Electricity Authority of Cyprus

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Speech by the Chairman of the Board of EAC

Presentation of Proceedings 2020

EAC Headquarters: 29 July, 2021

Honourable Madam Minister of Energy

Your Excellencies Messrs Ambassadors

Mr. Permanent Secretary of the Ministry of Energy

President, Vice President and Member of CERA

Dear Representatives of the Mass Media

Distinguished Guests,

Dear all,

EAC Project Report - Preliminary Financial Results for 2020

On behalf of the Board of Directors of the EAC, the Management and the Human Resources of the Organization, I welcome you to today’s event. This is of particular importance as the term of this Board of Directors ends very soon. Therefore, in addition to the presentation of last year’s activities, it is an opportunity to capture the overall work done at the Organization in recent years and especially during the term of this Board, of which I have the honour to be Chairman.

The public account of our work is imperative, as the EAC belongs to the State of Cyprus and to the Cypriot citizens in general. As the Board of Directors, we have the responsibility, in the context of transparency and responsible corporate governance, to provide information regarding the primary milestones of our journey, the important challenges we have faced, but also the challenges that the Organization is called to face in the near future.

It is important to emphasize at this point that those of us who have served the EAC from positions of responsibility over time, have a duty to ensure the continuity of its work and to further strengthen its value, as it is an invaluable asset of the Cypriot society.

It is clear that what we have achieved was done in close, productive cooperation with the Management, the Trade Unions and the staff of the EAC. The contribution of the people of the Organization is vital for the development of the Organization and the uninterrupted supply of electricity.

Let us now turn to the important issues of this report.

Pandemic Management

There is no doubt that the pandemic has dramatically changed the social and economic condition, not only in Cyprus but all over the world. From the first moment, with the overriding concern to protect the health of all, employees, associates, consumers; we, at the EAC prepared action plans to ensure the uninterrupted supply of electricity.

In this context, the operation of Customer Service Centres and Network User Centres was adapted and new technologies were utilized, with emphasis on communication and electronic consumer service.

The COVID-19 pandemic brought radical and mandatory changes in the daily work of our employees. Accordingly, we have adapted technological systems and processes to ensure our operational and functional continuity.

According to the financial capabilities of the EAC, the Management decided to reduce by 10% the invoices of all its customers for a period of 6 months. This move of the Organization corresponds to an amount of over €30 million, which the EAC returned to the society and economy of Cyprus. At the same time, we stood by our fellow citizens who were facing difficulties.

Overall, the pandemic was a major challenge for continuous improvement and effective emergency response.

Operational and Accounting Unbundling

A particularly positive development for the EAC, is its successful compliance with the provisions of the regulatory decision of CERA, regarding the Operational and Accounting Unbundling of its Activities. In order to facilitate the opening of the electricity market in Cyprus, implementing a European Directive and a relevant decision of CERA, the EAC has been divided into 4 Core Independent Regulated Activities and the Directorate of Non-Regulated Activities. Each Core Regulated Activity organizes its departments independently in order to respond effectively to the new needs of the Market. The EAC is now ready to support the opening of the Electricity Market in terms of transparency and equal treatment.

Significant Financial Data of the past year

Let us now look at the most significant financial data of the past year. The total revenue of the EAC in 2020, before the deduction of the special 10% discount granted due to the covid-19 pandemic, amounted to €700.4 million. The special discount which was granted to all EAC customers for a period of 6 months amounted to approximately €31.9 million, with the result that the total income after the discount amounted to €668.5 million. The total expenses reached €688.3 million, resulting in a loss of operations for the year of €19.8 million. The loss of operations was mainly due to the spread of the pandemic, the consequent economic downturn and the decision to grant a 10% reduction in the final price of electricity for a period of 6 months, a decision taken with the support of all Cypriot citizens and businesses.

