does not include the consumption of Turkish Cypriots in the areas of the Republic of Cyprus where the Government of the Republic does not exercise effective control. The unbilled electrical energy, calculated at a special rate, amounts to €240.000 (2014: €1.001.000).

## 6. Other operating income-net

Income from reconnection Employees' contribution to the defined benefit plan (Note 1)	1.880 1.733	2.258
Employees' contribution to the defined benefit plan (Note 1)	1.733	
		1.871
Income from fees for telecommunication usage of optical fibres	1.432	1.438
Income from Desalination	9.098	14.500
Consumers' capital contributions	21.447	21.119
Greenhouse gas emission allowances cost recovered	6.009	4.103
Income from TSOC	2.875	2.600
Compensation from Insurance Companies	-	1.000
Sundry income	3.565	4.202
Interest income from:		
Bank balances	4.193	1.332
Other	1.517	708
	53.749	55.131

Note: The amount represents deduction from the employees' salaries at the rate of 3% and is paid to the Group for maintaining the viability of the Defined benefit plan per Law 216 (i) 2012, paragraph 4.

# 7. Other losses net

2015 €000	2014 €000
16	196
(307)	(217)
(291)	(21)
	€000 16 (307)

# 8. Operating costs

	2015 €000	2014 €000
Fuel	288.632	446.975
Repairs at Vasilikos Power Station	231	1.023
Purchase of Electricity from third parties	26.196	31.831
Staff costs (Note 9)	89.702	84.953
Depreciation (Note 15)	93.230	95.244
Repairs and maintenance	11.124	15.441
Compensation for early retirement	8.754	-
Independent Auditor's Fees for the compulsory audit of the annual financial statements	62	66
General Audit Fee	34	34
Audit of the Funds	24	28
Audit fees prior years	(3)	18
Rental expenses	661	823
Provision for impairment of inventories	-	240
(Reversal of provision)/ Provision for Bad debts	(137)	2.743
Immovable property tax	327	331
Cyprus Energy Regulatory Authority fees	1.719	1.693
Transmission System Operator Cyprus fee	4.471	4.307
Transport	2.234	2.606
Insurance	3.678	3.703
Telephones and postages	1.516	1.484
Electricity, cleaning and water	1.185	1.314
Electricity for Desalination	2.753	7.026
Other expenses	15.938	14.712
Total expenses	552.331	716.595

Other expenses disclosed above include fees amounting to €6.000 (2014: €Nil) for other non audit services.

## 9. Staff costs

	2015 €000	2014 €000
Wages and salaries	65.905	70.609
Social insurance and other costs	8.219	8.767
Social cohesion fund	1.325	1.423
Defined benefit cost - current year cost	14.895	5.169
Other defined contribution plans	3.449	3.718
	93.793	89.686
	2015	2014
	€000	€000
The staff costs were allocated as follows:		
Statement of profit or loss (Note 8):		
- Staff costs	89.702	84.953
- Restoration of the Vasilikos P/S	10	179
Capitalized in fixed assets and work in progress	4.081	4.554
	93.793	89.686

#### **Defined Benefit Plan**

The amounts recognised in the consolidated statement of financial position and the consolidated statement of other comprehensive income of the Group as at 31 December 2015 are in accordance with the actuarial valuation as at 31 December 2015 for the defined benefit plan. The assets used for the purposes of the actuarial valuation were extracted from the audited financial statements of Electricity Authority's employees defined benefit plan (the "Plan") for the year ended 31 December 2015.

	2015 €000	2014 €000
Present value of defined benefit obligation	662.902	757.296
Fair value of plan assets	(529.972)	(539.301)
Net obligation on the consolidated statement of financial position	132.930	217.995
Funding level	80%	71%
	2015 €000	2014 €000
Current service cost	10.286	6.161
Net interest expense/ (income)	4.609	(992)
Total expense recognized in 'staff costs'	14.895	5.169

Movement in net obligation included in the consolidated statement of financial position	2015 €000	2014 €000
Net obligation/ (asset) in the statement of financial position at the beginning of the year	217.995	(22.932)
Contributions by the employer	(15.477)	(9.239)
Total expense recognized in the consolidated statement of profit or los	s <b>14.895</b>	5.169
Total amount recognized in other comprehensive (income)/ expense	(84.483)	244.997
Net obligation at the end of the year	132.930	217.995
Changes to the present value of the defined benefit obligation during the year	2015 €000	2014 €000
Present value of the defined benefit obligation at beginning of the year	757.296	514.263
Current service cost	10.286	6.161
Interest cost	15.931	18.795
Contributions by participants	1.122	1.175
Benefits paid out	(37.093)	(24.084)
Adjustments:		
- Actuarial (gain)/ loss - (financial assumptions)	(86.794)	185.276
- Actuarial (gain)/ loss - (demographic assumptions)	(500)	16.844
- Actuarial loss - (experience)	2.654	38.866
Present value of the defined benefit obligation at the end of the year	662.902	757.296
Changes to the fair value of plan assets during the year	2015 €000	2014 €000
Fair value of plan assets at the beginning of year	539.301	537.195
Expected return on plan assets	11.322	19.787
Contributions by the employer (Note)	15.477	9.239
Contributions by participants	1.122	1.175
Benefits paid out	(37.093)	(24.084)
Adjustments:		
Actuarial loss	(157)	(4.011)
Fair value of plan assets at the end of the year	529.972	539.301

