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2021 ANNUAL REPORT

OF CYPRUS ENERGY REGULATORY AUTHORITY

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ANNUAL REPORT
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2021

Προς την Αυτού Εξοχότητα
Κύριο Νίκο Αναστασιάδη
Πρόεδρο Κυπριακής Δημοκρατίας
Λευκωσία

29 Ιουλίου 2022

Εξοχότατε,

Έχουμε την τιμή να σας υποβάλουμε την 18η Ετήσια Έκθεση και τους Λογαριασμούς της ΡΥΘΜΙΣΤΙΚΗΣ ΑΡΧΗΣ ΕΝΕΡΓΕΙΑΣ ΚΥΠΡΟΥ, για τον χρόνο που τελείωσε στις 31 Δεκεμβρίου 2021 που περιλαμβάνει και την Έκθεση της Ελεγκτικής Υπηρεσίας της Δημοκρατίας.

Η Έκθεση αυτή και οι Λογαριασμοί υποβάλλονται σε σας σύμφωνα με το άρθρο 15 του περί Σύστασης και Λειτουργίας της Ρυθμιστικής Αρχής Ενέργειας Κύπρου Νόμου του 2021 και το άρθρο 7(1)(ιη) των Περί Ρύθμισης της Αγοράς Φυσικού Αερίου Νόμων του 2004 μέχρι το 2021.

Με τιμή,

Δρ. Ανδρέας Πουλλικκάς
Πρόεδρος

Φίλιππος (Άλκης) Φιλίππου
Αντιπρόεδρος

Νεόφυτος Χατζηγεωργίου
Μέλος

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Abbreviations

ACER	Agency for the Cooperation of Energy Regulators
ADN	Active Distribution Network
AMI	Advanced Metering Infrastructure
CdT	Translation Center for the Bodies of the European Union
CEER	Council of European Energy Regulators
CERA	Cyprus Energy Regulatory Authority
COSMOS	Cyprus Organization for Storage and Management of Oil Stocks
DEFA	Natural Gas Public Company
DSO	Distribution System Operator
EAC	Electricity Authority of Cyprus
EC	Energy Conservation
ECG	Electricity Coordination Group
ENTSO	European Network of Transmission System Operators
ETS	Emissions Trading Scheme
ETYFA	Natural Gas Infrastructure Company
EU	European Union
HECHP	High Efficiency Cogeneration of Heat and Power
HHI	Herfindahl-Hirschman Index
ICT	Information and Communications Technology
KDP	Regulatory Administrative Act
LNG	Liquified Natural Gas
LNG System Operator	Liquefied Natural Gas System Operator
LNGS Owner	Liquefied Natural Gas System Owner
MECI	Ministry of Energy, Commerce and Industry
MEDREG	Mediterranean Energy Regulators
NECP	National Energy and Climate Plan
NRAs	National Regulatory Authorities
ODS	Owner of Distribution System
OTS	Owner of Transmission System
PCI	Project of Common Interest
PP	Power Plant
PPA	Power Purchase Agreements
PSO	Public Service Obligations
RES	Renewable Energy Sources
RES-E	RES Electricity Generation Systems
RIF	Research and Innovation Foundation
SPV	Special Purpose Vehicle
SSO	Storage System Operator

SSOw	Storage System Owner
TDR	Transmission and Distribution Rules
TSOC	Transmission System Operator - Cyprus
TSR	Trading and Settlement Rules
TYNDP	Ten-Year Network Development Plan
VAT	Value Added Tax
WACF	Weighted Average Cost of Fuel

INTRODUCTORY NOTE OF THE CHAIRMAN, VICE CHAIRMAN AND MEMBER OF CERA

Climate change is one of the biggest challenges that the world faces today, making the need for coordinated and decisive action a matter of urgency. The energy sector, which is unquestionably one of the drivers behind the global economy, is at the epicenter of this task.

Following the negative impact of the pandemic, Europe is battling a record-breaking surge in energy prices that threatens to derail the post-pandemic economic recovery, strain household incomes and even tarnish the nascent green transition. A series of market, geographic and political factors have merged into a perfect storm that shows no signs of abetting. Nevertheless, the biggest challenges in the energy sector started with the pandemic-induced recession reminding us that the world's energy map needs to be reshaped starting from energy production, distribution and use.

The year 2021 was undoubtedly a year of drastic changes for national energy activity. The national electricity market was given a taste of the future, with a higher penetration of renewable energy sources and concerns about security of supply. At the same time, after bouncing back from the pandemic and the returning to normalcy, emission allowances have seen an unprecedented rapid increase due to the European policies on Green Energy. The lack of natural gas, a major long-term disadvantage of the Cypriot economy, has now been converted into a stroke of luck, given that the natural gas prices in the rest of Europe have multiplied over recent months and, in combination with constantly record-high emission allowances, have led to an unprecedented energy crisis.

The introduction of natural gas to the island is not expected to suffice in lowering the electricity prices for Cypriot consumers and industry on its own. This could be feasible with the large-scale implementation of renewable energy sources in combination with storage and/or in combination with Cyprus being interconnected to the Continental European Network. With the EU determined to increase the cost of emissions, Cyprus will ultimately need to follow suit. The switch to renewable energy sources and higher energy efficiency levels is now a matter of urgency. Renewable energy sources hold the key for the switch to low-carbon energy forms and the creation of a sustainable energy system.

Cyprus is going through an era of unprecedented changes and challenges that stem from the opening of the competitive electricity market, as well as the relentless efforts that are being made for the island to cease being "electrically isolated" from the rest of Europe. At the forefront of the developments, CERA took action and will continue to do so driven by the creation of new sustainable and people-centered regulations that will always focus on the consumer, the environment, but also national economy.

Special thanks are expressed to the CERA Office staff for their valuable contribution, productivity and readiness that they demonstrated in dealing with the challenges that arose throughout the year.

1 INTRODUCTION

The Cyprus Energy Regulatory Authority (CERA) was established by Law in 2003 in accordance with European Union Directives.

CERA is an independent authority governed by public law and its main purpose is to regulate and monitor the internal electricity and natural gas markets. In addition, CERA aims to ensure a competitive, secure and environmentally sustainable energy market with its main concern being to protect the rights of the consumers.

At the same time, CERA is responsible for advising the Minister for Energy, Commerce and Industry on all issues related to the energy market.

Based on the Law Regulating the Electricity Market of 2021 (L.131(I)/2021), by the end of June each year, CERA submits an Annual Report of its activities to the President of the Republic of Cyprus and files a copy of the Annual Report to the Council of Ministers and the House of Representatives.

This Annual Activity Report of CERA covers the year 2021 and is the eighteenth (18th) to be issued.

During the year under review, CERA issued 2 regulatory decisions:

- Regulatory Decision 01/2021 (KDP 359/2021), regarding the Statement of Regulatory Practice and Electricity Tariffs Methodology.
- Regulatory Decision 02/2021 (KDP 523/2021) regarding the Regulatory Framework for the Granting of General License.

At the same time, CERA issued a series of Decisions; the most important of these being:

- Decision 12/2021 - Approval of Calculation Methodology and Prices of Monthly Capacity Factors (CFg) of the Transitory Regulation of the Electricity Market for 2021
- Decision 15/2021 - Allowed Revenues and Regulated Electricity Tariffs for 2021
- Decision 26/2021 - Electricity Tariff Plans for 2021
- Decision 33/2021 - Parameters set by the DSO for the Transitory Regulations of the Electricity Market Rules for 2021
- Decision 42/2021 - Draft Regulatory Decision on the "Statement of Regulatory Practice and Electricity Tariffs Methodology"
- Decision 43/2021 - Changes to the Transitory Regulations of the Electricity Market - Version 1.6
- Decision 48/2021 - Calculation Methodology of the Preventive Increase of Security Covers of Producers and RES Producers
- Decision 73/2021 - Guidelines on conducting an estimate of natural gas demand in the Natural Gas Transmission System by the Natural Gas Transmission System Operator

and the conclusion of interconnection agreements

- Decision 74/2021 - Guidelines on preparing the Natural Gas Transmission System development plan
- Decision 82/2021 - Draft regarding the Regulations Regulating the Natural Gas Market (Natural Gas Quality Requirements)
- Decision 87/2021 - CERA Code of Public Governance
- Decision 88/2021 - CERA Risk Report
- Decision 93/2021 - Electronic Registry for Guarantees of Origin Fees
- Decision 103/2021 - Approval of Ten-Year Transmission System Development Plan 2021 - 2030
- Decision 115/2021 - Draft Regulating the Natural Gas Market (Natural Gas Quality Requirements) Regulations
- Decision 136/2021 - Update of the Cross-Border Cost Allocation of the PCI No 3.10.2 Interconnection Between Kofinou (CY) and Korakia, Crete (EL)
- Decision 163/2021 - Long-Term Annual Forecast of Maximum Total Electricity Capacity and Total Generated Electricity for the Decade 2021 - 2030
- Decision 165/2021 - Regulation 2019/941 - Establishment of a Risk-Preparedness Plan in the Electricity Sector
- Decision 166/2021 - Call for Expression of Interest for the selection of a Supplier of Last Resort in the Cypriot Electricity Market for a two-year period
- Decision 178/2021 - Submission of Allowed Revenue and Regulated Electricity Tariffs for 2022
- Decision 232/2021 - Fuel Clause Coefficients for the Adjustment of the Wholesale Tariff (T-W), Fuel Clause Coefficients and Basic Prices for the purchase of RES-generated energy for the period July - December 2021
- Decision 250/2021 - Regulatory Decision No. 01/2021 Statement of Regulatory Practice and Electricity Tariffs Methodology
- Decision 278/2021 - Changes to the Transitory Regulations of the Electricity Market - Version 1.7
- Decision 294/2021 - Discount to Regulated Use of Transmission System and Electricity Distribution Tariffs for 2021
- Decision 295/2021 - Appointment of members of the Licensing Agency of Authorized Independent Producers and Consumers
- Decision 301/2021 - Approval of amending version of the Ten-Year Transmission System Development Plan 2021 - 2030
- Decision 325/2021 - Approval of amending version of the Ten-Year Transmission System Development Plan 2021 - 2030
- Decision 326/2021 - Request by Paramount Energy Corporation Ltd for exemption from the provisions of the transmission and distribution rules
- Decision 334/2021 - Approval of proposed amendments to the trading and settlement rules by the Transmission System Operator - Cyprus - Version 2.0.3
- Decision 365/2021 - Fuel Clause Coefficients for the Adjustment of the Wholesale Tariff (T-W), Fuel Clause Coefficients and Basic Tariffs for the purchase of RES-generated energy for the period January - June 2022
- Decision 373/2021 - Forms and Standard Terms of Exemption to holding a license

- Decision 374/2021 - Approval of Transitory Regulation parameters for the Security Covers of the Electricity Market, Version 1.7 for 2022
- Decision 375/2021 - Approval of Transitory Regulation Parameters of the Electricity Market Version 1.7 for 2022
- Decision 376/2021 - Parameters set by the DSO for the Transitory Regulation of the Electricity Market for 2022
- Decision 383/2021 - CERA Reserve Fund Policy
- Decision 386/2021 - Approval of Amendments proposed to the Transmission and Distribution Rules by the Transmission System Operator - Cyprus - Version 5.3.0

Electricity - Responsibilities and Powers of CERA

- Ensures genuine competition in the Electricity Market, avoiding adverse discrimination and ultimately aiming at price reductions.
- Protects the interests of the consumers.
- Promotes the development of an economically viable and efficient electricity market.
- Ensures adequacy in electricity supply for the satisfaction of all reasonable needs and demands for electricity.
- Safeguards the continuity, quality, reliability and security of electricity supply.
- Encourages the efficient use and generation of electricity.
- Issues, controls, enforces, amends, and revokes licenses or grants exemptions from licenses.
- It is a single point of contact for informing consumers.
- Sets the rules or the procedures under which complaints are examined which relate to services offered by the licensees, including, where appropriate, the carrying out of investigations and decision-making for such complaints.
- Carries out investigations either following the submission of a complaint or initiated by CERA ex officio.
- Ensures that licensees operate efficiently and are in a position to finance the business activities for which the license has been issued.
- Determines, publishes and imposes quality standards with which licensees have to comply.
- Regulates tariffs, charges and other terms and conditions to be applied by licensees for any services provided pursuant to the terms of their licenses.
- Promotes the development of regional markets within the Community so that they can operate competitively and properly in order to achieve security of supply.
- Promotes the elimination of electricity trade restrictions among Member States, including developing appropriate cross-border transmission capacities to meet demand and enhances the integration of national markets.
- Ensures that the Regulations governing the operation of electricity networks and the electricity market (Transmission and Distribution Rules and Trading and Settlement Rules) are prepared and approved in accordance with the Law.

- Imposes administrative fines in the event of violation of laws or regulations.
- Ensures the implementation of the provisions of Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25th October 2011 on wholesale energy market integrity and transparency.
- Promotes Renewable Energy Sources (RES).
- Promotes research and development in the energy sector.
- Prepares and implements long-term planning regarding capacity for generation, transmission and distribution on a long-term basis, in order to meet the demand for electricity in the system and to secure supplies to customers which include security of supply, energy efficiency/demand-side management and achievement of environmental objectives and targets for energy from renewable sources.

Natural Gas - Responsibilities and Powers of CERA

- Promotes the development of an economically robust and efficient natural gas market.
- Ensures the safety, continuity of supply, quality and efficiency in the supply of natural gas.
- Monitors security of supply issues, and especially the balance of market supply/demand, the level of the expected future demand and the availability of supply, as well as the level of competition in the market.
- Announces the measures that may be put into effect in case of an unforeseeable crisis in the energy market, or when the security of people, works, installations or the integrity of the networks are threatened.
- Prepares and publishes Technical Rules determining the minimum standards of technical design and operation for the connection to the network of installations of Liquefied Natural Gas (LNG), storage installations, other transmission or distribution networks and direct natural gas pipes.
- Takes appropriate and effective measures for control and transparency to avoid possible misuse of dominant position, especially to the detriment of consumers.
- Protects the interests of end consumers.
- Promotes the development of regional markets within the Union so that they can operate competitively and properly to achieve security of supply.
- Promotes the elimination of natural gas trade restrictions among Member States, including the development of appropriate cross-border transmission capacities to meet demand and enhance the integration of national markets.
- As the competent authority, it ensures the implementation of the measures safeguarding security of gas supply.
- Resolves disputes on access to in-front-of pipeline networks, in connection with negotiations for access to the network.
- It is a single point of contact for informing consumers.
- Carries out investigations either following the submission of a complaint or initiated by CERA ex officio.
- Imposes administrative fines in the event of violation of laws or regulations.