Operating loss for the year ended 31 December 2020 and changes compared to the previous year

The decrease of approximately €169 million in total revenue is mainly a result of the decrease in sales revenue. Net income from electricity sales for the year was €613,248,000 and decreased by €161,322,000 or 21%. The significant decrease in sales revenue was mainly due to the decrease in units sold by 7%, the decrease in the sale price was a result of the automatic adjustment due to a reduction in fuel prices as well as the discount of approximately €32 million granted to customers due to of the COVID-19 pandemic.

Despite the reduction in operating expenses by approximately €93 million, operating profits from 2019 decreased by approximately €78 million, resulting an operating loss of €19.8 million for 2020.

Operating Expenses Breakdown for 2020

Primarily as a result of the reduction of electricity generation and the reduction in fuel prices, fuel consumption decreased by approximately €112 million at €304.9 million.

Despite the decrease in fuel prices and consequently in the energy from RES purchase price of, the purchase of electricity from third parties increased by 6% to €46.4 million due to an increase in the units purchased by approximately 18%.

The cost of greenhouse gas emission allowances increased by €7.6 million and amounted to €74,660,000. The increase is mainly due to an increase of approximately 11% in the number of allowances purchased during the year due to the fact that on the basis of a European Commission decision, 2019 was the last year in which the Authority was granted free allowances by the Competent authority.

It is noted that approximately 62% of the total costs comprised of fuel costs, the power purchase and the purchase of greenhouse gas emission allowances.

Expansion of RES use

A common goal is to reduce dependence on oil and increase the use of Renewable Energy Sources. Our vision is a green energy future. Since 2014, the EAC has launched the first Photovoltaic Park of Cyprus in Tseri with a capacity of 3MW. The latest project in the use of RES, is the PP in Akrotiri Limassol, with a total capacity of 12MW. According to the latest positive developments regarding its licensing, the project is at the final stage before commencing implementation works.

Within the framework of the EAC joint venture with the Holy Archbishopric of Cyprus, for the development of large photovoltaic parks in Achera, the first phase has been approved and we are at the stage of issuing a tender. For the second phase we are in the stage of securing the necessary permits. Simultaneously, the EAC is in collaboration with the Ministry of Education to install photovoltaic systems in all schools throughout Cyprus.

The installation of photovoltaic systems at the EAC Headquarters and the new Regional Office of Famagusta-Larnaca was also recently completed. A qsimilar study is being done for the other EAC buildings in Cyprus.

The addition of RES projects to the EAC generation mix has multiple benefits for our country, both in reducing dependence on imported fuels and in stabilizing electricity prices at low levels.

EAC participation in ETYFA

In the context of the implementation of its strategic planning, the EAC participates in the share capital of the Natural Gas Infrastructure Company (ETYFA) with a percentage of 30% having paid an amount of €43 million. Our goal is to contribute to the energy fortification of Cyprus through the development of Natural Gas (NG) infrastructure, making it a project of special importance for our country.

Regarding the use of natural gas, the necessary modifications to the Generation Units of the Vasilikos Power Station are already in progress and are progressing rapidly so that they are ready when the NG is at our disposal. Specifically, the conversions in boilers 1, 2 and 3 to operate with natural gas have been completed. The installation of Natural Gas infrastructure in Units 4 and 5 has also been completed and it remains testing using Natural Gas. At the beginning of 2021, the work of the common infrastructure (measurement of quantity, regulation of pressure and temperature) of natural gas for the Production Units 1, 2 & 3 of the Vasilikos Power Station started. The work of this project is expected to be completed in early 2022.

Installation of Environmental Protection Systems

Environmental protection is a key priority for the Authority. In conjunction with the modifications of the generation units for the additional use of natural gas, the necessary operational testing of the modern environmental protection systems that accompany these Units have been completed. This is done in the context of our compliance with EU directives and permissible emission limits, as specified in the operating license issued by the Ministry of Labour.

The installation of desulphurization and denitrification systems in boilers 1, 2 and 3 has been completed and we are at the stage of final testing before their final delivery.

These are large and complex projects that are carried out at the same time in each Generation Unit.