Note: Employer's contributions include an amount of €1.733.000, that was deducted at the rate of 3% from the employees' salaries for maintaining the viability of the Defined benefit plan per Law 216 (i) 2012, paragraph 4 and is presented in other operating income of the Group.

Remeasurements:	2015 €000	2014 €000
Gain/ (loss) from the remeasurement of the defined benefit obligation	84.640	(240.986)
Difference between the expected and actual return on plan assets	(157)	(4.011)
Total actuarial Gain/ (loss) recognized in other comprehensive		
income/(expense)	84.483	(244.997)

The cumulative actuarial amount recognized in the statement of other comprehensive income until 31 December 2015 was €155.071.000 loss (2014: €239.554.000 loss).

# 9. Staff costs (continued)

The principal actuarial assumptions used for the actuarial valuation were:

	<b>2015</b> %	2014 %
Discount rate	2,26	2,14
Average expected return on plan assets	2,26	2,14
Total salary increases	2016: 0,00	2015-16: 0,00
	2017+: 1,25 +	2017+: 3,5
	promotional and merit increases	
General salary increases	2016:0,00	2016:0,25
	2017:0,25	2017:0,50
Social Insurance Scheme supplementary pension increases	2,0	1,0
Pension increases	1,0	1,50
Increase on maximum insurable earnings limit	2,5	3,0
Price inflation	2,0	2,0
Mortality table	60% тои РА90	80% тои EVK2000
Plan duration	18,55 years	18,56 years

In accordance with the amended IAS19, the discount rate should reflect the rate at which the liabilities could effectively be settled. Accordingly, the discount rate has been extracted from annual yield of the iBoxx Euro Corporates AA 10+ Bond Index with maturity of 18,55 years (2014: 18,56 years) which corresponds to the average maturity life of the Plan's liabilities.

Assumptions regarding current year's future mortality rates are according to the published general mortality table PA90 (2014: EVK 2000). The underlying table reduced by 40% represents the expected mortality of the Plan's members after retirement. According to the underlying mortality rate table, the expected life for a male and female aged 65 (normal retirement age) is 18.4 years and 22.2 years respectively.

The sensitivity of the defined benefit obligation to changes in the significant financial assumptions, keeping other assumptions constant, is as follows:

	2015			
	Change Impac			
Discount rate	+0,50% -7,70%			
Discount rate	-0,50%	8,80%		
Salaries	+0,50%	6,00%		
Salaries	-0,50%	-5,60%		
Pensions	+0,50%	9,20%		
Pensions	-0,50%	-8,80%		
Life expectancy	+1 έτος	3,50%		
Life expectancy	-1 έτος	-3,50%		

# 9. Staff costs (continued)

Based on the audited financial statements of the Plan, its assets are comprised as follows:

	2015	<b>2015</b> 2014*		14*	
	€000	%	€000	%	
Immovable property	26.639.334	5,00	27.530.987	5,07	
Shares	65.293.267	12,26	57.643.309	10,62	
Debentures - (Government)	55.487.697	10,42	78.493.476	14,46	
Debentures - (Other)	2.555.770	0,48	4.170.009	0,77	
Receivables	1.360.516	0,24	115.860.060	21,32	
Loans	23.313.954	4,38	26.160.882	4,82	
Hedge Funds	6.209.263	1,17	8.566.898	1,58	
Mutual debenture funds	166.873.040	31,33	17.922.955	3,30	
Cash and cash equivalents	184.931.275	34,72	206.631.828	38,06	
	532.664.116	100,00	542.980.404	100,00	

<sup>\*</sup> The classification of the plan assets has been adjusted to conform to the investment policy of the Plan. As a result of this amendment and for comparability purposes, comparative figures have also been restated.

The estimated regular statement of profit or loss charge for the financial year 2016 based on the amended IAS 19 is as follows:

	2016 €000
Current service cost	7.764
Net interest charge	3
Total	7.767

The actual charge in the consolidated statement of profit or loss will remain unknown until the end of the year, where any potential additional costs will be determined.

Expected benefits to be paid from the defined benefit plan for the next year are €22.173.000(2014: €22.819.000).