- Sets the rules for the operation and distribution of the interconnection capacity, in consultation with the appropriate authorities of interconnected Member States.
- Prepares and implements long-term planning regarding the planning of supply and transmission capacity of natural gas undertakings over the long term so as to satisfy the demand of the system for natural gas, achieve the diversification of sources, and ensure supply to the customers. Long-term planning includes the security of supply, energy efficiency/demand-side management and the achievement of energy-related environmental goals and targets from renewable sources.

In addition to these specific responsibilities and powers, during the execution of its duties and the exercise of its responsibilities and powers, CERA can:

- Take decisions in accordance with the provisions of the Law and the Regulations issued thereunder.
- Take regulatory decisions to determine how it will regulate the electricity market and which licensees will be bound by such a regulatory decision.
- Issue Regulations based on the Law.

Actions to address the repercussions of the COVID-19 virus on the energy sector

The COVID-19 pandemic triggered the change to the global medium-and long-term economies, given that it affects an ever-growing number of sectors. The way in which organizations and people use energy has already changed significantly due to the socio-economic impacts of the pandemic.

The decommissioning of the economy resulted from the restrictive lockdowns that were implemented to stop the spread of the pandemic. Many European countries imposed lockdowns throughout 2021, while most countries implemented restrictive measures rather than total lockdowns. Restrictive measures usually resulted in the closing of stores, businesses, workplaces and schools and in many cases national restrictions of freedom of movement during the day. The Government of the Republic of Cyprus imposed a partial lockdown in 2021 which ran from 26 April to 9 May 2021.

The pandemic-induced reduction in social and economic activity has affected all aspects of life, including the electricity sector. As expected, the gradual shift to remote working and learning resulted in lower electricity consumption in the commercial and public sector and an increase in the electricity consumption of households. The sudden and major decline in demand affected all the energy markets resulting in a drop in prices. Global data have drastically changed in 2021. The rapid increase that was observed is attributed to the easing of the pandemic restrictions, but mainly to the increase in the prices of natural gas and greenhouse gas emissions allowances (mainly CO2). The last two factors are also the main drivers of the continuous and unprecedented price surges that Europe faced until the end of 2021.

In an effort to prevent the surge in electricity prices due to the increase in the prices of greenhouse gas emission allowances, Cyprus took a number of measures which positioned the electricity price for household consumers among the lowest prices in major European countries.

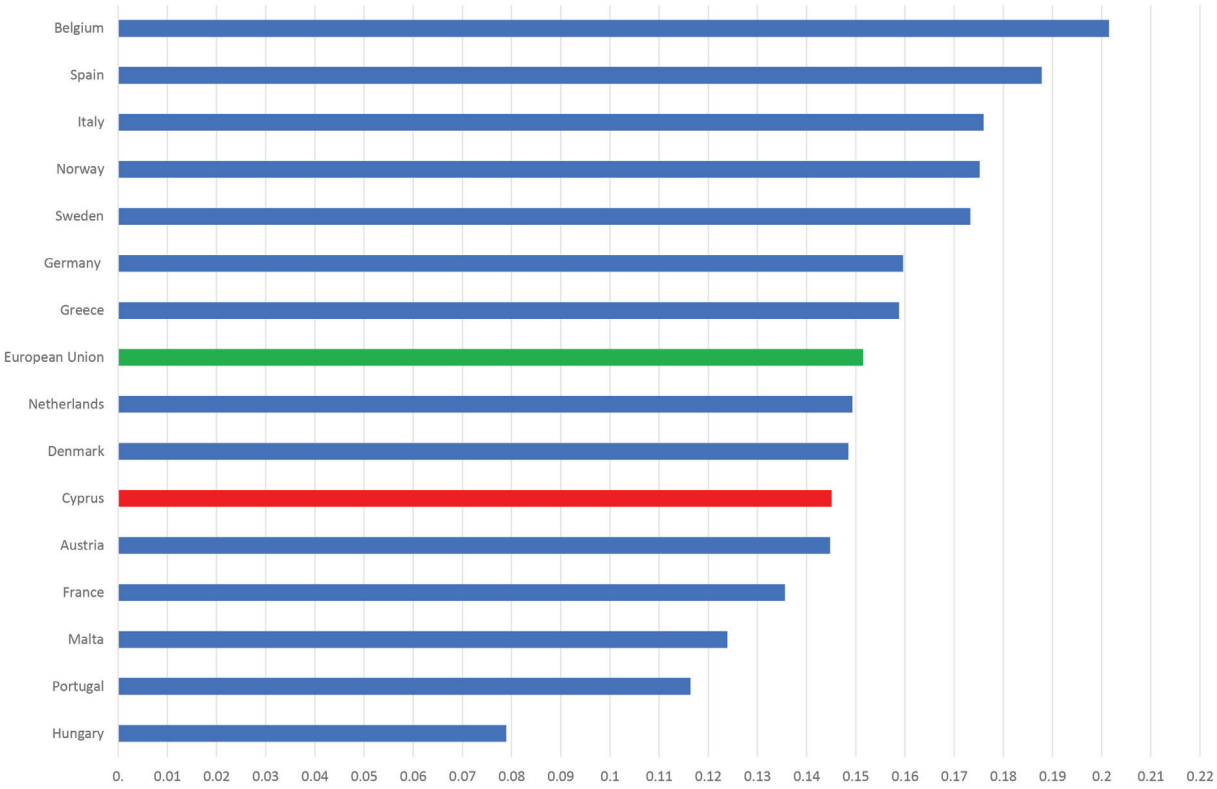


Figure 1 - Indicative electricity prices for household consumers in Europe in 2021[1]

In June 2020, the Council of European Energy Regulators (CEER) created an Ad Hoc Working Group (COV WG) to assess the effects of the pandemic on the energy sector. In particular, the Working Group focuses on issues pertaining to the impact of the pandemic on consumption, electricity and natural gas prices, the effects on energy consumers, suppliers and network operators as well as the measures that were taken by governments, regulatory authorities and other stakeholders to contain the pandemic and address its effects. CERA had an active role in the Working Group as it closely monitors the developments and reactions of the other Member States in relation to the impact of the pandemic, but also assists in the provision of information on the effects of the pandemic at national level and the relevant actions and measures taken by CERA throughout 2021. As part of the work carried out by the COV WG Working Group in 2021, a report was prepared with all the national findings at European level and is based on data that was collected from 24 Member States in the period from 1 January 2020 to 30 June 2021[2].

Furthermore, on 17 September 2021, a series of compensatory measures were announced by the Minister of Energy, Commerce and Industry (MECI) of Cyprus, which emerged from a consultation between the Ministries of Energy and Finance, CERA and the Electricity Authority of Cyprus (EAC). These measures include:

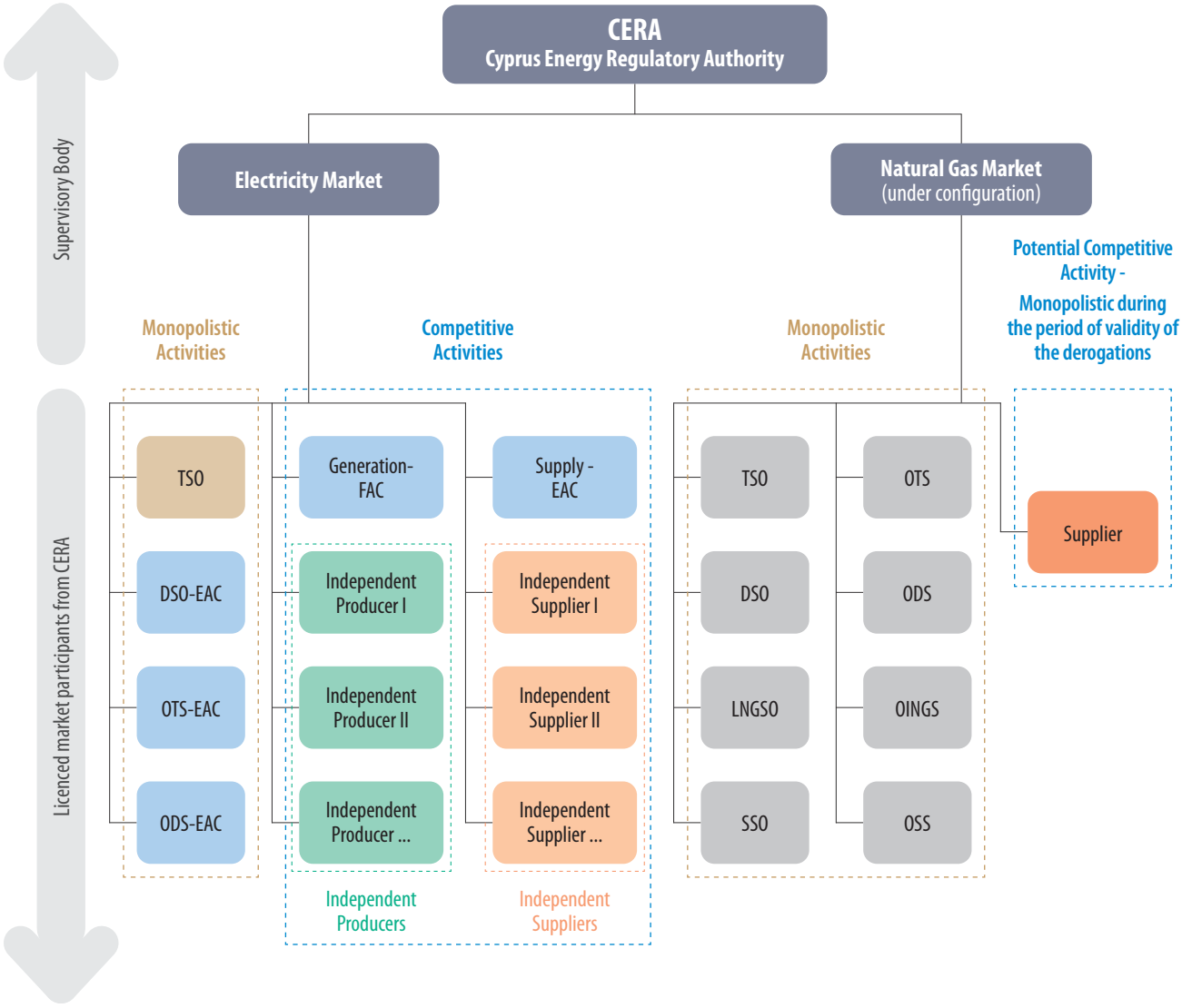
- Absorption of part of the basic tariffs of electricity network charges by the EAC and a 10% reduction in consumer bills, for the bi-monthly periods of November - December 2021 and January - February 2022.

[1] Source: https://ec.europa.eu/eurostat/databrowser/view/nrg_pc_204/default/bar?lang=en

[2] https://www.ceer.eu/documents/104400/-/-/4c242433-bbba-cb27-ca23-74e6d60be22a

- Differentiation of the Grant Scheme for the installation of photovoltaic systems by household consumers, including the virtual net-metering category, for consumers that are unable, due to technical constraints and/or limited space, to install photovoltaic systems on the rooftops of their buildings. This will allow both household consumers and agricultural holdings/activities to install photovoltaic systems on rooftops of other buildings or on the ground, whose electricity production will be offset against the consumption of that particular household.
- The existing Scheme to encourage the use of renewable energy sources and energy savings in residences (for ceiling insulations, installation of photovoltaics or a combination of both), which expired on 20 December 2021, will be re-announced immediately following the approval of the budget of the RES and Energy Conservation Fund and will have a retroactive effect.
- Immediate preparation of a Grant Scheme which will provide vulnerable consumers with a subsidy for the replacement of energy-intensive appliances with new, energy efficient products, in particular, air conditioners and refrigerators. In addition, vulnerable household consumers will be subsidized for replacing old type bulbs with LED bulbs.
- Announcement of a special Support Scheme, in collaboration with the Ministries of Energy and Agriculture, Rural Development and Environment, for the use of RES in the agricultural sector. The main objective of the Scheme is to reduce the cost of pumping irrigation water. The Scheme will be announced in 2022.
- Announcement of Grant Scheme and tender for new commercial RES systems and for energy storage, which can help reduce the price of electricity due to the lower operating cost of electricity generation than the corresponding production with conventional fuels. The Scheme is scheduled to be launched in 2022, subject to approval by the European Union.
- Conduct an energy efficiency awareness campaign.