Tender announcement for a new Unit 6 in Vasiliko

Upon securing all the necessary licenses, in 2020 the EAC announced a Community Tender for the installation of a Unit 6 Combined Cycle Gas Turbine (CCGT) plant with a capacity of 130 to 160 MW, at the Vasilikos Power Station. The Project includes design, manufacture and supply, complete erection, testing in works, commissioning and putting into normal operation. The Tender also includes the Long Term Service Agreement (LTSA) maintenance of the gas turbines, up to the completion of the first major overhaul.

The bids were submitted on 18 September, 2020 and the technical evaluation was completed. The tender is expected to be awarded within 2021.

The duration of the contract is approximately 28 months from the date of its entry into force. The New Generation Unit is expected to be put into commercial operation within 2023.

Transmission network

In the Transmission Network, the implementation of expansion, upgrade and maintenance schedule continued at an intensive pace. Indicatively, I mention some of the completed projects:

* The New Moni GIS Transmission Substation, having all of the old equipment of the Moni Station completely replaced.
* The new interconnection of the Vasilikos Power Station with the Moni GIS Substation.
* The installation of 11/22 kV Interbus Transformers to connect the photovoltaic parks with the substations of Mari, Kofinou, Agios Nikolaos, Orounta and Pissouri.
* The upgrade of the Sotira Substation from 2X31.5 to 2X40 MVA.

SCADA / DMS & Smart Networks

The EAC networks form the “circulatory” system of all electricity flowing from Generation to final consumption. Within the new context of the Electricity Market, our networks are continuously evolving, transforming the traditional system from simple passive wires to a platform of two-way flow of energy and information.

Smart meters constitute a small-scale revolution. Through their operational capabilities, they offer multiple benefits to consumers, for example detailed information on how they consume electricity. According to a relevant decision of CERA, 400,000 conventional meters are to be replaced with smart ones, during a timeframe beginning in 2022 until 2025. The tender has already been announced.

The smart meter system, the SCADA / DMS Distribution Management System (System Control and Data Acquisition / Data Management System) and the MDMS system (the metering data management system), which is the foundation of reliability and transparency for the smooth and unrestricted operation of the competitive electricity market, form the basis of smart grids developed by the EAC, in the ever-changing field of the Electricity Market.

The EAC implements its strategic planning in close cooperation with the Ministry of Energy and CERA. The goal is to be at the forefront of the energy challenges in the next decade. At the heart of them is the transition to a zero-carbon economy, with global penetration and efficient green energy management as a key factor.

Major projects that have been concluded or are in progress in the last 30 months, include inter alia:

* The management of the connection and integration of Photovoltaic Systems, which contribute to the sustainable green development and the gradual decoupling of the economy from liquid fuels.
* The implementation of the pilot project of installation of 3000 smart meters, is the forerunner of the mass installation of smart meters.
* The design of an advanced smart pilot metering system, known as AMI (Advanced Metering Infrastructure). This project is useful for the needs of Distribution and all stakeholders in the Electricity Market. The project includes the supply of 3500 meters, a communication system, accumulators and software for the fully automated download of metering data.
* The initial implementation of the modern system for recording and management of all metering data (MDMS), which serves the needs of consumers, Suppliers, Producers and generally all stakeholders in the Electricity Market has been concluded.

Pilot Project for installing Fiber Optics in the aerial Distribution network

In the context of the approved Strategy of CRA Distribution in Telecommunications, it was decided to carry out a pilot project for the installation of a fiber optics cable in the aerial Distribution Network. While the Authority strives to transition its energy network to a new digital environment, the pilot project aims to highlight the applications and problems that may arise from the use of a privately owned fiber optic telecommunications network.

Upon connection to the EAC power network, this privately owned telecommunications network will be the carrier and transmitter of digital information, through which it will be possible to carry out remote controls, telemetering and remote monitoring of the Distribution network from other data collection and monitoring systems such as the SCADA, MDMS etc. The pilot project is expected to be concluded soon.