The expected contributions to be paid to the defined benefit plan for the financial year 2016 are €20.491.000. In addition, the annual deficit payment of 2015, amounting to €11 million, will also be paid. This payment was not made during 2015, as it was not included in the annually approved budget of the Authority.

#### 10. Finance costs

	2015	2014
	€000	€000
Interest expense:		
Borrowings	6.158	9.240
Interest on taxes	1	343
Other	194	88
	6.353	9.671
Net foreign exchange transaction losses	1.224	1.528
	7.577	11.199

The Plan did not hold any of the Group's financial assets, immovable property or other assets.

## 10. Finance costs (continued)

The finance cost is allocated as follows:

	2015 €000	2014 €000
Consolidated statement of profit or loss	7.577	11.199
	7.577	11.199

#### 11. Tax

	2015 €000	2014 €000
Current tax:		
Corporation tax - previous years	(18)	2
Defence contribution	1.244	325
Total current tax	1.226	327
Deferred tax (Note 22):		
Origination and reversal of temporary differences	8.738	6.150
Total deferred tax	8.738	6.150
Tax charge	9.964	6.477

Tax on Group profit before tax differs from the theoretical amount that would arise using the applicable tax rates as follows:

	2015	2015 €000	2014	2014 €000
Profit before tax		70.342		48.453
Tax calculated at the applicable tax rates on income and defence contribution	13,67%	9.616	12,91%	6.255
Tax effect of expenses not deductible for tax purposes	0,53%	371	0,46%	225
Tax effect of income not subject to tax	-%	1	-%	-
Tax charge - previous years	(0,03)%	(18)	-%	2
Tax charge	14,17%	9.964	13,37%	6.477

The Group is subject to income tax on taxable profits at the rate of 12,5%

As from the year 2012, tax losses of 5 years can be carried forward and set against taxable profits. Under certain conditions, interest received may be subject to special contribution for defence at the rate of 30%. In such cases, this interest will be exempt from income tax. In certain cases, dividends received from abroad may be subject to special contribution for defence at the rate of 20% for the years 2012 and 2013 and 17% for the year 2014 and thereafter.

The tax (charge)/credit relating to components of other comprehensive income is as follows:

## Tax effects of components of other comprehensive income

	Year ended 31 December 2015 Tax (charge)/			Year e	nded 31 Decem 2014	ber
				Tax (charge)/		
	Before	credit	After	Before	After	
	tax	tax	tax	tax	tax	tax
	€000	€000	€000	€000	€000	€000
Defined benefit obligation:						
Remeasurements of post						
employment benefit obligation	84.483	-	84.483	(244.997)	680	(244.317)
Other comprehensive income	84.483	-	84.483	(244.997)	680	(244.317)

#### 12. Financial assets at fair value through profit or loss

	2015 €000	2014 €000
Equity securities (Note 3(iii))	671	978

Financial assets at fair value through profit or loss are recorded in the consolidated statement of cash flow as part of the movement in working capital.

Changes in fair values of financial assets at fair value through profit or loss are recorded in 'Other losses - net' (Note 7) in profit or loss.

# 13. Financial instruments by category

Assets as per consolidated statement of financial position - 2015

	Assets measured at fair value €000	Loans and receivables €000	Total €000
Non current receivables	-	322	322
Trade and other receivables (Note 1)	-	83.128	83.128
Financial assets at fair value through profit or loss	671	-	671
Short term deposits	-	301.772	301.772
Cash and cash equivalents	-	19.275	19.275
Total	671	404.497	405.168

<sup>(1)</sup> The rest of the statement of financial position item "trade and other receivables" is deposits and prepayments.

## 13. Financial instruments by category (continued)

Assets as per consolidated statement of financial position - 2014

	Assets measured at fair value €000	Loans and receivables €000	Total €000
Non current receivables	-	631	631
Trade and other receivables (Note 1)	-	109.388	109.388
Financial assets at fair value through profit or loss	978	-	978
Short term deposits	-	145.336	145.336
Cash and cash equivalents	-	33.042	33.042
Total	978	288.397	289.375

<sup>(1)</sup> The rest of the statement of financial position item "trade and other receivables" is deposits and prepayments.

#### Liabilities as per consolidated statement of financial position

#### Other financial liabilities

	2015 €000	2014 €000
Borrowings	472.647	502.127
Net defined benefit obligation	132.930	217.995
Trade and other payables (Note 1)	95.224	91.551
Total	700.801	811.673

<sup>(1)</sup> The rest of the statement of financial position item 'trade and other payables' is statutory liabilities and deferred income.