REGULATION OF THE ELECTRICITY & NATURAL GAS MARKETS
LICENSING OF ACTIVITIES



TSO	Transmission System Operator
DSO	Distribution System Operator
OTS	Owner of Transmission Systems
ODS	Owner of Distribution System
LNG Operator	Liquefied Natural Gas System Operator
SSO	Storage System Operator
LNG Owner	Liquefied Natural Gas System Owner
SS Owner	Storage System Owner

MEMBERS OF CERA

CHAIRMAN
Dr. Andreas Poullikkas
Mechanical Engineer

VICE-CHAIRMAN
Philippos (Alkis) Philippou
Business Administration

MEMBER
Neophytos (Akis) Hadjigeorgiou
Electrical Engineer

CONSULTANTS

LEGAL CONSULTANT
Orphanides, Christofides & Co LLC
Stelios Americanos & Co LLC

ACCOUNTANTS
Alliot Partellas Kiliaris Limited

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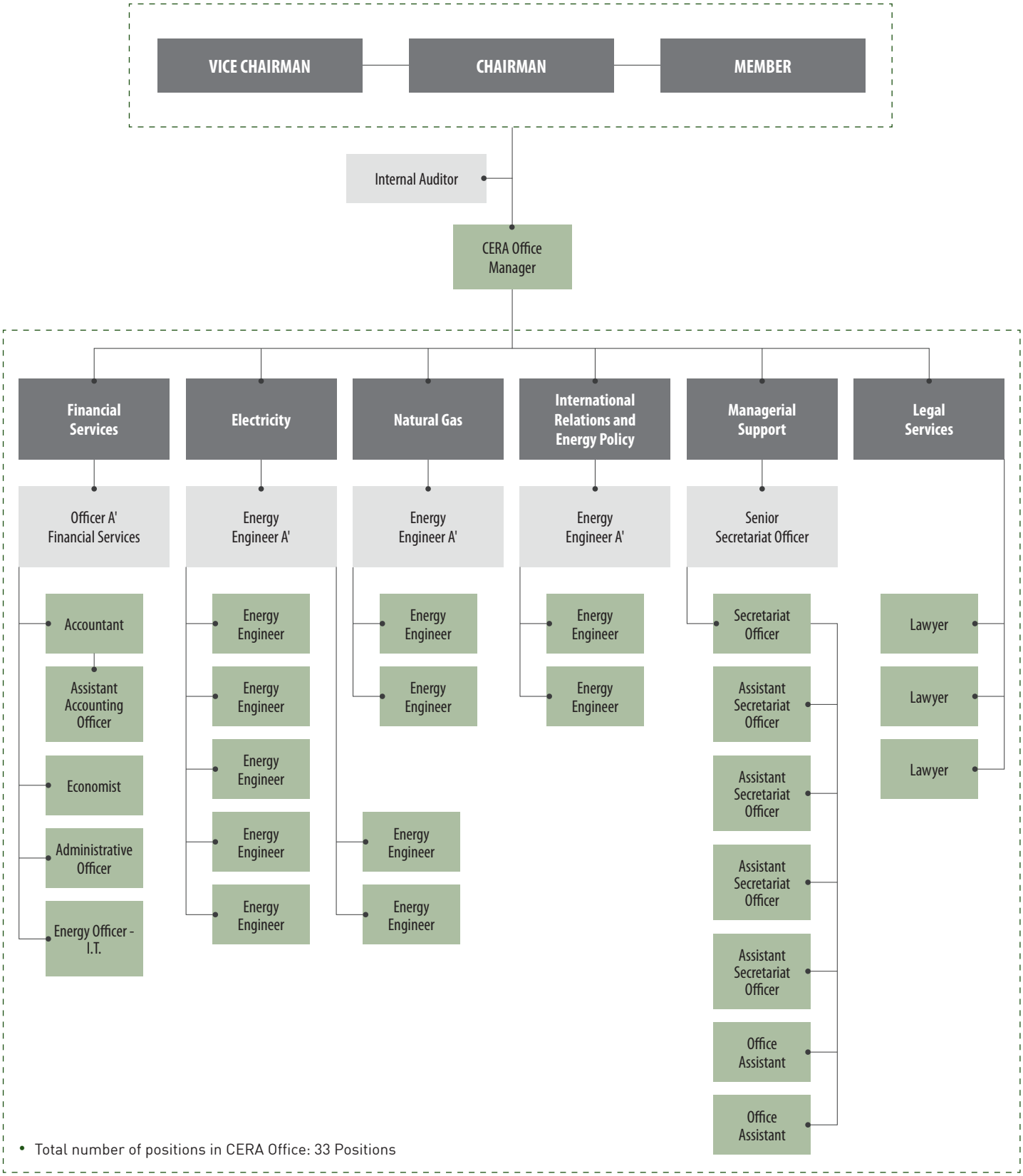
ORGANIZATION STRUCTURE OF CERA



- Total number of positions in CERA Office: 33 Positions

CERA OFFICE

At the beginning of 2021, the CERA Office had 19 staff members which grew to 31 by the end of the year.

On 1st March 2021, CERA filled 7 first-appointment positions (5 Energy Engineer positions, 1 Legal Advisor position, 1 Accountant position) after completing the candidate selection procedure which had started with the announcement of these positions on 6 September 2019.

On 1st September 2021, CERA filled another 6 first-appointment positions (3 Energy Engineer positions, 1 Internal Auditor position and 2 Secretariat Officer positions). On 4 October 2021, 1 Administrative Officer position was filled. The above 7 positions were filled after completion of the candidate selection procedure which had started with the announcement of these positions on 22 May 2020.

The delay in filling the above positions is due to the measures that had been taken to restrict the spread of the COVID-19 virus.

In CERA's Budget for 2021 1 Economist position was approved, who will be responsible for the tariffs. CERA's Top Management is pending approval of its requests for the unfreezing of this position so that it can move forward with its announcement. Until the Economist position is filled, CERA will proceed with consulting services contracts to perform its duties in accordance with the relevant legislation and the protection of consumers.

In order to fulfill its legal duties and responsibilities as an independent authority, pursuant to the obligations that are imposed by national and European legislation, under the supervision of the electricity and natural gas markets, and the protection of consumers, CERA will request the approval of new positions in its coming Budgets.

TRAINING

Figure 2 shows the training of the CERA Office staff by field of activity during 2021.

Due to the measures taken to contain the spread of the COVID-19 virus, participation in educational programs in 2021 was significantly reduced compared to previous years. All training was conducted online.

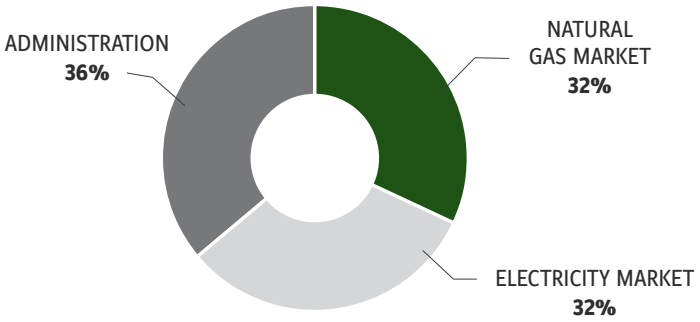


Figure 2 - CERA Office staff Training 2021

2 LEGISLATIVE REGULATIONS AND CERA DECISIONS

National Legislative Regulations

The following section presents the Laws and Regulations that have been amended, the bills that are under discussion, CERA's most important Regulatory Decisions and Decisions as well as the developments in the Trading and Settlement Rules and the Transmission and Distribution Rules.

Laws and Regulations

Law Regulating the Electricity Market of 2021 L.130(I)/2021

On 7 October 2021, the House of Representatives passed the Law Regulating the Electricity Market of 2021 L.130(I)/2021 which repeals the Laws Regulating the Electricity Market of 2003 to 2018.

The Electricity Law was passed for the purposes of harmonization with Directive (EU) 2019/944 on common rules for the internal market in electricity, partial harmonization with Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources, and Directive 2012/27/EU on energy efficiency, effective implementation of Regulation (EU) No. 1227/2011 on wholesale market integrity and transparency, and more effective implementation of Regulation (EU) No. 347/2013 on guidelines for trans-European energy infrastructure, Regulation (EU) No. 2019/943 on the internal market for electricity, and Regulation (EU) No. 2017/1485, on the establishment of guidelines on electricity transmission system operation.

The Electricity Law provides for the regulation of the electricity market in the Republic of Cyprus, by establishing common rules concerning the generation, transmission, distribution, storage and supply of electricity, as well as the protection of consumers, with a view to creating truly integrated, competitive, consumer-focused, flexible, fair and transparent electricity markets in the EU.

By taking advantage of the benefits of an integrated market, among other things, it aims to ensure affordable, transparent prices and energy costs for consumers, a high degree of security of supply and a smooth transition to a lower-carbon energy emission system.

It lays down basic rules for the organization and operation of the electricity sector, in particular position strengthening and consumer protection rules, for open access to the integrated market and for third party access to transmission and distribution infrastructure.

Lastly, it ensures that electricity companies operate aimed at achieving a competitive, secure, and environmentally sustainable electricity market, without being discriminated in terms of their rights or obligations.

The Electricity Law provides, among other things, for:

- the introduction of a new licensing regime for production, transmission, distribution, supply, and storage of electricity as well as the operation of the market and the interconnection with electricity systems,
- the establishment of the Transmission System Operator - Cyprus (TSOC),
- the establishment of a framework for arrangements between the Owner of Transmission System and TSOC,
- the establishment of a framework for arrangements between TSOC and the Distribution System Operator (DSO),
- the regulation of a framework for arrangements between the Interconnector Owner and TSOC; between the Interconnector Owner and the Interconnector Operator; between the Interconnector Operator and TSOC; between the Interconnector Operator and neighboring Transmission System Operators, and between TSOC and neighboring Transmission System Operators,
- the regulation of access to the transmission system and to the distribution system,
- the introduction of Public Service Obligations,
- the regulation of issues pertaining to the protection of the consumer in relation to the electricity market, and
- the regulation of issues related to the protection of vulnerable customers and energy poverty.

Laws Regulating the Natural Gas Market of 2004 to 2021

Laws Regulating the Natural Gas Market of 2004 to 2021 were passed for harmonization with Directive 2003/55/EC concerning common rules for the internal market in natural gas.

On 7 October 2021, the House of Representatives passed the (Amending) Law Regulating the Natural Gas Market of 2021.

The Laws Regulating the Natural Gas Market of 2004 to 2021 provide for the regulation of the natural gas market in the Republic and among other things establishes the rules pertaining to the transmission, distribution, supply, and storage of natural gas and determines the rules regarding the organization and operation of the natural gas sector, access to the market, the operation of the networks, and the criteria and procedures for the granting of licenses for the transmission, distribution, supply, and storage of natural gas.

The rules that are established with the Laws Regulating the Natural Gas Market of 2004 to 2021 for natural gas, including LNG, shall also apply in a non-discriminatory way to biogas and gas from biomass or other types of gas in so far as such gases can technically and safely be injected into, and transported through, the natural gas system.

Law for the Establishment and Operation of the Cyprus Energy Regulatory Authority of 2021

On 7 October 2021, the House of Representatives passed the Law for the Establishment and Operation of the Cyprus Energy Regulatory Authority of 2021, L.129(I)/2021, for harmonization with Article 57 of Directive (EU) 2019/944 on common rules for the internal market for electricity and Article 39 of Directive 2009/73/EC concerning common rules for the internal market in natural gas.

The Law for the Establishment and Operation of the Cyprus Energy Regulatory Authority of 2021 provides for the establishment and operation of the regulatory authority at national level, pursuant to the provisions of Directive (EU) 2019/944 and Directive (EU) 2009/73/EC, with the ability to decide on

any relevant regulatory issue in order for the internal electricity and natural gas markets to operate properly in accordance with the above Directives and to be fully independent from any other public or private interest.

Draft bill entitled "Law on the Promotion and Encouragement of the Use of Renewable Energy Sources of 2021"

The preliminary draft bill was prepared for the partial harmonization of national legislation with "Directive (EU) 2018/2001 of the European Parliament and of the Council of 11th December 2018 on the promotion of the use of energy from renewable sources". The proposed Law will replace the "Laws on the Promotion and Encouragement of the Use of Renewable Energy Sources of 2013 to 2018".

From 10 February 2021 until 10 March 2021, the MECI conducted a public consultation on the draft bill entitled "Law on the Promotion and Encouragement of the Use of Renewable Energy Sources of 2021" and its results have been announced.

Code of Public Governance

CERA has adopted the Code of Public Governance as this had been approved by the Council of Ministers, under Decision no. 87,869 dated 25 July 2019, for implementation by Government Organizations and Government Enterprises. CERA has also issued a Guide on the implementation of the Code of Public Governance, which shows how CERA conforms with the Code of Public Governance.

With the adoption of the Code of Public Governance, CERA has defined a clear set of values regarding the way in which it conducts its activities. CERA's Top Management and office staff, represent these values and operate on their basis when carrying out their activities and during their contact the various stakeholders.

The members of the Top Management of CERA support the implementation of the Code of Public Governance and evaluate its effective implementation since it is a useful tool for controlling the effectiveness of governance and encourages the achievement of better results via accountability and transparency.

In addition, CERA has defined and published its Mission, Vision and Values on its website, as follows:

Mission

CERA's mission concerns the regulation of the electricity market in the Republic, the establishment of rules concerning the generation, transmission, distribution, storage and supply of electricity, as well as the creation of integrated, competitive, consumer-focused, flexible, fair and transparent electricity markets in Cyprus to ensure affordable and transparent prices as well as energy cost for the purpose of protecting consumers.

In addition, CERA's mission concerns the regulation of the natural gas market in the Republic, the establishment of rules pertaining to the transmission, distribution, supply, and storage of natural gas and the determination of rules regarding the organization and operation of the natural gas sector, access to the market, the operation of the networks, and the criteria and procedures for the granting of licenses for the transmission, distribution, supply, and storage of natural gas.

In particular, the Law Regulating the Electricity Market of 2021 (L.130(I)/2021) and the Laws Regulating the Natural Gas Market of 2004 to 2021 (L.183(I) 2004), set the framework of rules and principles for achieving the mission of CERA, whose main objective is to ensure the smooth operation of the energy market in Cyprus, the protection of consumers, and the protection of the environment.

Vision

CERA's vision is to regulate the electricity and natural gas markets in the Republic, to ensure a high degree of security, quality, and supply of electricity and natural gas, to protect the interests of consumers, to contribute to environmental protection and to promote research and development in the energy sector.

Values

During the performance of their duties, CERA's Top Management and office staff adopt values based on the General Principles of the Administrative Law of 1999, L.158(I)/1999 as follows:

- Transparency
- Impartiality
- Protection against conflicts of interest
- Ensuring equality and fairness
- Protection of the right to be heard
- Proportionality principle (all measures taken must be proportionate to the purpose they serve)
- Principle of good faith
- Reasonability for the decisions taken
- Perform duties and responsibilities within a reasonable period of time

Regulatory Decisions, Draft Regulatory Decisions and important CERA Decisions in 2021

During 2021, CERA took Regulatory Decisions and other Decisions of which the most important are the following:

REGULATORY DECISIONS AND DRAFT REGULATORY DECISIONS

Regulatory Decision 01/2021 (KDP 359/2021), regarding the Statement of Regulatory Practice and Electricity Tariffs Methodology

By Regulatory Decision 01/2021, CERA estimated that with the implementation the Trading and Settlement Rules, Version 2.0.0 and the new electricity market, a Statement of Regulatory Practice and Electricity Tariffs Methodology needs to be in force which will fall in line with the new Trading and Settlement Rules, and after assessing all the comments from the Public Consultation, it issued Regulatory Decision No. 01/2021 "Statement of Regulatory Practice and Electricity Tariffs Methodology" (KDP 359/2021).

Regulatory Decision 01/2021 was published in the Official Government Gazette on 13 August 2021.

Regulatory Decision 02/2021 (KDP 523/2021) regarding the Regulatory Framework for the Granting of General License

By Regulatory Decision 02/2021 (KDP 523/2021), CERA determined the regulatory framework for the granting of a General License, the General License Notification Form, the DSO terms of mandate for connection to the distribution network following mere notification, the General License terms, the notification fees and annual fees, the Details Change Form and the General License termination form

Regulatory Decision 02/2021 was published in the Official Government Gazette on 17 December 2021.