Telematics and navigation system

A state-of-the-art application of Telematics, Navigation and Fleet Management of the Authority has been developed in the GIS system, which integrates the Electricity Network, the Vehicles and the monitoring of maintenance crews in the single geographical area in real time. The application generates complete reports including the geographical location of vehicles, drivers-maintenance crews and fault reporting. As part of the GIS system, troubleshooting is greatly facilitated and improved, while staff response time is reduced.

Upgrading the network user service

Our network user service is constantly being upgraded and updated. We will soon automate procedures for the benefit of the user, who will be able to obtain online service. The submission of applications for inspection of the electrical installations for residences and all premises, will be done quickly and easily, online through our website.

At the same time, other modern applications related to the connection application management process are in progress. Applicants will no longer have to physically come to the service centres to conduct their business.

Upgrading the EAC Mobile App

The “EAC Mobile App” application for mobile phones and tablets will soon be upgraded according to the Operational Unbundling of the EAC aiming at offering better information and new features our customers.

Through this app, EAC Supply customers can calculate the electricity consumption for various appliances, view their account details such as consumption history and choose to receive their bill electronically.

In addition to existing features, network users will be able to enter their meter reading electronically.

Faults and scheduled power outages, a particularly useful feature, will be presented in a new, friendlier way.

The upgraded “EAC Mobile App” is expected to be available in August 2021.

Easy Payment Service

In the context of continuous development and technological upgrading of services and with a view to improving its customer service, EAC Supply has recently presented the new **Easy Payment Service.**

Through special terminals, which are installed at the EAC Customer Service Centers, customers can pay their electricity bill with their credit / debit card, simply and quickly!

**Collaboration of the EAC and the State Post Offices**

The primary goal of the EAC is to improve its customer service. For this purpose, the EAC and the Postal Service have designed a new service for the collection of amounts of electricity bills, from the Post on behalf of EAC Supply. Our aim is to offer another way attending to our customers’ needs and especially to the elderly, who live in remote areas, where there are no EAC Customer Service Centers.

Upgraded Technology

In addition to emergency measures in addressing the pandemic, the EAC continues to invest in new projects and technologies to meet existing and future IT needs.

The EAC digital infrastructure, networks, storage systems and recovery systems, are being upgraded at all levels. Aiming at the optimal citizen service, the EAC has completed the new Call Centre for Customers and Network Users.

Road Lighting Upgrade

The strategic pillar of development for the EAC is energy saving at all stages: from generation, transmission, distribution and supply of electricity to the final consumer.

In this context, agreements have been reached with all Communities and most Municipalities for the replacement of energy-consuming street lighting fixtures with new technology LED luminaires. This is the largest project of such caliber that has been carried out in Cyprus and has proven to be a big challenge for the EAC. With our human resources and the specialized know-how, we have successfully faced this challenge. To date, about 80% of the old luminaires have been replaced.

By replacing them, electricity savings of up to 60% are achieved, resulting in a significant reduction of operating costs, but also maintenance costs as the new LED lamps have a longer lifespan, eventually leading to significant economic and environmental benefits.

Smart lighting luminaires and smart Pillars

An additional option is the smart lighting and smart pillars, which are part of a smart city, as they can be controlled through the software of the central management platform. Each luminaire is controlled separately by a central software. For example, some can be adjusted to turn off in uninhabited areas, while in some other areas the power of each can be adjusted, saving energy while maintaining the brightness levels so as not to affect the safety of pedestrians and vehicles.

The smart pillars are equipped with a weather station, LED Board and wi-fi and can therefore provide information, advertising messages, announcements and free internet to the citizens and visitors of the Municipality.

The Municipality of Paphos chose to install these smart luminaires. Through them, it will save an amount of €420,000 every year just by energy saving. Moreover, approximately €50,000 will be saved every year from savings in the maintenance fees for the new lighting fixtures.

E-charge service

Given the international trend for environmentally friendly kinetic energy, the EAC contributes to the effort to reinforce electromobility in our country. Six years ago, the EAC created the e-charge service to allow electric vehicle owners to have access to reliable charging for their vehicles in public areas. We are currently operating 27 stations throughout Cyprus, with 55 charging points, 26 semi-fast chargers (22kW) and 1 fast charger (50kW). At the same time, the installation of another 12 stations is being planned for 2021. These include four additional new generation quick chargers with charging ability of just 20 minutes.