# 14. Credit quality of financial assets

The credit quality of financials assets that are neither past due nor impaired can be assessed by reference to external credit ratings (if applicable):

	2015 €000	2014 €000
Fully performing trade receivables - net		
Group 1	1,956	2.042
Group 2	7.104	10.923
Group 3	43.010	51.554
·	52.070	64.519
Past due trade receivables - net		
Group 4	12.313	17.075
Group 5	6.732	11.514
Group 6	117	327
Group 7	393	1.578
Group 8	1.712	3.541
	21.267	34.035
Other receivables		
Group 9	10.113	11.465
	10.113	11.465
Short term bank deposits		
Caa1	-	29.625
Caa2	34.135	12.036
Caa3	124.376	61.500
Without external credit rating <sup>(1)</sup>	143.261	42.175
	301.772	145.336
Cash and cash equivalents <sup>(2)</sup>		
B3	-	443
Caa1	-	4.513
Caa2	505	202
Caa3	15.632	22.322
	16.137	27.480

- Group 1: New customers (less than 6 months) with no defaults in the past.
- Group 2: Existing customers (more than 6 months) with no defaults in the past.
- Group 3: Trade receivables billed during the next year.
- Group 4: Existing customers (more than 6 months) with some defaults in the past. All defaults were fully recovered.
- Group 5: Receivables that have been provided for, excluding related parties.
- Group 6: Receivables from related parties that have been provided for.
- Group 7: Receivables from related parties including amounts with defaults in the past.
- Group 8: Other trade receivables including amounts with defaults in the past.
- Group 9: Other receivables with no defaults in the past.
- (1) Management monitors credit risk arising from deposits in financial institutions without external credit ratings.
- (2) The rest of the statement of financial position item 'cash and cash equivalents' is cash in hand and cash equivalents without external credit ratings. The cash and cash equivalents without external credit ratings amount to €3.138.000 (2014: €4.695.000).

None of the financial assets that are fully performing, have been renegotiated.

# 15. Property, plant and equipment

	Freehold land €000	Buildings €000	Plant and machinery €000	Lines, cables and meters €000	Motor vehicles €000	Furniture, fixtures and office equipment €000	Tools and instruments €000	Computer hardware and software €000	Work in progress €000	Total €000
At 1 January 2014										
Cost	28.990	345.580	1.470.204	1.005.748	21.394	7.240	7.242	32.472	42.313	2.961.183
Accumulated depreciation	-	(111.312)	(560.080)	(332.010)	(18.120)	(5.797)	(6.287)	(29.548)	-	(1.063.154)
Net book value	28.990	234.268	910.124	673.738	3.274	1.443	955	2.924	42.313	1.898.029
Year ended 31 December 2014										
Opening net book value	28.990	234.268	910.124	673.738	3.274	1.443	955	2.924	42.313	1.898.029
Additions	11.858	31	2.620	251	-	27	8	2.196	22.992	39.983
Disposals	(11)	(130)	(1.711)	-	-	-	-	-	-	(1.852)
Depreciation charge	-	(11.501)	(53.400)	(26.566)	(1.261)	(341)	(221)	(1.954)	-	(95.244)
Transfers	147	3.993	19.869	24.819	-	-	-	160	(48.988)	-
Closing net book value  At 31 December 2014	40.984	226.661	877.502	672.242	2.013	1.129	742	3.326	16.317	1.840.916
Cost	40.984	349.448	1.490.812	1.030.819	20.912	7.267	7.250	34.807	16.317	2.998.616
Accumulated depreciation	-	(122.787)	(613.310)	(358.577)	(18.899)	(6.138)	(6.508)	(31.481)	-	(1.157.700)
Net book value	40.984	226.661	877.502	672.242	2.013	1.129	742	3.326	16.317	1.840.916
Year ended 31 December 2015										
Opening net book value	40.984	226.661	877.502	672.242	2.013	1.129	742	3.326	16.317	1.840.916
Additions	462	33	451	124	-	20	85	676	15.870	17.721
Disposals	(1)	(64)	-	(4)	-	-	-	-	-	(69)
Depreciation charge	-	(11.214)	(52.177)	(26.838)	(996)	(263)	(206)	(1.536)	-	(93.230)
Transfers	147	1.075	5.994	12.431	-	-	-	269	(19.916)	-
Closing net book value	41.592	216.491	831.770	657.955	1.017	886	621	2.735	12.271	1.765.338
At 31 December 2015										
Cost	41.592	350.481	1.495.209	1.043.369	20.663	7.286	7.335	35.628	12.271	3.013.834
Accumulated depreciation	-	(133.990)	(663.439)	(385.414)	(19.646)	(6.400)	(6.714)	(32.893)	-	(1.248.496)
Net book value	41.592	216.491	831.770	657.955	1.017	886	621	2.735	12.271	1.765.338

In the consolidated statement of cash flows, proceeds from sale of property, plant and equipment comprise:

	2015 €000	2014 €000
Net book value	69	1.852
Profit from the sale of property, plant and equipment (Note 7)	16	196
Proceeds from disposal of property, plant and equipment	85	2.048

Depreciation amounting to €93.230.000 (2014: €95.244.000) has been charged to operating costs.