Draft Regulatory Decision "Determination of general principles and guidelines for connection charges to the transmission and distribution systems"

On 13 August 2021, CERA announced that it published the Draft Regulatory Decision entitled "Determination of general principles and guidelines for connection charges to the transmission and distribution systems" in the Official Gazette of the Republic of Cyprus and notified licensees, license applicants or other interested parties that they can submit their written comments, objections and/or presentation of the draft Regulatory Decision to CERA.

The draft Regulatory Decision concerns the determination of General Principles and Guidelines for connection charges to the Transmission and Distribution Systems to the competent Transmission System and Distribution System Operators, for preparation of the charge policy for connection to the Transmission System and Distribution System.

The general principles and guidelines for the preparation of the charge policy which are determined in the draft Regulatory Decision take into account that the charge policy for connection to the transmission and distribution systems depend on various parameters and are determined according to the connection's voltage level, the type of network user (e.g., consumer, producer or self-producer) or even the user category (e.g. household, commercial or industrial consumer, etc.), particularly for the Distribution system, by following the growth potential of the system and the market while resolving any new issues that arise.

CERA has published the General Table which includes fifty-six (56) comments. The comments regarding the draft Regulatory Decision during the public consultation are being processed and the results will be published early 2022.

Draft Regulatory Decision "Provision of guidance for the preparation of the Transmission System and Distribution System connection process"

On 13 August 2021, CERA announced that it published the Draft Regulatory Decision entitled "Provision of guidance for the preparation of the Transmission System and Distribution System connection process" in the Official Gazette of the Republic of Cyprus and notified licensees, license applicants or other interested parties that they can submit their written comments, objections and/or presentation of the draft Regulatory Decision to CERA.

The draft Regulatory Decision concerns the provision of guidance for the preparation of the transmission system and distribution system connection process by the competent Operators.

Pursuant to the draft Regulatory Decision, CERA decided to set guidelines for the preparation:

- of the "Distribution System Connection Process" by the DSO, and
- the "Transmission System Connection Process" by the TSOC,

which sets out the necessary procedures, the submitted applications, the necessary information, and every detail regarding the connection of a new user to the Transmission/Distribution System or the amending connection of an existing user, as well as other relevant details and information for the preparation of the relevant Connection and Use Contract, and such contract templates for every user type.

CERA has published the General Table which include thirty-nine (39) comments. The comments regarding the draft Regulatory Decision during the public consultation are being processed and the results will be published early 2022.

Draft Regulatory Decision "on the Establishment of Basic Principles for the Formulation of the Ten-Year Distribution System Development Plan"

On 23 December 2021, CERA published the Draft Regulatory Decision entitled "on the Establishment of Basic Principles for the Formulation of the Ten-Year Distribution System Development Plan" in the Official Gazette of the Republic of Cyprus and notified licensees, license applicants or other interested parties that they can submit their written comments, objections and/or presentation of the draft Regulatory Decision to CERA.

Pursuant to the draft Regulatory Decision, CERA decided to set basic principles for the formulation of the Ten-Year Distribution System Development Plan.

For the continuous updating of all licensees, license applicants, and any other interested parties, in the context of complete transparency in view of the imminent operation of the competitive electricity market in Cyprus, the draft Regulatory Decisions provides for the inclusion of the following criteria in addition to the provisions of the Law:

- The distinction of projects that are included in the Ten-Year Distribution System Development Plan into support and expansion projects aimed at separating the projects that are deemed necessary for improving the operation of the Distribution System (support projects) and projects that are required for the connection of users to the system (Producers, Medium and Low Voltage Customers).
- The inclusion of Distribution system modernization projects
- The inclusion of projects that aim at improving energy quality and reducing Distribution System energy losses.
- The inclusion of projects that aim at better serving Distribution System Users.
- The total estimated cash flows of all distribution projects.
- Detailed time schedule for the implementation of the distribution projects.

The draft Regulatory Decision also determines that within six months prior to the end of each two-year period (starting by December 2022 at the latest), the DSO shall submit the proposed Ten-Year Distribution System Development Plan for the decade starting in January of the coming year to CERA for approval. The validity of the Ten-Year Distribution System Development Plan starts from the date it receives approval from CERA. Upon completion of the public consultation in January 2022, CERA will publish the General Table with all the comments that have been submitted and will then process the comments and the results will be published.

Draft Regulatory Decision "on the Establishment of Basic Principles for the Formulation of the Ten-Year Transmission System Development Plan"

On 23 December 2021, CERA published the Draft Regulatory Decision entitled "on the Establishment of Basic Principles for the Formulation of the Ten-Year Transmission System Development Plan" in

the Official Gazette of the Republic of Cyprus and notified licensees, license applicants or other interested parties that they can submit their written comments, objections and/or presentation of the draft Regulatory Decision to CERA.

Pursuant to the draft Regulatory Decision, CERA decided to repeal Regulatory Decision No. 03/2020 (KDP 165/2020) "on the Establishment of the Basic Principles for the Formulation of the Ten-Year Transmission System Development Plan".

For the continuous updating of all licensees, license applicants, and any other interested parties, in the context of complete transparency in view of the imminent operation of the competitive electricity market in Cyprus, the draft Regulatory Decisions provides for the inclusion of the following criteria in addition to the provisions of the Law:

- The distinction of projects that are included in the Ten-Year Transmission System Development Plan into support and expansion projects aimed at separating the projects that are deemed necessary for improving the operation of the Transmission System (support projects) and projects that are required for the connection of users to the system (Producers, High Voltage Customers).
- The preparation of a techno-economic feasibility analysis for every new transmission project that may be included in the Ten-Year Transmission System Development Plan.
- The total estimated cash flows of all transmission projects.
- Detailed time schedule for the implementation of the transmission projects.
- Any environmental and/or other restrictions during the load flow simulations

Upon completion of the public consultation in January 2022, CERA will publish the General Table with all the comments that have been submitted and will then process the comments and the results will be published.

DECISIONS

Decision 12/2021 - Approval of Calculation Methodology and Prices of Monthly Capacity Factors (CFg) of the Transitory Regulation of the Electricity Market for 2021

By Decision 12/2021, CERA approved the monthly load factor of production plants in the Cypriot system (CFg) for 2021.

Decision 15/2021 - Allowed Revenues and Regulated Electricity Tariffs for 2021

By Decision 15/2021, CERA approved the Allowed revenue and Regulated Basic Electricity Tariffs for 2021 as presented in Table 1. The Allowed Revenues for 2021, include cost-plus adjustments for 2019, based on the Methodology of Allowed Revenue Adjustments issued by CERA pursuant to which there was a decrease of 3.2%, on average, in the total of Regulated Electricity Tariffs, for 2021.

Recovery from tariff		Initially Allowed Revenues 2021	Ex-cost adjustments	Allowed revenues 2021 approved by CERA
Wholesale electricity tariff **(T-W)** at basic price	€	358,674,499	1,515,305	360,189,804
Use of Transmission System Tariff **(T-NH)**	€	41,898,403	-5,259,922	36,638,481
Use of Distribution System Tariff (medium and low voltage), which includes a charge component related to the Distribution System Operator **(T-NM, T-NL)**	€	87,190,792	-10,722,739	76,468,053
Tariff for Business Management Services provided to customers **(T-BM)**	€	17,075,978	-49,738	17,026,240
Tariff for the provision of Ancillary Services and long-term reserve **(T-AS)**	€	32,111,211	-629,800	31,481,411
Tariff for the recovery of expenses of the Transmission System Operator **(T-TSO)**	€	6,244,000	-1,921,300	4,322,700
Tariff for the recovery of expenses of measurements incurred by the Distribution System Operator **(T-MET)**	€	3,718,994	0	3,718,994
Purchase of RES-generated energy at basic price	€	51,547,413	-7,819,150	43,728,263
Supply tariffs and electricity market charges to the end consumer **(T-RET)**	€	598,838,036	-4,593,904	594,244,132

Table 1 - Allowed Revenues and Regulated Electricity Tariffs for 2021

Decision 26/2021 - Electricity Tariff Plans for 2021

By Decision 26/2021, CERA approved the Electricity Tariff Plans for 2021, as submitted by EAC Supply and instructed EAC Supply to publish the approved Electricity Tariff Plans to properly inform electricity consumers and other participants in the electricity market.

Decision 42/2021 - Draft Regulatory Decision on the "Statement of Regulatory Practice and Electricity Tariffs Methodology"

By Decision 42/2021, after taking into account Regulatory Decision No. 02/2015 "Statement of Regulatory Practice and Electricity Tariffs Methodology" (KDP 208/2015) and Decision No. 84/2017 dated 12 May 2017, with which CERA approved the revised Trading and Settlement Rules (TSRs) that were submitted by the TSOC (Version 2.0.0), and after considering that with the implementation of the revised TSRs and the new electricity market a Statement of Regulatory Practice and Electricity Tariffs Method-

ology which is consistent with the new TSRs needs to be in force, CERA published a Draft Regulatory Decision entitled "Statement of Regulatory Practice and Electricity Tariffs Methodology".

Moreover, CERA called on all license applicants and/or other interested parties to submit their written comments, objections and/or presentation within 60 days of the Draft Regulatory Decision being published in the Official Gazette of the Republic of Cyprus.

Decision 43/2021 - Changes to the Transitory Regulations of the Electricity Market - Version 1.6

By Decision 43/2021, CERA approved changes to the Transitory Regulations of the Electricity Market Version 1.5 and the issue of the Transitory Regulations of the Electricity Market, Version 1.6.

Decision 48/2021 - Calculation Methodology of the Preventive Increase of the Guarantee Coverage of Producers and RES Producers

By Decision 48/2021, CERA approved the Calculation Methodology of the Preventive Increase of the Guarantee Coverage of Producers and RES Producers, which TSOC decided to post to its website.

Decision 73/2021 - Guidelines on conducting an estimate of natural gas demand in the Natural Gas Transmission System by the Natural Gas Transmission System Operator and the conclusion of interconnection agreements

By Decision 73/2021, dated 26 February 2021, CERA issued the Guidelines on conducting an estimate of natural gas demand in the Natural Gas Transmission System by the Natural Gas Transmission System Operator and the Conclusion of Interconnection Agreements.

Decision 74/2021 - Guidelines on preparing the Natural Gas Transmission System development plan

By Decision 74/2021, dated 26 February 2021, CERA issued the guidelines on preparing the Natural Gas Transmission System development plan, which is prepared by the Transmission System Operator and concerns the next ten (10) years.

Decision 82/2021 - Draft regarding the Regulations Regulating the Natural Gas Market (Natural Gas Quality Requirements)

By Decision 82/2021, dated 05 March 2021, CERA prepared the draft regarding the Regulations Regulating the Natural Gas Market (Natural Gas Quality Requirements) and decided to open the decision to public consultation.

Decision 87/2021 – CERA Code of Public Governance

By Decision 87/2021, CERA adopted the Principles of the Code of Public Governance as these have been approved by the Council of Ministers with Decision No. 87,869 and approved the Implementation Guide of the CERA Principles of the Code of Public Governance.

Decision 88/2021 - CERA Risk Report

By Decision 88/2021, CERA approved the CERA Risk Report based on Council of Ministers Decision No. 87,226 dated 9 April 2019, according to which the Council of Ministers decided to approve that all Entities of the General Government Sector/Government Enterprises/Government Organizations, prepare a risk report by regularly updating the Board of Directors of each Organization, the competent Minister and Minister of Finance and submit same to the Council of Ministers once a year, in the second quarter, for reference purposes.

Decision 93/2021 - Electronic Registry for Guarantees of Origin Fees

By Decision 93/2021, CERA set the fees for registration to the electronic registry for guarantee of origin of electricity by RES and high-efficiency combined heat and power (HECHP) according to Table 2.

Fee for Registration to the Electronic Registry for Guarantee of Origin for RES and HECHP producers

Power plant capacity (P)	Registration Fee (€)
P≤1MW	100
1MW>P≤8MW	200
8MW>P≤20MW	500
20MW>P≤60MW	1.000
P>60MW	1.500

Fee for registration to the electronic registry for guarantee of origin for suppliers

	Registration Fee (€)
Suppliers	0

Table 2 - Fee for registration to the electronic registry for guarantee of origin for RES and HECHP producers

In addition, for 2021 - 2030, it set a zero annual fee for registration to the electronic registry for guarantee of origin for RES and HECHP producers and suppliers and the fee for the issue, import/export and cancellation of guarantees of origin for RES and HECHP-generated electricity.

Decision 103/2021 - Approval of Ten-Year Transmission System Development Plan 2021 - 2030

By Decision 103/2021, CERA approved the Ten-Year Transmission System Development Plan 2021-2030 (TYNDP) submitted by TSOC, making the following remarks:

- TSOC to take immediate action for project "53" - New "Neos Vasilikos" Substation 132 kV GIS ΔZ 3150 A 40 kA is fully implemented without delays by making the project a matter of urgency and priority.

- TSOC will publish the TYNDP based on Regulatory Decision no. 03/2020 (KDP 165/2020), in the context of full transparency and information for all stakeholders. This publication should be made on condition that there is reference in RD No. 03/2020 (KDP 165/2020), and the clarification that this TYNDP is not fully harmonized with that decision.
- In the context of reducing costs, where possible, and restricting financial costs, TSOC should make an effort to reduce costs as much as possible during the implementation of the projects, taking into account the obligations arising from the legislation and the obligation for the operation of an efficient, coordinated, secure, reliable and economically viable transmission system.

Decision 115/2021 - Draft regarding the Regulations Regulating the Natural Gas Market (Natural Gas Quality Requirements)

By Decision 115/2021, dated 06 April 2021, CERA decided to revoke CERA Decision no. 82/2021, dated 05 March 2021 entitled "Draft regarding the Regulations Regulating the Natural Gas Market (Natural Gas Quality Requirements)" and the notification to the MECI of the Draft regarding the Regulations Regulating the Natural Gas Market (Natural Gas Quality Requirements) as prepared by CERA.

Decision No 136/2021 - Update of the Cross-Border Cost Allocation of the PCI No 3.10.2 Interconnection Between Kofinou (CY) and Korakia, Crete (EL)

By Decision 136/2021, dated 23 April 2021, having regard, among other things, to the request by the Implementation Body "Euroasia Interconnector Ltd" for the revision of the cross-border cost allocation agreement after the withdrawal of the former Project of Common Interest (PCI) "3.10.3 Internal line between Korakia, Crete (EL) and Attica region (EL)" from the updated EU PCI list, CERA decided to approve the agreement between the two regulatory authorities entitled "Joint Decision of the Hellenic Regulatory Authority for Energy (RAE) and the Cyprus Energy Regulatory Authority (CERA) with regards to clarifications and updates related to the Cross-Border Cost Allocation Agreement, of 10 October 2017, following the Commission Delegated Regulation (EU) 2020/389" Annex I, which concerns updated issues pertaining to:

- The rewording of the definitions of the words "Project" or "PCI" of the CBCA Agreement of 10th October 2017,
- The implementation time schedule for PCI 3.10.2,
- Ensuring the interoperability of PCI 3.10.2 and the Hellenic Electricity Transmission System (HETS), and
- Confirmation of the already agreed cross-border cost allocation, namely that 37% of the agreed implementation cost (according to the CBCA Agreement of 10th October 2017) is allocated to Greece and 63% to Cyprus, provided that 50% of the project will be funded by third parties.