With our priority to cover the highways, in practice the charging stations of the EAC cover the needs of electric vehicles throughout Cyprus.

At the same time, by using the platform [**myeac.etrel.com**](https://myeac.etrel.com/#/portal/locations) which works on a mobile phone or a computer, drivers can be informed regarding charging points, the chargers’ status and if they are occupied, as well as obtain other information

Installation of Photovoltaic Systems in the Schools of Cyprus

The installation of Photovoltaic Systems in the 405 schools of Cyprus, is a very important step for the sustainable future of our country. With this in mind, there is no other way than using Renewable Energy Sources. With its know-how and experience, the EAC has the power to ensure the success of this project.

The project includes Installation of Photovoltaic Systems of a total capacity 4.8 MW, as well as providing thermal insulation and waterproofing the surfaces where the Photovoltaic Systems will be installed, a total area of about 120,000 sq.m. The project will be funded by the EAC, while the Ministry of Education will repay the EAC gradually, over a period of 20 years.

Installation of PVS at the Head Offices

In the context of the EAC planning for the utilization of Renewable Energy Sources, a 425 kW photovoltaic power system was installed at the EAC Headquarters at Amfipoleos Street, in Strovolos.

The whole system was designed to be integrated within the existing building and aiming at its functionality. EAC customers now have a shaded parking lot for their best service and at the same time these awnings contribute to meeting the energy needs of the building. The Photovoltaic System covers about 40% of the total annual consumption of the EAC Headquarters.

Corresponding planning is underway for the other EAC buildings throughout Cyprus.

**Staff Training School**

The value of education, in an Organisation with the role and objective of the EAC, is self-evident. In order to expand the areas of knowledge and learning and to provide opportunities for the continuous development of skills, to all our employees, the EAC Staff Training School was recently upgraded.

Upgrading the Training School aims to provide services of preventive, planned and systematic education. The aim is for the Authority to be able to respond to the accelerating technological developments and the competitive electricity market.

The training design and delivery method have been adapted so that the training is accessible, flexible and effective for all employees.

Specifically, and in accordance with modern practices, flexible learning methods have been adopted that include the use of technology (e-learning, mobile device-based learning), but also specialization while on the clock (job rotation, on-the-job training, coaching by manager, mentoring).

The modules of the upgraded EAC Staff Training School include:

* Institutionalization of Certified Systematic Education
* Collection of the Standard Educational Material and its posting on the Web Portal
* Creation of an electronic library
* Training internal instructors
* Development of the ATHINA system skills, aiming at managing training through the use of technology and the realization of online modern and asynchronous education.
* Upgrading of training rooms with mobile furniture and audiovisual equipment and laboratories for technical training
* Upgrading of outdoor space at the Vassilikos PS for educational purposes
* Creating training and development plans per service plan and duties
* Memoranda of Cooperation with University Institutions etc.

It is noted that the Training School uses suitable spaces in all workplaces of the EAC throughout Cyprus. The theoretical training programmes are hosted in the training rooms that exist in all the Regional Offices and Power Stations of the EAC, while the technical training takes place at the Vasilikos Power Station.

There is no doubt that the people of the EAC are its most valuable asset. Its greatest strength. With professionalism, experience, knowledge and continuous training, they are able to successfully meet any challenge in the highly demanding sector of energy.

Research and Innovation Centre

In addition to the upgrade of the Training School, we also proceeded to the creation of a Research and Innovation Centre. The aim of the EAC is to liaise with recognized research and academic institutions. The Organization seeks to encourage and implement innovative ideas through the interconnection of its Research and Innovation Centre, with research and academic institutions, both in Cyprus and abroad. We seek to draw on ideas and scientific knowledge, and at the same time to promote innovation in the energy sector.