#### Land and equipment located in Turkish occupied area

The total fixed assets shown in the consolidated statement of financial position include land and equipment located in the area occupied by the Turkish invasion force, whose cost approximates €12.978.000. The depreciation provision for the year in respect of these assets was NIL (2014: NIL) bringing the accumulated provision at 31 December 2015 to €12.440.000 (2014: €12.440.000) and leaving a written down value of €538.000 (2014: €538.000) which represents the cost of land. The consequences of the Turkish occupation on the value of this land and equipment is unknown.

#### 16. Trade and other receivables

	2015 €000	2014 €000
Trade receivables	92.634	117.863
Less: Provision for impairment of receivables	(19.297)	(19.309)
Trade receivables - net	73.337	98.554
Capital contributions receivable by instalments	632	764
Advance payments to subcontractors	4.764	3.294
Other receivables	9.481	10.701
Deposits and prepayments	1.165	399
	89.379	113.712
Less non current receivables	(322)	(631)
Current receivables	89.057	113.081

The maturity of non current receivables and prepayments is as follows:

	2015 €000	2014 €000
Between 1 and 2 years	173	314
Between 2 and 5 years	149	317
	322	631

## 16. Trade and other receivables (continued)

The fair values of current trade and other receivables approximate their carrying values at the reporting date.

At 31 December 2015, trade receivable of €51.978.000 (2014: €67.594.000) were neither due or impaired.

Trade receivables that are less than three months past due are not considered impaired. As of 31 December 2015, trade receivables of €14.510.000 (2014: €19.194.000) were past due but not impaired. These relate to a number of independent customers for whom there is no recent history of default. The ageing analysis of these trade receivables is as follows:

	2015 €000	2014 €000
Up to 3 months	13.570	18.622
3 to 6 months	872	572
Over 6 months	68	-
	14.510	19.194

As at 31 December 2015, trade receivables of €26.146.000 (2014: €31.150.000) were impaired and provided for. As at 31 December 2015 the amount of the provision was €19.297.000 (2014: €19.309.000). The individually impaired receivables mainly relate to consumers, which are in an unexpectedly difficult economic situation. It was assessed that a portion of the receivables is expected to be recovered. The ageing of these receivables is as follows:

	2015 €000	2014 €000
Up to 3 months	2.155	7.586
3 to 6 months	2.189	3.963
Over 6 months	21.802	19.601
	26.146	31.150

Concentrations of credit risk with respect to trade receivables are limited due to the Group's large number of customers who have a variety of end markets in which they sell. The Group's historical experience in the collection of trade receivables falls within the recorded allowances. Due to these factors, Management believes that no additional credit risk beyond amounts provided for collection losses is inherent in the Group's trade receivables.

Movements on the Group's provision for impairment of trade receivables are as follows:

	2015	2014
	€000	€000
At 1 January	19.309	16.678
Provision for impairment of receivables	(12)	2.897
Receivables written off during the year as uncollectible	-	(266)
At 31 December	19.297	19.309

The creation and release of provision for impaired receivables have been included in operating costs in the consolidated statement of comprehensive income (Note 8). Amounts charged to the allowance account are generally written off when there is no expectation of recovering additional cash.

Other groups within trade and other receivables contain impaired assets or past due amounting to €75.000 (2014: €212.000).

The maximum exposure to credit risk at the reporting date is the carrying value of each group of receivable mentioned above. The Group does not hold any collateral as security.

The carrying amounts of the Group's trade and other receivables are denominated in the following currencies:

	2015 €000	2014 €000
Currency		
Euro	89.379	113.712
	89.379	113.712

#### 17. Inventories

2015 €000	2014 €000
37.519	49.411
53.879	58.959
91.398	108.370
	€000 37.519 53.879

The cost of inventories recognized as expense and included in operating costs amounted to €295.934.000 (2014: €453.009.000).

Inventories are stated at cost.

## 18. Tax receivable / Tax (liability)

	2015 €000	2014 €000
Corporation tax	4.287	4.270
Special contribution for defence	(3.718)	-
	569	4.270

There are transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

#### 19. Short term deposits

	2015 €000	2014 €000	
Short term bank deposits	301.772	145.336	

The effective interest rate on short term bank deposits was 0,75%-3,25% (2014: 0,40%-3.40%) and these deposits had a maturity of 3-12 months (2014: 3-12 months). Deposits of €12,6 million are used as guarantees for fuel deliveries.

### 20. Cash and cash equivalents

Cash and cash equivalents included in the consolidated statement of cash flows represent the amounts in the consolidated statement of financial position of cash at bank and in hand and are analysed as follows:

	2015 €000	2014 €000
Cash at bank and in hand	19.025	29.955
Short term bank deposits	250	3.087
	19.275	33.042

The effective interest rate on short term bank deposits was 0,75%-2,50% (2014: 0,75%-2,50%) and these deposits had a maturity of 67 days (2014: 33 days).