It was also decided that this decision will be communicated to the Agency for the Cooperation of Energy Regulators (ACER) along with all the relevant information and to the Implementation of the Project and to be published in the Official Gazette of the Republic of Cyprus and on the CERA website, without Annex I, because it contains confidential information that cannot be published.

Decision 163/2021 - Long-Term Annual Forecast of Maximum Total Electricity Capacity and Total Generated Electricity for the Decade 2021 - 2030

By Decision 163/2021, CERA approved the long-term forecast of annual maximum total capacity of electricity and total generated electricity for the decade 2021-2030 which was submitted by the TSOC.

Decision 165/2021 - Regulation 2019/941 - Establishment of a Risk-Preparedness Plan in the Electricity Sector

By Decision 165/2021, dated 26 May 2021, having regard to

- the first phase of consultations that took place with the TSOC regarding the preparation of the draft risk-preparedness plan,
- the consultations that took place with the DSOs, the trade bodies of the relevant producers, the electricity companies, and the relevant organizations that represent the interests of industrial and non-industrial electricity customers regarding the preparation of the draft risk-preparedness plan,
- the fact that in order to ensure the consistency of the risk-preparedness plans, prior to approving these risk-preparedness plans, the competent authorities submit the drafts to consultation to the competent authorities of the relevant member states in the region and when not in the same region, to the competent authorities of directly related member states, and to the Electricity Co-ordination Group (ECG).
- the fact that Cyprus is isolated in nature and does not fall under a region nor is it linked to other Member States, therefore, the draft risk-preparedness plan will only be submitted to the ECG,

CERA decided to approve the Draft Risk-Preparedness Plan in the electricity sector, which it submitted to the CERA Office and this decision will be communicated to the ECG.

Decision 166/2021 - Call for Expression of Interest for the selection of a Supplier of Last Resort in the Cypriot Electricity Market for a two-year period

By Decision 166/2021, dated 26 May 2021, having regard to Decision No. 24/2021, dated 15 January 2021, regarding the detailed terms and procedure for call for expression of interest for the selection of a supplier of last resort in the Cypriot electricity market for a two-year period and the consultations that were conducted with the CERA licensees, electricity suppliers to final customers, and license applicants for the supply of electricity to final customers, CERA decided to approve the Draft of the Call for Expression of Interest for the selection of a Supplier of Last Resort in the Cypriot Electricity Market for a two-year period.

In addition, CERA decided for the Call for Expression of Interest for the Selection of a Supplier of Last Resort in the Cypriot Electricity Market for a two-year period to be published in two daily newspapers, to be posted to the CERA website, to be published in the Official Gazette of the Republic of Cyprus, and to be notified to the competent agencies of the European Commission.

Decision 178/2021 - Submission of Allowed Revenue and Regulated Electricity Tariffs for 2022

By Decision 178/2021, CERA issued instructions for the preparation and submission of the Allowed Revenue and Regulated Electricity Tariffs for 2022 alone to CERA, for the existing Regulatory Decision No. 02/2015 (KDP 208/2015) "Statement of Regulatory Practice and Electricity Tariffs Methodology" to be followed, and set specific time schedules for the submission of the Allowed Revenue and Regulated Electricity Tariffs for 2022 to CERA, by each of the regulated activities.

It also issued instructions that with the issue of the new Regulatory Decision "Statement of Regulatory Practice and Electricity Tariffs Methodology", each regulated activity shall submit the Allowed Revenue and Regulated Electricity Tariffs for 2022-2026 pursuant to the time schedules set in the new regulatory Decision and the revised adjustment methodology of allowed revenue that will be issued.

Decision 232/2021 – Fuel Clause Coefficients for the Adjustment of the Wholesale Tariff (T-W), Fuel Clause Coefficients and Basic Prices for the purchase of RES-generated energy for the period July - December 2021

By Decision 232/2021, CERA approved the Fuel Clause Coefficients and Basic Prices for the adjustment of the wholesale tariff T-W and for the purchase of energy from RES as well as the Basic Purchase Price of RES-generated energy for the period July - December 2021, as listed in Table 3.

Fuel Clause Coefficients for the adjustment of the wholesale tariff (T-W)		Fuel Clause Coefficients for the purchase of RES-generated energy		Basic prices for the purchase of RES-generated electricity	
	€c/kWh/ 1 €c		€c/kWh/ 1 €c		€c/kWh
Low voltage	0.00023064	Low voltage	0.00022779	Low voltage	7.065
Medium voltage	0.00022779	Medium voltage	0.00022532	Medium voltage	6.991
High voltage	0.00022532	High voltage	0.00022214	High voltage	6.896

Table 3 - Fuel Clause Coefficients and Basic Purchase Prices of RES-generated energy

Decision 250/2021 - Regulatory Decision No. 01/2021 Statement of Regulatory Practice and Electricity Tariffs Methodology

By Decision 250/2021, having regard to the comments that were received during the Public Consultation of the Regulatory Decision entitled "Statement of Regulatory Practice and Electricity Tariffs Methodology" which ran from 12 February 2021 through to 13 April 2021, CERA issued Regulatory Decision No. 01/2021 on "Statement of Regulatory Practice and Electricity Tariffs Methodology".

Decision 278/2021 - Changes to the Transitory Regulations of the Electricity Market - Version 1.7

By Decision 278/2021, CERA approved the necessary changes to the Transitory Regulations for the proper representation of Consumers of RES-generated electricity for self-consumption under the support scheme.

Decision 294/2021 – Discount to Regulated Use of Transmission System and Electricity Distribution Tariffs for 2021

CERA, having regard to, among other things:

- the fact that EAC had consolidated cash reserves of approximately € 444mil., according to the audited financial statements for ended 31 December 2019, and cash on hand amounting to € 404mil., according to the unofficial financial statements for ended 31 December 2020, which have been recovered from electricity consumers,
- the recommendation of EAC that was sent to CERA under File No. M/M.1, dated 16 September 2021, entitled "Reduction in final electricity price", for a 65% discount on the usage charges of the High, Medium and Low Voltage network, which concerns all electricity consumers, for the bill that will be issued based on the readings that will be recorded for the months November - December 2021 and January - February 2022,

and estimates that a decrease in the following Regulated Tariffs for the use of transmission and distribution systems:

- Regulated Tariff for Use of Transmission System (T-NH)
- Regulated Tariff for Use of Medium Voltage Distribution System (T-NM), and
- Regulated Tariff for Use of Low Voltage Distribution System (T-NL),

does not affect competition in the Electricity Market, since the Owner of the Transmission System and Owner and Operator of the Distribution System monopolize these activities, decided:

- To reduce the Regulated Tariff for use of transmission and distribution systems (T-NH, T-NM, T-NL), which was approved with CERA Decision No. 15/2021, by 65% for a total period of four (4) months.
- The loss of revenue that the Owner of the Transmission System and the Owner and Operator of the Distribution System will incur due to the reduction of Regulated Tariff for use of transmission and distribution systems will not be recovered during the rest of the current Regulatory Audit Period or during the next Regulatory Audit Period, but will be covered by cash reserves of EAC.
- The discount that will be given shall clearly appear on the electricity bills that are issued by all electricity Suppliers, including the Regulated Supplier.
- The reduction to the Regulated Tariffs for use of transmission and distribution systems (T-NH, T-NM, T-NL) to apply:
  - to monthly consumers, for electricity bills whose consumption was measured at the end of November 2021, and
  - to bi-monthly consumers, for electricity bills whose consumption was measured from 1st November 2021.
- In the context of full transparency and information of all stakeholders, this Decision shall be communicated to EAC and will be posted on CERA's website.

As a result of the above, a decrease of about 10% is expected on the final electricity bill of an average household consumer.

Decision 295/2021 - Appointment of members of a licensing agency comprising of authorized independent producers and consumers

By 295/2021, CERA approved the proposal made by TSOC for the appointment of specific Officers from the TSOC and EAC as the new Members of the Agency for the period from 18 October 2021 to 18 October 2024.

Decision 301/2021 - Approval of amending version of the Ten-Year Transmission System Development Plan 2021 - 2030

By Decision 301/2021, CERA approved the Amending Version of the Ten-Year Transmission System Development Plan 2021 - 2030 (TYNDP) as submitted by TSOC and its publication.

Decision 325/2021 - Approval of amending version of the Ten-Year Transmission System Development Plan 2021 - 2030

By Decision 325/2021, CERA approved the Amending Version of the Ten-Year Network Development Plan 2021 - 2030 (TYNDP) as submitted by the TSOC and its publication.

Decision 334/2021 - Approval of Proposed Amendments to the Trading and Settlement Rules by the Transmission System Operator - Cyprus - Version 2.0.3

By Decision 334/2021, CERA approved the proposed Trading and Settlement Rules, Version 2.0.3 that were submitted by the TSOC.

Decision 365/2021 - Fuel Clause Coefficients for the Adjustment of the Wholesale Tariff (T-W), Fuel Clause Coefficients and Basic Tariffs for the purchase of RES-generated energy for the period January - June 2022

By Decision 365/2021, CERA approved the Fuel Clause Coefficients and Basic Prices for the adjustment of the wholesale tariff (T-W) and for the purchase of energy from RES as well as the Basic Purchase Price of RES-generated energy for the period January-June 2022, as presented below.

Fuel Clause Coefficients for the adjustment of the wholesale tariff (T-W)		Fuel Clause Coefficients for the purchase of RES-generated energy		Basic prices for the purchase of RES-generated electricity	
	€c/kWh/ 1 €c		€c/kWh/ 1 €c		€c/kWh
Low voltage	0.00022483	Low voltage	0.00022212	Low voltage	6.960
Medium voltage	0.00022212	Medium voltage	0.00021977	Medium voltage	6.890
High voltage	0.00021977	High voltage	0.00021682	High voltage	6.801

Table 4 - Fuel Clause Coefficients and Basic Purchase Prices of RES-generated energy

Decision 373/2021 - Forms and Standard Terms of Exemption from holding a license

By Decision 373/2021, for the purposes of compliance with the Electricity Law, CERA approved the updated format of the Forms and Standard Terms of Exemption to holding a license for the Construction and operation of power plants using RES with generation capacity of up to 5MW greater than 50kW up to 8MW and the construction and operation of power plants with conventional fuels greater than 30kW up to 1MW, up to 1MW for own use or for reserve purposes.

Decision 374/2021 - Approval of Transitory Regulation Guarantee Coverage Parameters of the Electricity Market, Version 1.7 for 2022

By Decision 374/2021, CERA approved the specific Transitory Regulation Guarantee Coverage Parameters of the Electricity Market for the period from 1 October 2021 to 30 September 2022.

Decision 375/2021 - Approval of Transitory Regulation Parameters of the Electricity Market Version 1.7 for 2022

By Decision 375/2021, CERA approved the specific Transitory Regulation Parameters of the Electricity Market for the monthly transmission loss coefficients and the monthly load factors of the production units in the Cypriot System.

Decision 376/2021 - Parameters set by the DSO for the Transitory Regulation of the Electricity Market for 2022

By Decision 376/2021, CERA approved the distribution losses coefficients of the distribution system (Medium and Low Voltage) for 2022.

Decision 383/2021 - CERA Reserve Fund Policy

Having regard to the Law Regarding the Establishment and Operation of the Energy Regulatory Authority of 2021 and particularly Articles 10 and 12, and the need to establish policies for the use of CERA reserves (cash, bonds, and shares) that are observed at the end of each year given that end of every two years and following the joint decision of CERA, MECI and the Ministry of Finance any CERA reserve surplus will be transferred to the electricity, natural gas, and RES-related fund of the Republic (Article 10 (3) of the Law), CERA established the following policy for the use of use of CERA reserves (cash, bonds, and shares) that are observed at the end of each year:

Upon completion of the audit of the financial statements of CERA by the Auditing Agency or the Contractor that the latter appoints for the audit, CERA's cash balances in the banks as well as the value of bonds and cash for year *t* (e.g., for 2020) are determined.

CERA accumulates a reserve which consists of:

- Any Budget deficit for year *t*+1 and year *t*+2.
- A safety reserve which is calculated as 10/12 of the expenses of CERA's Budget for year *t*+2, because CERA's fees are billed in October and collected in November each year.
- Amounts to cover the retirement benefits of all permanent staff of the Office of CERA, past and present, as well as of the Members of CERA, past and present, where applicable, according to the approved positions included in the Budget of year *t*+1.
- Amounts for the purchase of a building for CERA's needs.

Decision 386/2021 - Approval of Amendments proposed to the Transmission and Distribution Rules by the Transmission System Operator - Cyprus - Version 5.3.0

By Decision 386/2021, CERA approved the proposed Transmission and Distribution Rules (TDR), Version 5.3.0 that were submitted by the TSOC. In addition, it invited the TSOC to publish the newly approved TDRs on its website without, however, having any force, in the context of full transparency, update and timely information of all interested investors for activity in the field of competitive electricity market but also for informing any other interested persons and/or participants in the electricity market.

Actions taken in relation to previous Regulatory Decisions

Compliance check of DSO and TSOC according to the regulatory framework for the preparation of thorough techno-economic feasibility study for the redesign of the transmission system

With respect to the provisions of Regulatory Decision No. 02/2019 (KDP 204/2019) "on the preparation of thorough techno-economic feasibility study for the redesign of the transmission and distribution system 2021-2030", CERA performed a compliance check of the DSO and TSOC, the findings were recorded and specific deviations were highlighted regarding the TSOC's and DSO's compliance with the regulatory framework.

Then, having regard to these findings, CERA took the appropriate actions pointing out these findings to the TSOC and DSO and particularly the specific deviation with instructions for their rectification and full implementation and compliance with the regulatory framework.

In the context of controlling the harmonization of the TSOC and DSO, CERA approved the publication of the Host Capacity Map for Power Grid for Renewable Electricity Production (RES-E).