Initiatives like this, are a guide for the use of research and the creation of new knowledge that takes place in our country, in the field of technologically applied sciences.

The Centre also provides the possibility of exchanging information and know-how on issues of common interest, as well as the development of joint cultural, scientific and educational events and activities. Also, the placement of students in the workplaces of the EAC, provides the opportunity for our young people to gain practical experience before they even complete their studies, which constitutes a valuable resource for their future professional careers.

In this direction, our vision is to join forces with the wider scientific community and to contribute to the exchange of know-how and to the encouragement of the implementation of innovative ideas and applications.

Memoranda of Cooperation with Organizations of significance

In an increasingly open world, the power of extroversion acquires special value. The EAC has signed Memoranda of Cooperation with Organizations of significance in the electricity sector. Specifically, with the State Electricity Company of Israel, the Israel Electric Corporation and the Public Power Corporation (DEI) of Greece, the agreements include the transfer of know-how and exchange of experience on issues of common interest and research topics in energy matters. We have also recently signed a memorandum of cooperation with the Ministry of Research, Innovation and Digital Policy.

Assessment System

Through a relevant Tender, the Cyprus Electricity Authority proceeded with the purchase of Consulting services for the design of a new Personnel Assessment System. This is required to meet the new needs of the Organisation and the relevant requirements of the Cyprus Energy Regulatory Authority.

The process has been concluded and the amending Regulation governing the New EAC Assessment System was sent through the Ministry of Energy, Trade and Industry to the Law Office of the Republic of Cyprus for the necessary legislative control, in order to be forwarded as soon as possible to the Cabinet of Ministers for approval and then to the House of Representatives for voting.

New Famagusta-Larnaca building

Recently, we inaugurated the new, green energy building of the EAC, which was designed with modern aesthetics and construction perfection to meet the technological and environmental challenges of our time. This building provides improved functionality, easy access to parking spaces and a comfortable public service environment.

The new building reflects the EAC’s policy of constructing buildings with almost zero electricity consumption, according to the guidelines of the Ministry of Energy. For this project, a relevant tender was announced, which included the design, construction and maintenance of the building for a period of twelve years. It is noted that the building has been rated with the highest energy efficiency scale. Pioneering systems of energy saving and use of RES have been installed such as roof solar panels, active sun protection system, thermal insulation of the building shell and roof, etc.

Looking towards the future and given the increasing use of electric vehicles, we have also installed two semi-fast chargers of the e-charge Service of the EAC which can provide quadruple simultaneous charging and provision for support the electric vehicles of the Authority.

Social Responsibility

The work and services of the EAC are under daily scrutinization, during the easy but especially during the hard times. However, it is those difficult moments that confirm the character of the organization.

We have recently faced an extremely adverse situation with the devastating fires in the areas of Limassol and Larnaca. It was there that the EAC and its people gave their best, through unceasing and stood by the victims from the first moment.

In the broader context of its role and mission, the EAC develops a network of social actions and service. It actively supports the sectors of Health, Safety and initiatives for environmental protection.

Acknowledgements

Dear Guests

Concluding the presentation of the report of the current Board of Directors of the EAC, I would like to express my gratitude to the President of the Republic of Cyprus, Mr. Nicos Anastasiades for the trust he has shown me. I would also like to thank the Minister of Energy, Commerce and Industry, Ms. Natasa Pilides for her close and productive cooperation, as well as all the officials of the Ministry.

I would also like to express my appreciation to the Government, the House of Representatives, the Auditor General of the Republic, the Cyprus Energy Regulatory Authority, the Cyprus Transmission System Operator, to all Government Bodies and Local Authorities with which the EAC has collaborated, as well as to the representatives of the Media for the promotion of the work and the role of the EAC.

Finally, I especially wish to thank all my associates on the Board of Directors, the General Manager of the EAC, Mr. Panayiotis Olympios and the members of the Management, the Union leaders as well as the EAC personnel. We have all joined forces and worked with a common goal: the continuous development and evolution of the EAC. The Organization that is the energy pillar of Cyprus.

Thank you for your attention.