# 21. Borrowings

	2015	2014
	€000	€000
Current		
Bank loans	31.051	29.479
Non current		
Bank loans	441.596	472.648
	441.596	472.648
Total borrowings	472.647	502.127

#### Maturity of non current borrowings is as follows:

2015 €000	2014 €000
32.242	31.050
123.583	118.199
285.771	323.399
441.596	472.648
	€000 32.242 123.583 285.771

The loans are payable in Euro as stipulated in the loan agreements. Loans are guaranteed as to the repayment of principal and interest by the Republic of Cyprus.

The weighted average effective interest rates at the reporting date were as follows:

	<b>2015</b> %	2014 %
Bank overdrafts and loans	1,1	1,3

The exposure of the Group's borrowings to interest rate changes and the contractual repricing dates at the reporting dates are as follows:

	2015 €000	2014 €000
Floating rate		
6 months or less	472.167	501.609
Fixed rate on maturity	480	518
	472.647	502.127

# The Group has the following unutilised borrowing facilities:

	2015	2014
	€000	€000
Floating rate		
Expiring within one year	82.500	97.500
Expiring beyond one year	10.000	-
	92.500	97.500

# 21. Borrowings (continued)

The carrying amounts of bank overdrafts and bank loans approximate their fair value.

The carrying value of the Group's borrowings is denominated in the following currencies:

	2015 €000	2014 €000
Euro functional and presentation currency	472.647	502.127
	472.647	502.127

#### 22. Deferred tax liabilities

Deferred tax liabilities are analysed as follows:

	2015 €000	2014 €000
Deferred tax liabilities to be settled after twelve months	65.804	57.066

Deferred taxation is calculated in full on all temporary differences under the liability method using the applicable tax rates (Note 11).

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on the Group where there is an intention to settle the balances on a net basis. The gross movement of the deferred taxation account is as follows:

	2015 €000	2014 €000
At 1 January	57.066	51.596
Charge to statement of profit or loss (Note 11)	8.738	6.150
Credit) to other comprehensive income		(680)
At 31 December	65.804	57.066

The movement in deferred income tax assets and liabilities during the year is as follows:

	Accelerated tax depreciation €000	Deferred income €000	Actuarial losses €000	Tax loss €000	Other €000	Total €000
At 1 January 2014	110.968	(58.065)	680	-	(1.987)	51.596
Charged/ (credited): Statement of profit or loss	9.411	757	-	(4.110)	92	6.150
Other comprehensive income	-	-	(680)	-	-	(680)
Balance at 1 January 2015	120.379	(57.308)	-	(4.110)	(1.895)	57.066
Charged/ (credited):						
Statement of profit or loss	7.807	913	-	(173)	191	8.738
Balance at 31 December 2015	128.186	(56.395)		(4.283)	(1.704)	65.804

# 23. Deferred income

	2015	2014
	€000	€000
Balance at 1 January	458.467	464.522
Additions	14.139	15.064
Transferred to the consolidated statement of profit or loss	(21.447)	(21.119
Balance at 31 December	451.159	458.467
Deferred income more than one year	(429.443)	(437.020
Deferred income within one year	21.716	21.447

# 24. Trade and other payables

	2015 €000	2014 €000
Fuel oil suppliers	23.747	17.311
Other Suppliers	9.017	8.410
Value Added Tax payable	6.286	17.110
Pay As You Earn payable	505	570
Retention from contractors on capital contracts	1.654	2.467
Consumers' deposits	24.420	20.528
Payments received in advance	1	33
Interest payable	166	199
Other contribution to defined benefit plan	-	47
Accrued expenses	1.861	1.969
Creditors for purchase of land and substations	8.938	9.406
Amount available for interpleader proceedings	13.631 <sup>(1)</sup>	11.897(1)
Other creditors	11.789	19.284
	102.015	109.231

The fair values of trade and other payables approximate their carrying values at the reporting date.

# 25. Subsidiary undertakings

	% Holding	Country of incorporation	Principal activities
Electriki Limited Investments	100	Cyprus	Dormant
EAC LNG Investments Company Ltd	100	Cyprus	Dormant
EAC Solar Thermal Power Ltd	100	Cyprus	Dormant

The results of Subsidiary undertakings, which during 2015 remained dormant, were consolidated in the Group accounts of Electricity Authority of Cyprus.

This amount represents a retention of amounts payable to a supplier of fuel to award beneficiaries through interpleader proceedings of various demanders against the Group and the specific supplier.