DSO compliance check pursuant to the regulatory framework for the mass installation and operation of smart metering systems

With respect to the provisions of Regulatory Decision No. 02/2018 (KDP 259/2018) "on the Application of a binding timetable for the mass installation and operation by the Distribution System Operator (DSO) of an Advanced Metering Infrastructure (AMI)", CERA performed a compliance check of DSO, the findings were recorded, and specific deviations were highlighted regarding the DSO's compliance with the regulatory framework.

Having regard to the findings of the check that it performed, CERA took the appropriate actions pointing out these findings to the EAC Board of Directors and particularly the specific deviation with instructions for their rectification and full implementation and compliance with the regulatory framework.

Compliance check of TSOC pursuant to the regulatory framework for the formulation of the Ten-Year Transmission System Development Plan

With respect to the provisions of Regulatory Decision No. 03/2020 (KDP 165/2020) "on the establishment of basic principles for the formulation of the Ten-Year Transmission System Development Plan" CERA performed a compliance check of TSOC, the findings were recorded and specific deviations were highlighted regarding the TSOC's compliance with the regulatory framework.

Having regard to these findings, CERA took the appropriate actions pointing out these findings to TSOC and particularly the specific deviation with instructions for their rectification and full implementation and compliance with the regulatory framework.

Tender No. 10/2020 "Assessment of the needs of the Cypriot electricity system based on the regulatory framework for the operation of in-front-of-the-meter electricity storage facilities in the Wholesale Electricity Market".

Having regard to the tasks for implementation of the provisions of CERA's Regulatory Decision No. 03/2019 - KDP 224/2019 "regarding the establishment of basic regulatory principles of the operation of

in-front-of-the-meter electricity storage facilities in the wholesale electricity market, CERA proceeded to the purchase of consulting services regarding the assessment of the needs of the Cypriot electricity system based on the regulatory framework for the operation of in-front-of-the-meter electricity storage facilities in the Wholesale Electricity Market. The study was undertaken by the company Phazor IKE.

With this Tender and the national plan of penetration of RES in mind, system-level simulations of future developments were performed, in order to evaluate how storage contributes to the management of RES production and the operating cost of the system and on the basis of the provisions of the regulatory framework.

To achieve the above, the in-front-of-the-meter electricity storage facilities that belong to known and commercially mature technologies, such as Pumped-Hydro and Li-ion Batteries, in accordance with the above description, were thoroughly evaluated.

This analysis used the cost-optimal approach with an MILP optimization model to prepare and solve daily planning, which took into account the main technical constraints of the system and the techno-economic characteristics of all production and storage units (variable production costs, system reserve needs and supply capacities of the units per reserve category, load limits and rate of ascent/descent of the units, operating and holding times, etc.). The simulations had an annual duration with an hourly rate and generated as output the electricity production of all system components, including the RES and storage units considered in each scenario.

Based on the above, an estimate was also made of the total operating costs of the whole system, based on the objective production costs of its components (reference year 2030). From the specific estimates, the following were analyzed:

- Energy generation of individual stations and cuts in RES production.
- Coverage of the reserve requirements by the individual production components.
- The system's annual variable production cost.
- Assessment of the contribution of storage to the adequacy of system's capacity.
- Comparative evaluation of alternative technologies and dimensioning of storage stations, taking into account energy targets for RES penetration and the cost of production of the system.
- Proposal for the appropriate size and storage characteristics for the Cypriot system during the reference year.

This tender was closed in March 2021.

Tender No. 4/2021 "Quantitative analysis of the Storage Support Mechanism in the Cypriot System".

Having regard to the results of Tender 10/2020 and the importance of the integration of storage stations in the system, CERA purchased consulting services regarding the quantitative analysis of the Storage Support Mechanism in the Cypriot System. The study was undertaken by the company Phazor IKE.

This tender estimated the funding gap/missing money of the storage projects, which needs to be covered by a support mechanism, and this amount, the budget of the scheme, and the amount of funding was determined.

At the same time, the study provided an overview of the effects of storage deployment and level of energy market prices and balancing, as well as the expected revenues of other participants, such as RES plants that are not included in support schemes. It then dealt with the basic principles of

designing a support mechanism in relation to the form of tenders for the selection of beneficiaries, the conditions for participation in the tender, the remuneration ceiling, the duration of the support, the minimum technical requirements and other obligations for beneficiaries, any provisions to avoid overperformance, etc.

This tender was closed in August 2021.

Trading and Settlement Rules

According to the Law Regulating the Electricity Market of 2021 L.130(I)/2021, the TSRs:

- Govern the mechanisms, prices and other terms and conditions that apply in cases where licensees buy or sell electricity based on arrangements made by the TSOC.
- Ensure that licensees, who are required to participate in the purchase and sell of electricity, under these arrangements, will not be subject to discrimination.
- Promote efficiency and economy and facilitate competition regarding the purchase and sale of electricity under these arrangements.
- They provide non-compliance charges which the TSOC, in its capacity as the Electricity Market Operator, imposes on any of the participants in the electricity market in case of failure to comply with any obligation provided in the Trading and Settlement Rules.
- They are fully harmonized with the provisions of Regulation (EU) 2019/943, where applicable.

The TSRs are adhered to be all final customers that directly or cumulatively participate in the electricity market, licensees or persons that have been granted exemptions, based on the provisions of Article 27 to the extent that is required by their licenses or exemptions.

On 3 November 2021, CERA approved the amendments to the TSRs that were proposed by the TSOC - Version 2.0.3 (Decision No. 334/2021). The amendments related to changes in order to facilitate the process of outsourcing the actions required to fulfill the obligations arising from the participation in the wholesale electricity market to a Clearing House and the outsourcing of credit risk management to a Coverage Body in the event of a deficit arising from the failure Participant to meet his financial obligations, arising from his participation in the market. Given the time required by the TSOC for the supply of the relevant software and hardware for their implementation, the relevant TSRs will be published in the Official Gazette of the Republic of Cyprus at a later date that, based on the provisions of Article 81(6) of the Law, they will enter into force, by CERA's Decision.

Also, during the year in question, TSOC proceeded to the legalized procedures for the revision of the TSRs in the context of complying with the provisions of CERA's Regulatory Decision No. 03/2019 (KDP 224/2019) "regarding the Establishment of the Basic Principles of the Regulatory Framework for In-Front-Of-The-Meter Electricity Storage Facilities in the Wholesale Electricity Market". This task was finalized around the end of 2021 and expected to be approved in early 2022.

Based on the provisions of the Electricity Law and specifically Article 93, until the publication of the revised TSRs in the Official Gazette of the Republic, the provisions of Regulatory Decision No. 04/2017 - KDP 223/2017 "Regarding the implementation of the transitional arrangements of the electricity market in Cyprus prior the full implementation of the new Electricity Market Model" and the Transitory Regulations of the Electricity Market which entered into force based on CERA Decision No. 118/2017, shall apply. The last revised version of the Transitory Regulations the year under review, is version 1.7 (Decision No. 278/2021, dated 03 September 2021).

Transmission and Distribution Rules

Pursuant to the Electricity Law, the Transmission and Distribution Rules:

- Govern the technical requirements and restrictions applied by licensees whenever they want to connect to the transmission and/or distribution system or use the transmission or distribution system for the transmission of electricity.
- Ensure that the technical terms applicable to licensees who wish to connect or use the transmission or distribution system do not discriminate against licensees.
- Promote efficiency, reliability and economy in the use and development of the transmission and distribution system.

The provisions of the Transmission and Distribution Rules shall be complied by all licensees or by persons to whom exemptions have been granted, to the extent required by their licenses or exemptions, respectively.

During the year in question, with CERA Decision 386/2021, dated 30 December 2021, version 5.3.0 of the TDRs as proposed by the TSOC, which concern the introduction of provisions regarding the Energy Storage Facilities, were approved.

Given the time required by the TSOC for the supply of the relevant software for the implementation of the new revised approved TSRs, CERA will decide at a later stage the date on which it will publish the new revised approved TDRs in the Official Gazette of the Republic of Cyprus.

3 ENERGY POLICY, INTERNATIONAL AND LOCAL ACTIVITIES

European Legislative Regulations

FIT for 55

On 14 July 2021, the European Commission adopted a package of proposals (FIT for 55) to make the EU's climate, energy, land use, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Achieving these emission reductions in the next decade is crucial to Europe becoming the world's first climate-neutral continent by 2050 and making the European Green Deal a reality. With today's proposals, the Commission is presenting the legislative tools to deliver on the targets agreed in the European Climate Law and fundamentally transform our economy and society for a fair, green and prosperous future.

Proposal for revision of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11th December 2018, on the promotion of the use of energy from renewable sources (RED)

Energy production and use accounts for 75% of EU emissions, so accelerating the transition to a greener energy system is crucial. The Renewable Energy Directive will set an increased target to produce 40% of our energy from renewable sources by 2030. All Member States will contribute to this goal, and specific targets are proposed for renewable energy use in transport, heating and cooling, buildings and industry. To meet both our climate and environmental goals, sustainability criteria for the use of bioenergy are strengthened and Member States must design any support schemes for bioenergy in a way that respects the cascading principle of uses for woody biomass.

On 14 July 2021, the European Commission announced the publication of the amendment to "Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (REDII)[3]" in the context of the set of proposals "FIT for 55 - Implementation of the European Green Deal". The overall objectives of the revision to Directive REDII are:

- to achieve an increase in the use of energy from RES by 2030,
- to foster better energy system integration, and
- to contribute to climate and environmental objectives including the protection of biodiversity, while addressing concerns that are related to global warming and biodiversity loss.

This revision of Directive REDII is essential to achieve the increased climate target as well as to protect our environment and health, reduce our energy dependency, and contribute to the EU's technological and industrial leadership along with the creation of jobs and economic growth.

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016PC0767R%2801%29

Proposal for Revision of Directive 2012/27/EU of the European Parliament and of the Council of 25th October 2012 on energy efficiency (EED)

Energy efficiency is a key area of action, without which the full decarbonization of the EU economy cannot be achieved. The Energy Efficiency Directive has led to the Union's current energy efficiency policy to capture the cost-effective energy saving opportunities. In December 2018, the Energy Efficiency Directive was amended as part of the 'Clean Energy for All Europeans package', in particular to include a new headline 2030 Union energy efficiency target of at least 32.5% (compared to projections of the expected energy use in 2030), and to extend and strengthen the energy savings obligation beyond 2020. While the 2020 energy efficiency target may have been achieved due to the exceptional circumstances created by the Covid-19 pandemic, the sum of national contributions communicated by Member States in the National Energy Climate Plans (NECP) falls short of the Union's level of ambition of 32.5% in 2030. The contributions collectively would lead to a reduction of 29,4% for final energy consumption (FEC) and 29,7% for primary energy consumption (PEC) compared to the projections from the 2007 reference scenario for 2030. This would translate in a collective ambition gap of 2.8 percentage points for primary energy consumption and 3.1 percentage points for final energy consumption for EU27.

On 15 July 2021, the European Commission announced the publication of the proposal for amendment to "Directive (EU) 2012/27 on the promotion of the use of energy in the context of the set of proposals "FIT for 55 – Implementation of the European Green Deal". The overall objective of the revision of the Directive is for each Member State to determine their indicative national contribution based on a formula of objective criteria and benchmarks, which reflect national circumstances. The revision of the Directive increases one of the key elements for driving energy efficiency improvements – the obligation on Member States to achieve annual energy savings in end-use consumption. At present, the obligation is set at 0.8% per year, but the proposal seeks to raise this figure to 1.5% as of 2024, through to 2030. As this targets energy end-use, it is expected to encourage greater efforts in key sectors such as buildings, industry and transport via the energy efficiency obligation schemes and the alternative policy measures.

Regarding Cyprus, the revision deviates from the efficiency obligation of 0.8% of the annual end-use consumption, and obliges Cyprus to achieve new annual efficiency, from 1st January 2021 to 31st December 2023, equivalent to 0.24% of the annual end-use consumption, on average during the most recent three-year period before 1st January 2019 (Article 8, Energy efficiency obligation[4]).

The amendments to Article 8 increase in the obligation rate to achieve new annual final energy savings from 1st January 2024 for all Member States, including Cyprus. In particular, new savings each year from 1st January 2024 to 31st December 2030 of 1.5% of annual final energy consumption, averaged over the three-year period prior to 1st January 2020.

Proposal for revision of Directive 2003/87/EC on establishing a scheme for greenhouse gas emission allowance trading within the Community (EU ETS)

The EU Emissions Trading System (ETS) puts a price on carbon and lowers the cap on emissions from certain economic sectors every year. It has successfully brought down emissions from power generation and energy-intensive industries by 42.8% in the past 16 years. Via the "FIT for 55" proposals, the Commission is proposing to lower the overall emission cap even further and increase its annual rate of reduction. The Commission is also proposing to phase out free emission allowances for aviation and align with the global Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and to include shipping emissions for the first time in the EU ETS. To address the lack of emissions reductions in road transport and buildings, a separate new emissions trading system is set up for fuel

[4] https://eur-lex.europa.eu/legal-content/EL/TXT/?uri=CELEX:52021PC0558

distribution for road transport and buildings. The Commission also proposes to increase the size of the Innovation and Modernization Funds.

To complement the substantial spending on climate in the EU budget, Member States should spend the entirety of their emissions trading revenues on climate and energy-related projects. A dedicated part of the revenues from the new system for road transport and buildings should address the possible social impact on vulnerable households, micro-enterprises and transport users.

Proposal for the revision of Regulation 347/2013 on guidelines for trans-European energy infrastructures

EU ambassadors endorsed a provisional political agreement on the revision of the Trans-European Networks for Energy (TEN-E) Regulation, reached between the Council presidency and the European Parliament's negotiators on 15 December 2021. The new rules for TEN-E will support the EU's climate objectives and the Green Deal.