### 26. Contingent liabilities

- (a) As at 31 December 2015, the Group had a contingent liability in respect of possible tax for various expenses, amounting to €514.000 (2014: €2.911.000).
- (b) On 2 December 2015, Income Tax authorities sent a notification letter to the Authority regarding Tax Enforcement for non withholding tax from employees emoluments for the year 2009, which amounted to €3.925.000 plus interests and penalties. The Authority filed an objection on 26 January 2016 for the above mentioned case. The Group believes that there is an adequate defense against all claims and therefore no provision has been made in the financial statements.
- (c) As at 31 December 2015, the Group had contingent liabilities in respect of pending litigations amounting to €3.561.000 (2014: €3.451.000) and contingent asset of €259.000 (2014: €677.000) not including any amounts to be claimed from insurance companies relating to the Mari incident.
  - The Group believes that adequate defence exists against all claims and does not expect to suffer significant loss. Accordingly, no provision has been made in these financial statements in respect of this matter.
- (d) On 31 December 2015, the Group had the following guarantee documents:
  - (i) An amount of €2.792.000 for the benefit of Senior Customs Officer regarding the authorization granted to the Group for exemption from payment of excise duty on energy products used for electricity generation, including fuel oil (diesel).

## 27. Commitments

#### **Capital commitments**

	2015 €000	2014 €000
Commitments in respect of contracts or with work in progress	10.221	7.709
Approved commitments but not contracted or without any work in progress	65.970	62.629
Approved commitments with expenditure outstanding	76.191	70.338

### Operating lease commitments - where the Authority is the lessee

The future minimum lease payments under non-cancellable operating leases are as follows:

	2015 €000	2014 €000
Not later than one year	388	413
Later than one year and not later than 5 years	841	669
Over 5 years	13	14
	1.242	1.096

# 28. Related party transactions

The Electricity Authority of Cyprus is a Public Corporate Body which was established in Cyprus under the Electricity Development Law Cap. 171 of 1952.

#### (i) Sales

	2015 €000	2014 €000
Sales of electricity to related parties to the Group	37.733	58.416

The related parties consist of Governmental controlled entities (e.g. Government Offices, Ministries, etc.) and all transactions were made under the normal trade terms and conditions.

#### (ii) Year end balances - net

	2015 €000	2014 €000
Receivable from related parties from sales of electricity	510	1.905

The related parties consist of Governmental controlled entities (e.g. Government Offices, Ministries, etc.).

#### (iii) Key management personnel compensation

The compensation of key management personnel is as follows:

2015 €000	2014 €000
264	330
	€000

### (iv) Directors' remuneration

The compensation of key management personnel (that is included in key management personnel compensation) is as follows:

2015 €000	2014 €000
26	32
26	32
	€000 26

# 29. Events after the reporting period

There were no material events after the reporting period, which have a bearing on the understanding of the consolidated financial statements.

Reports of the Independent Auditor and Auditor General of the Republic on pages 60 and 61.

# Appendix

Appendix I
Consumers, sales and average prices

AS AT 31 DECEMBER	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NUMBER OF CONSUMERS	0.40.004	000 700	000 400	400.074	445.450	400.055	407404	100.010	400.070	407.577
Domestic	348.394	366.799	386.489	402.671	415.150	422.655	427.184	428.616	433.072	437.577
Commercial	76.272	78.294	80.913	83.160	84.800	85.325	85.198	84.695	85.188	85.525
Industrial	11.198	11.299	11.792	11.618	11.391	11.255	10.805	10.222	9.836	9.712
Agricultural	11.597	12.117	12.796	13.546	14.209	14.692	14.978	15.280	15.536	15.748
Street lighting	7.581	7.991	8.499	9.035	9.500	9.983	10.333	10.635	10.942	11.138
TOTAL	455.042	476.500	500.489	520.030	535.050	543.910	548.498	549.448	554.574	559.700
SALES TO CONSUMERS (Thous	sand kWh)									
Domestic	1.500.511	1.607.048	1.682.327	1.720.777	1.737.474	1.721.663	1.671.095	1.435.231	1.407.656	1.475.972
Commercial	1.713.921	1.783.885	1.881.173	1.918.932	1.990.994	1.854.782	1.836.756	1.655.761	1.630.789	1.659.588
Industrial	723.038	699.746	757.803	791.640	816.074	796.187	631.829	581.860	656.097	685.864
Agricultural	128.701	137.339	156.930	143.971	152.642	136.747	128.590	129.129	135.680	129.447
Street lighting	68.851	70.301	77.596	80.426	84.788	85.502	87.330	87.807	85.257	85.211
TOTAL	4.135.022	4.298.319	4.555.829	4.655.746	4.781.972	4.594.881	4.355.600	3.889.788	3.915.479	4.036.082
AVERAGE SALES PER CONSUMER (kWh)										
Domestic	4.307	4.381	4.353	4.273	4.185	4.073	3.912	3.349	3.250	3.373
Commercial	22.471	22.784	23.249	23.075	23.479	21.738	21.559	19.550	19.143	19.405
Industrial	64.568	61.930	64.264	68.139	71.642	70.741	58.476	56.922	66.704	70.620
Agricultural	11.098	11.334	12.264	10.628	10.743	9.308	8.585	8.451	8.733	8.220
Street lighting	9.082	8.798	9.130	8.902	8.925	8.565	8.452	8.256	7.792	7.650
AVERAGE PRICE PER UNIT BILLED (cent)										
Domestic	12,492	12,746	15,988	13,321	16,192	18,695	22,271	20,743	18,663	14,654
Commercial	13,009	13,328	16,982	14,196	16,905	19,377	22,645	20,840	18,923	14,731
Industrial	11,111	11,458	14,955	12,325	14,982	17,148	20,868	19,127	16,824	12,531
Agricultural	11,434	11,675	15,296	12,697	15,440	18,293	21,929	20,013	18,168	14,127
Street lighting	10,981	11,233	14,554	12,129	14,711	17,481	20,909	19,393	17,353	13,366
AVERAGE PRICE	12,408	12,719	16,178	13,473	16,232	18,668	22,188	20,488	18,418	14,281

Appendix 2
Generation, transmission & distribution equipment

Description	Unit	In Commission 31.12.2014	Commis- sioned in 2015	Taken out of Commis- sion in 2015	In Commission 31.12.2015
GENERATION PLANT					
Dhekelia Power Station					
Steam Turbines	No.	6		-	6
Capacity	MW	360		-	360
Internal Combustion Engines	No.	6		-	6
Capacity	MW	100		-	100
Moni Power Station					
Steam Turbines	No.	-		-	-
Capacity	MW	-		-	-
Gas Turbines	No.	4		-	4
Capacity	MW	150		_	150
Vasilikos Power Station					
Gas Turbines	No.	1		-	1
Capacity	MW	38		-	38
Steam Turbines	No.	3		-	3
Capacity	MW	390		-	390
Combined Cycle Gas					
Turbine Units	No.	2		-	2
Capacity	MW	440		-	440
TRANSMISSION EQUIPMENT					
220kV Transmission Lines operated at 132kV					
Route Length	km	43,89		-	43,89
Circuit Length	km	87,77		-	87,77
132kV Transmission Lines		-			
Route Length	km	447,40		-	447,40
Circuit Length	km	894,79	-	-	894,79
132kV Underground Cables					
Route Length	km	211,43		-	211,43
Circuit Length	km	211,43	-	-	211,43
132kV U/G Cables-					
Operated at 66kV					
Route Length	km	0		-	0
Circuit Length	km	0		-	0
66kV Underground Cables					
Route Length	km	0,66		-	0,66
Circuit Length	km	0,66		-	0,66

# Appendix

# Generation, transmission & distribution equipment (con't)

Description	Unit	In Commission 31.12.2014	Commis- sioned in 2015	Taken out of Commis- sion in 2015	In Commission 31.12.2015
GENERATION PLANT (con't)					
132kV Transmission Lines					
operated at 66kV					
Route Length	km	42,58		15,28	27,30
Circuit Length	km	85,15	-	30,56	54,59
66kV Transmission Lines					
Route Length	km	80,50		40,36	40,14
Circuit Length	km	80,50		40,36	40,14
132/66kV Interbus Transformers	No.	13	-	-	13
	MVA	648		-	648
132/11kV Step Down Transformers	No.	102	5	1	106
	MVA	3 441	166	31,5	3 575,5
132/6,6kV Step Down Transformers	No.	2	-	-	2
	MVA	58		-	58
132/3,3kV Step Down Transformers	No.	2	-	-	2
	MVA	20		-	20
66/11kV Step Down Transformers	No.	25	-	4	21
	MVA	331		60	271
66/3,3kV Step Down Transformers	No.	2		-	2
	MVA	5	-	-	5
15,75/132kV Step Up Transformers	No.	3	-	-	3
	MVA	495	-	-	495
11/132kV Step Up Transformers	No.	20		-	20
	MVA	1 304	-	-	1 304
11/66kV Step Up Transformers	No.	4		4	-
	MVA	150		150	-
Substations	No.	63	-	-	63
DISTRIBUTION EQUIPMENT					
MV Overhead Lines	km	5 816,28	59,19	14,91	5 860,55
MV Underground Cables	km	3 760,24	37,40	12,25	3 785,39
LV Overhead Lines	km	9 757,99	109,48	23,14	9 844,33
LV Underground Cables	km	5 848,49	128,41	0,12	5 976,78
22000-11000/433/250V					
P.M. Transformers	No.	10 088	176	25	10 239
	kVA	943 874	12 918	2 900	953 892
22000-11000/433V					
G.M. Transformers	No.	6 207	55	11	6 251
	kVA	3 479 495	28 255	6 960	3 500 790



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