The Council's and Parliament's negotiators agreed among other things to:

- End support for new natural gas and oil projects and introduce mandatory sustainability criteria for all projects.
- Simplify and accelerate permitting and authorisation procedures, notably by creating a unique point of contact per project for permitting and authorisation.
- Allow during a transitional period until 31st December 2029, for dedicated hydrogen assets converted from natural gas to be used to transport or store a pre-defined blend of hydrogen with natural gas or biomethane. Eligibility for EU financial assistance for such projects will end on 31 December 2027.
- Allow for projects no longer on the list of projects of common interest, but for which an application file has been accepted for examination by the competent authority, to maintain their rights and obligations in terms of faster permitting.
- In the case of Cyprus and Malta, that are still not interconnected to the trans-European gas network, allow for one interconnection per Member State under development or planning that has been granted the Project of Common Interest status and is necessary to secure permanent interconnection of Cyprus and Malta to the trans-European gas network.
- Add an explicit reference to Article 136 of the EU financial regulation that enumerates the situations where a person or entity shall be excluded from being selected for receiving EU financing, such as fraud, corruption or conduct related to criminal organizations.
- Include in the scope of the Regulation certain types of electrolysers that account for at least 50 MW capacity, provided by a single electrolyser or by a set of electrolysers that form a single, coordinated project and that contribute to sustainability. Electrolysers will not be eligible for financing.
- Emphasize the role of RES-generated energy regarding all assets, including smart gas grids.
- Create a possibility for non-binding cooperation in the field of offshore grid planning.
- Strengthen the governance process for TEN-E with a stronger role for relevant stakeholders.
- Include in the scope of the Regulation projects of mutual interest, where they are sustainable and demonstrate benefits at EU-level.

The revised Regulation will continue to ensure that new projects respond to market integration, competitiveness and security of supply objectives. It will continue to support projects that connect regions currently isolated from European energy markets, that strengthen existing cross-border interconnections and that promote cooperation with countries outside of the EU.

European Commission Public Consultation on hydrogen and decarbonizing the EU gas market

In the context of the European Green Deal's efforts for decarbonizing the EU gas market, the European Commission launched an open public consultation from 26 March to 18 June 2021 on the revision of Directive 2009/73/EC concerning common rules for the internal market in natural gas and Regulation 715/2009/EC on conditions for access to the natural gas transmission networks.

The objective of this consultation is to seek stakeholder views on how the Gas Directive and Gas Regulation should be revised as to facilitate the uptake of renewable and low-carbon gases and consumer empowerment, while ensuring an integrated, liquid and interoperable EU internal gas market. The issues that were raised during the consultation primarily relates primarily to cost-efficient decarbonization of the existing gas sector and the enabling a market for renewable and low carbon hydrogen allowing it to become a key component of the energy sector. Focus was also placed on facilitating the injection, transmission, distribution and trading of renewable and low carbon gases in the existing gas grid in the context of the wider energy system integration.

Proposal regarding the common rules for the internal markets in renewable and natural gases and in hydrogen[5]

Hydrogen is expected to be used mainly in the areas where electrification is not an option, including today's energy-intensive industry (e.g. refineries, fertilisers, steel making) and certain heavy-duty transport sectors (maritime transport, aviation, long distance heavy vehicles). Developing a dedicated hydrogen infrastructure is necessary to release the full potential of this energy carrier in specific end-use applications. The objective of promoting renewable and low-carbon gases is to decarbonize these sectors, increase the flexibility of the electricity system thanks to power-to-X technologies, strengthen security of supply by reducing dependence on natural gas imports and allow to store (and produce) electricity.

On 15 December 2021, the European Commission presented a proposal which seeks to facilitate the penetration of renewable and low-carbon gases into the energy system, enabling a shift from natural gas and to allow for these new gases to play their needed role towards the goal of EU climate neutrality in 2050.

Within this context, it addresses the following areas:

- Low level of customer engagement and protection in the green gas retail market.
- Hydrogen infrastructure and hydrogen markets: The current regulatory framework for gaseous energy carriers does not address the deployment of hydrogen as an independent energy carrier via dedicated hydrogen networks. There are no rules at EU level on tariff-based investments in networks, or on the ownership and operation of dedicated hydrogen networks. In addition, no harmonized rules on (pure) hydrogen quality exist. Consequently, barriers exist for the development of a cost-effective, cross-border hydrogen infrastructure and competitive hydrogen market.
- Renewable and low-carbon gases in the existing gas infrastructure and markets, and energy security: To untap their potential, access to the gas wholesale market, i.e. the virtual trading points, represents a key prerequisite. Abolishing costs for cross-border trade of those gases and facilitating connection of production facilities will also improve the business case.
- Network planning: Current network planning schemes and practices are deficient as there are discrepancies between the EU-wide ten-year network development plan ('TYNDP') and national network development plans ('NDP').

[5] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2021%3A0803%3AFIN

- Security of supply and storage: The measures proposed require Member States to explicitly make storages part of their security of supply risks assessments at regional level, including risks linked to the control of storage by entities from third countries.

EU Taxonomy Climate Delegated Act

The economic impact of the COVID-19 pandemic has highlighted the importance of sustainable development and the need to redirect capital flows towards sustainable projects in order to make our economies, businesses and societies, including our health systems, more resilient against climate and environmental shocks and risks. In this way, the European Green Deal can provide for a strong and sustainable recovery strategy and the EU taxonomy can serve as an instrument to facilitate the role of financial markets in delivering such a recovery.

This Delegated Regulation of 4th June 2021 specifies the technical screening criteria under which certain economic activities qualify as contributing substantially to climate change mitigation and climate change adaptation and for determining whether those economic activities cause significant harm to any of the other relevant environmental objectives. In accordance with Article 19 paragraph 5 of the Taxonomy Regulation, the Commission shall regularly review the technical screening criteria, including at least every three years in the case of activities labelled as transitional according to Article 10 paragraph 2, and where appropriate, amend this Delegated Regulation in line with scientific and technological developments. These updates shall be developed based on input from the Platform on Sustainable Finance and take into account the experience of financial market participants with the criteria and the impact on channeling of investments into environmentally sustainable economic activities.

Digitalizing the energy sector - EU action plan

The digitization of the energy sector can bring a lot of benefits, but it also brings risks and challenges. An EU policy response is required to ensure that investments in digital technologies in the energy sector contribute to the Green Deal and to a Europe that is fit for the digital age, and to ensure that it contributes to a single market for energy and for data, the document states.

The action plan for digitalizing the energy sector will outline how different EU policies and funding instruments will work together to exploit the benefits of the digital transformation of the energy system, while minimizing the inherent risks and environmental footprint of the respective digital solutions. The action plan will identify possible complementary actions to ensure synergies between them, for example in relation to data sharing for smart grids, smart buildings and smart cities. In particular, policy measures are needed to ensure that new markets based on energy data are open and competitive, while respecting ethics, data protection and privacy and cybersecurity, with consideration to the specificity of the energy sector. The increased energy demand for equipment, networks and Information and Communications Technology (ICT) services, needs to be adequately managed in the context of an integrated energy system.

In this context, on 4 October 2021, the Commission launched a public online consultation to collect information from stakeholders and individuals regarding the multiple facets of the digitalization of the energy system, which are addressed through targeted sections and questions. The main stakeholders come from the digital and energy value chains and include Transmission System Operators, Distribution System Operators, Suppliers, Small-Medium Enterprises, Aggregators, consumers, energy communities, energy-intensive industries, etc. The public online consultation was closed on 24th January 2022.

EUROPEAN COMMISSION: Tackling rising energy prices: A toolbox for action and support

The European Union, like many other regions in the world, is currently facing a sharp spike in energy prices in 2021. This spike is principally driven by increased global demand for energy at large and gas in particular, which is directly linked to the recovery of the financial crisis and the spread of the COVID-19 virus.

The EU's policy framework already allows Member States to immediately take a series of targeted measures to protect vulnerable consumers and mitigate the impacts on industry. In this context, the European Commission published a "toolbox" (COM(2021) 660) on 13 October 2021 which allows a co-ordinated approach to protect those most at risk. In addition to immediate measures, this Communication provides an outlook onto coordinated measures the Commission considers to take over the medium-term to ensure a better preparedness to gas price fluctuations while reducing the EU's dependence on fossil fuels.

The immediate measures that were proposed focus on protecting consumers and businesses. Twenty Member States have taken or are envisaging taking measures, often with a focus on mitigating the impact on the most vulnerable, the smaller businesses and energy intensive industries. This includes price caps and temporary tax breaks for vulnerable energy consumers, or vouchers and subsidies for consumers and businesses. Such immediate measures could be partly financed from the revenue generated from the auctions of the EU ETS allowances, levies and taxes on energy prices, as well as through environmental taxes.

- Emergency income support and avoiding disconnections from the grid:
  - Provide time limited compensation measures and direct support to energy-poor end-users including groups at risk, e.g. through vouchers or by covering parts of the energy bill, financed inter alia from the ETS revenues.
  - Put in place and/or maintain safeguards to avoid disconnections from the energy grid or defer payments temporarily.
  - Exchange best practices and coordinate measures through the Commission Energy poverty and vulnerable consumers coordination group.
- Taxation:
  - Reduce taxation rates for vulnerable populations, in a time limited and targeted way.
  - Consider shifting the financing of renewable support schemes away from levies to sources outside the electricity bill.
- State Aid:
  - Take measures reducing energy costs for all energy end-users. For example, aid in the form of reductions in harmonised environmental taxes up to the minima set in the Energy Taxation Directive can be implemented by Member States without prior notification to the Commission.
  - Provide aid to companies or industries to weather the crisis, in full compliance with the state aid framework, while using, as appropriate, the scope for flexibility provided for in the framework and encouraging transition away from fossil fuels.
  - Facilitate a wider access to RES power purchase agreements (PPAs) beyond large business, including SMEs. For instance, by aggregating end-user demand in compliance with competition rules.
  - Support of PPAs through flanking measures such as match-making, standard contracts and de-risking through InvestEU financial products.

With respect to medium-term measures, drawing on lessons learned from the crisis, the European Commission proposes measures that do not have an immediate impact on the current situation, but will strengthen preparedness for possible future price shocks, increase market integration and

resilience, empower consumers, enhance access to affordable energy and reduce the dependence on volatile fossil fuels.

- Storage capacity and a resilient EU energy system:
  - Both short to medium (batteries) and long-term storage (Power to X) options need to be exploited. Increasing electricity storage in particular supports integrating renewables into the system and smoothening peak demand. This could also lower electricity prices during peak times when generators using fossil fuels often set the price.
- Empowering and protecting end users:
  - Support consumer empowerment, providing consumers with information and offering options on how they can participate in the energy market.
  - Appoint a Supplier of Last Resort, in the event of market exit or failure of a supplier.
  - Further boost the role of consumer in the energy market, by contributing to improving demand response, as well as by developing self-supply via individual renewable energy and energy community arrangements.
- Stepping up investments in renewable energy and in energy efficiency:
  - Accelerate auctions for renewable energy and ensure the rapid and full implementation of relevant investments under the Recovery and Resilience Fund.
  - Speed up permitting by reducing lengthy and complex permit procedures which are one of the biggest obstacles to development and deployment of clean energy infrastructure.
  - Ramp up the production of equipment for RES which is another critical success factor for accelerating the deployment of RES.
  - Step up investments on energy efficiency and in buildings performance, which lowers energy consumption and energy costs and eases pressure on energy markets.
  - Step up investments in trans-European networks to avoid curtailment, based on Projects of Common Interest. These include interconnectors, removing national bottlenecks, storage and smartening the transmission and distribution grids.

Projects of Common Interest (PCI)

On 19 November 2021, the European Commission approved the 5th PCI list in the energy sector. These are key cross-border energy infrastructure projects for building a more integrated and resilient EU internal energy market and pursuing our energy and climate goals. The 5th PCI list includes 98 projects: 67 electricity transmission and storage projects, 20 gas projects, 6 CO2 network projects, and 5 smart grid projects.

The 67 electricity transmission and storage projects on the PCI list will make an important contribution to the increased renewable energy ambition under the European Green Deal, while 5 smart grid projects will improve efficiency of the networks, cross-border data coordination and safer grid management. No new gas infrastructure project is supported by the proposal. The selected gas projects, which have already been on the 4th PCI list, are projects that are necessary to ensure security of supply for all Member States. A strengthened sustainability assessment has led to a number of gas projects being dropped from the list.

Following its adoption by the Commission, the Delegated Act with the 5th PCI list will be submitted to the European Parliament and the Council. Both co-legislators have two months to either accept or reject the list - a process which can be extended by a further two months, if needed. Based on the applicable legal provisions, the co-legislators do not have the possibility to amend the draft list.

The PCI list is updated every two years, so that the projects that meet new needs are added and obsolete ones are deleted.

PCIs are benefited from faster licensing procedures and more favorable arrangements and are eligible for financial support from the "Connecting Europe Facility". In the 2014-2020 budget period, 107 PCIs have benefited from the "Connecting Europe Facility" programme. The allocated grants for works and studies are worth €4.7 billion in total.

When allocating "Connecting Europe Facility" Energy financial assistance, the Commission gave particular consideration to electricity projects, with the aim of making a major part of the financial assistance available to these projects over the period 2014 – 2020. So far, the majority of "Connecting Europe Facility" financial assistance has been allocated to electricity projects (including smart grids), which represent around 65% of total funding, double the amount dedicated to gas infrastructure.

The year 2021 marks the start of the new multiannual work programme from 2021-2027, with an indicative timetable and budget for the calls for proposals 2021-2023. The first "Connecting Europe Facility" Energy PCI call for proposal, making €785 million available to finance clean energy infrastructure projects, was open for submission from 7 September to 19 October 2021.

The projects that concern Cyprus and have been included in the 5th PCI list are the following:

- Israel - Cyprus - Greece cluster (currently referred to as the "EuroAsia Interconnector"). The cluster includes the following PCIs:
  - Electrical Interconnection between Hadera (Israel) and Kofinou (Cyprus) and
  - Electrical Interconnection between Kofinou (Cyprus) and Crete (Greece)
- Cluster of natural gas infrastructure and related equipment for the transmission of new gas resources from the offshore deposits of the Eastern Mediterranean, which includes the following PCI:
  - EastMed Pipeline - Natural gas pipeline outside Cyprus (offshore) to the mainland Greece via Crete, and
- Development of gas infrastructure in Cyprus, the so-called "Cyprus Gas2EU".

With respect to the Euroasia Inerconnector project and in particular the electrical interconnection between Israel and Cyprus, it is worth noting that in 2021, with Decision 136/2021 CERA decided to approve the agreement between the two regulatory authorities entitled "Joint Decision of the Hellenic Regulatory Authority for Energy (RAE) and the Cyprus Energy Regulatory Authority (CERA) with regards to clarifications and updates related to the Cross-Border Cost Allocation Agreement, of 10 October 2017, following the Commission Delegated Regulation (EU) 2020/389", which concerns updated issues pertaining to:

- The rewording of the definitions of the words "Project" or "PCI" of the CBCA Agreement of 10th October 2017,
- The implementation time schedule for PCI 3.10.2,
- Ensuring the interoperability of PCI 3.10.2 and the Hellenic Electricity Transmission System (HETS), and
- Confirmation of the already agreed cross-border cost allocation, namely that 37% of the agreed implementation cost (according to the CBCA Agreement of 10 October 2017) is allocated to Greece and 63% to Cyprus, provided that 50% of the project will be funded by third parties.

In addition to the PCIs, which are included in the 5th list of key energy infrastructure projects, the implementation of the 2000MW electricity interconnection between Egypt and Cyprus of the so-called 'EuroAfrica Interconnector' is in progress. The project provides the implementation of the Egypt-

Cyprus electricity interconnection, using high voltage continuous flow submarine cables (HVDV) with a transmission capacity of 2000MW. In addition, the project provides that the interconnection will be completed in two phases, with the first phase providing the capacity of 1000MW. The project EuroAfrica Interconnector has completed the preliminary cost benefit studies and is expected to provide significant economic and geopolitical benefits to the countries involved and contribute to the goal of removing the energy isolation. In 2021 CERA was in close contact with the Egyptian Energy Regulatory Authority "EGYPTERA" in order to track all the required actions and define the necessary procedures at the level of regulatory supervision, so that the implementation of this project will be promoted.

International Activities

Agency for the Cooperation of Energy Regulators (ACER)

The Agency for the Cooperation of Energy Regulators (ACER) (https://www.acer.europa.eu) is a community body with legal personality and was established under the provisions of Regulation 713/2009 of the European Parliament and of the Council of 13th July 2009 establishing an Agency for the Cooperation of Energy Regulators. ACER started to operate officially in March 2011 and is headquartered in Ljubljana, Slovenia.

The main objective of the Agency is to support and coordinate the actions of national regulatory authorities at the EU level, ensure the completion of the market for electricity and natural gas, and to align the regulatory frameworks within the framework of EU energy policy objectives.

ACER, also, advises the European Commission to take binding decisions for the Member States. ACER intervenes with suggestions for resolving disputes between regulators and it contributes to the creation of common pan-European codes (Network Codes).

ACER plays a key role in developing a European level network and market rules aimed at the enhancement of the competition. ACER coordinates regional and interregional initiatives that contribute to the integration of the market. ACER monitors the work of the European Network of Transmission System Operators (ENTSO) as well as the overall operation of the markets for natural gas and electricity and in particular the operation of the wholesale energy trade.

ACER consists of the Administrative Board, whose members are appointed by European institutions, the Board of Regulators, which is composed by senior representatives of the regulatory authorities of the EU and the Board of Appeal, which is affiliated with ACER but it is independent of its administrative and regulatory structures and before which appeals against ACER decisions are brought to be heard.

Cyprus is represented in the Board of Regulators by the Chairman and the Vice-Chairman of CERA and/or authorized staff of the sector of International Affairs and Energy Policy. During 2021, CERA participated in the 97th, 98th, 99th, 100th, 101st, 102nd, 103rd, and 104th ACER General Assembly meetings. Due to the measures for the containment of the COVID-19 pandemic apart from the 88th ACER General Assembly meeting, all the other ACER General Assembly meetings were held online.

Besides the Board of Regulator's meetings, CERA participated in various institutionalized working groups related to electricity and gas infrastructure, cross-border issues, operation of the energy market, pandemic management, consumers and more.

Working Group on the implementation of the Regulation on wholesale energy market integrity and transparency (ACER REMIT Committee - ARC)

The main objective of ARC is to facilitate the discussion among REMIT experts to provide support to the ACER Director regarding the following key responsibilities of ACER within REMIT:

- promote a framework for cooperation between ACER and regulatory authorities on market monitoring issues,
- provide technical information for ACER's data collection and data sharing,
- provide a forum where ACER and the regulatory authorities can exchange opinions, allowing regulatory authorities to perform their duties under REMIT in a coordinated and consistent manner,
- promotion of a common culture regarding the monitoring of the market integrity and research,
- develop collaborations with international surveillance agencies.

The Working Group is divided into the following Task Forces:

- REMIT Policy Task Force (RP TF) - Provides guidance to the National Regulatory Authorities (NRAs) on the application of REMIT policies and monitors the NRAs' progress.
- Market Monitoring Standing Committee (MM SC) - Provides a forum to debate the application of REMIT to specific market abuse cases, on the surveillance of wholesale energy markets and the coordination on REMIT cases.
- Market Data Standing Committee (MD SC) - Focuses on the analysis of REMIT data collected via the data reporting process and the improvement of data quality.
- REMIT Information Security Implementation Group (RISIG) - The purpose of the meetings is to provide support, advice and coordination on the definition and implementation of ACER's REMIT information security policy.
- ARIS NRA User Group (ANUG) - Provides support to the end users of ACER's REMIT Information System (ARIS).

In 2021, CERA participated in the 5th ARC meeting, the 15th and 19th RP TF meeting, the 25th RISIG meeting and the 5th MD SC meeting.

ACER Electricity Working Group (AEWG)

The Working Group focuses on issues related to the full implementation of the Network Codes and Guidelines developed since 2011 (which form the basis for the Internal Electricity Market) as well as the efficient and safe integration of RES generation.

The AEWG carries out the activities assigned to them in ACER's programming document and any activities assigned to them by the Board of Regulators (BoR) and the Director.

In addition, prior to the submission of draft opinions, recommendations and decisions requiring a favourable opinion of the Board of Regulators, the Director submits proposals for draft opinions, recommendations or decisions to the Electricity Working Group for consultation.

To better support the market integration process, the Electricity Working Group is divided into the following Task Forces:

- System Operation and Grid Connection Task Force: develops, implements and monitors the grid connection and system operation rules for full harmonization at European level.

- Forward Capacity Allocation Task Force (FCA TF): ensures effective implementation of Regulation 2016/1719.
- Capacity Allocation and Congestion Management Task Force (CACM TF): ensures effective implementation of Regulation 2015/2022.
- Electricity Balancing Task Force (BAL TF): ensures effective implementation of Regulation 2017/2195.
- Infrastructure Task Force (INF TF): ensures an efficient and transparent network development.
- Adequacy and Capacity Remuneration Mechanism Task Force (Adequacy and CRM TF): responsible for the development, implementation and monitoring of sound and transparent methodologies identifying resource gaps in Europe.
- Future Policy & Governance Task Force (FP TF)

In 2021, CERA participated in the 98th, 101st, 102nd, and 103rd AEWG meeting, the 80th, 83rd and 85th INF TF meeting.

ACER Gas Working Group (AGWG)

ACER's Gas Department is working towards meeting all the challenges associated with creating a well-functioning, competitive, integrated, secure and sustainable European gas market, delivering tangible benefits to the European consumers. AGWG's main objectives include aligning national market and network operation rules for gas as well as making cross-border investment in energy infrastructure easier.

The AGWG carries out the activities assigned to them in ACER's programming document and any activities assigned to them by the BoR and the Director.

In addition, prior to the submission of draft opinions, recommendations and decisions requiring a favourable opinion of the Board of Regulators, the Director submits proposals for draft opinions, recommendations or decisions to the Gas Working Group for consultation.

To better support the market integration process, the Gas Working Group is divided into the following Task Forces:

- Gas Balancing Task Force (BAL TF): ensures effective implementation of Regulation 312/2014.
- Capacity Allocation Mechanism and Congestion Management Task Force (CAM TF): ensures effective implementation of Regulation 2017/459.
- Gas infrastructure Task Force (GI TF): ensures the efficient, safe and secure operation of the gas industry infrastructure. Assesses how gas infrastructure developments may influence market integrity, competition, security of gas supply and sustainability.
- Interoperability Task Force (INT TF): ensures effective implementation of Regulation 2015/703.
- Gas Tariffs Task Force (TAR TF)
- Gas Target Model Task Force (GTM TF)

In 2021, CERA participated in the 101st and 102nd AGWG meeting and the 67th and 71st GI TF meeting.

Council of European Energy Regulators (CEER)

The Council of European Energy Regulators (CEER) (http://www.ceer.eu/) was established in 2000 and was the first autonomous community of independent energy regulators in Europe. CEER is a non-profit organization based in Brussels.

The main objective of CEER is to promote an integrated, competitive, efficient and sustainable internal market in natural gas and electricity in Europe. Through CEER national regulators have the opportunity to work together and exchange information and best practices. In addition, CEER provides assistance to the national regulatory authorities of Europe and represents their voice in the European Union as well as internationally.

CEER works very closely with ACER. CEER is also a member of the International Confederation of Energy Regulators (ICER), which brings together similar organizations from around the world, including NARUC (America), ERRA (Central / Eastern Europe) and MEDREG (Mediterranean region).

The Council consists of the General Assembly and the Board of Directors. CEER organizes its work through Working Groups, which can be supported by Work Streams that are in charge of specific matters. CERA participated in various institutionalized working groups related to electricity and gas infrastructure, cross-border issues, operation of the energy market, consumers and more.

The Council meets regularly, usually in Brussels. Members of CERA and/or authorized staff of the sector of International Affairs and Energy Policy represent Cyprus in these meetings. In 2020, CERA participated in the 160th, 161st, 162nd, 163rd, 164th, 165th, 166th and 167th CEER General Assembly meetings. Due to the measures for the containment of the COVID-19 pandemic apart from CEER's 152nd General Assembly meeting, all other CEER meetings were held online.

CERA also participated in various institutionalized CEER working groups related to electricity and gas infrastructure, cross-border issues, operation of the energy market, consumers and more.

CEER Electricity Working Group (CEWG)

The Electricity Working Group covers all topics related to the wholesale electricity markets. Certain issues are discussed annually or bi-annually, such as renewable energy support schemes and regulatory frameworks. Other areas where the EWG focused on in 2021 were tendering procedures to determine the level of support for renewables, offshore renewable energy and researching aspects for a future-proof wholesale electricity market design.

The EWG has four work streams:

- Renewables (RES): responsible for issues related to renewable energy.
- Future Policy (FP): responsible for market design issues and related policy initiatives.
- Incentives Regulation and Efficiency Benchmarking (IRB): responsible for issues related to incentives regulation, analyzing the European regulatory frameworks and TSO cost-efficiency benchmarking, and
- Infrastructure (INF): responsible for infrastructure and network planning issues.

In 2021, CERA participated in the 166th CEWG meeting and the 59th and 60th IRB meeting. All the meetings were conducted online.

CEER Gas Working Group (CGWG WG)

The Gas Working Group is responsible for addressing issues related to the European gas transmission systems and the EU gas market. The GWG cooperates closely with the European Commission, ENTSOG, GSE, GLE, GIE, Eurogas and the other CEER Working Groups on number of issues. The work of the Group involves a set of measures for hydrogen and gas market decarbonization along the legislative process, long-term energy storage, gas infrastructure repurposing (costs and planning), and the role of LNG in the new energy market.

The Gas Working Group has four work streams:

- Regulatory Gas Strategy (RGS)
- Liquefied Natural Gas (LNG)
- Gas Decarbonization Legislation (GDL)
- Gas Infrastructure (GI)

In 2021, CERA participated in the 176th CGWG meeting. All the meetings were conducted online.

Distribution Systems Working Group (DS WG)

The Distribution Working Group focuses on the distribution level of the electricity and gas sector by examining current and upcoming challenges. Some of the prevailing topics are flexibility, the impact of electric vehicles on the distribution grid, data shared by DSOs, cybersecurity, and finally, research into new connections and flexible connections.

The DS WG has two work streams, though much of its work is done via small project and drafting teams:

- Energy Quality of Supply (EQS)
- Cybersecurity (CS)

In 2021, CERA participated in the 72nd, 73rd online DS WG meetings, but also in work stream with participation in the 105th EQS WS meeting and the 77th, 78th, 79th and 80th online CS WS meetings.

Customers and Retail Markets Working Group (CRM WG)

Consumer protection and monitoring competitive retail markets will continue to be a major focus of CEER Customers and Retail Markets Working Group. Emphasis is given to enabling consumers to engage more effectively in energy markets and on energy regulating issues. The work of the Working Group extends to new developments and trends on consumer empowerment and protection, monitoring of retail markets based on national indicators (Retail Market Monitoring report), progress toward achieving well-functioning retail energy markets by 2025 (Roadmap to 2025 for Well-Functioning Retail Energy Markets), implications in the regulation and protection of consumers of innovative business models, products and services emerging in the energy sector and beyond. The Group also works on issues related to tools of digital comparison and cybersecurity as part of the cross-sectoral and all-inclusive cooperation initiative.

Customers and Retail Markets Working Group has five work streams:

- Customer Empowerment (CEM)

- Innovation and Retail Markets (IRM)
- Monitoring Consumer Empowerment (MCE)
- Monitoring Retail Markets (MRM)
- Retail Market Roadmap (RMR)

CERA participated in the 148th CRM WG meeting, the 141st and 143rd CEM WS meeting and the 27th RMR WS meeting. All the above meetings were conducted online.

CEER Market Integrity and Transparency Working Group (CMIT WG)

The Market Integrity and Transparency Working Group (MIT WG) addresses the issues of transparency and supervision of energy trading including the interrelationship of wholesale energy market legislation and relevant financial market legislation.

The Market Integrity and Transparency Working Group has one work stream:

- Wholesale Energy Market Work Stream (WEM WS)

CERA participated in the 91st and 92nd CMIT WG meetings. All the above meetings were conducted online.

COVID-19 Ad hoc Working Group

The Working Group focuses on mapping the various short-, medium- and long-term effects of the COVID-19 crisis on the energy system. Through discussions, members can exchange information, experiences, and best practices regarding the crisis and crisis management. The objective is to identify "lessons learned" and best practices through a horizontal approach aimed at contributing to the achievement of the objectives of the other CEER Working Groups.

CERA participated in the 5th, 8th, 9th and 10th online COVID-19 Ad hoc WG meeting in 2021. All the above meetings were conducted online.

Regulatory Benchmarking Work Stream (RBM WS)

The Work Stream engages in regulatory approaches that were adopted by EU members aimed at the introduction of innovative strategies in the energy sector and informing of the need for regulatory reforms within the definition of Dynamic Regulation.

In 2021, CERA participated in the 34th and 35th online RBM WS meeting.

Association of Mediterranean Energy Regulators (MEDREG)

Association of Mediterranean Energy Regulators (MEDREG) (http://medreg-regulators.org/) was established in 2007, under Italian law and is headquartered in Milan. It currently consists of 27 Energy Regulators originated from 22 countries, (Albania (ERE), Algeria (CREG and ARH), Bosnia and Herzegovina (SERC), Croatia (HERA), Cyprus (CERA), Egypt (EgyptEra and GASREG), France (CRE), Greece

(RAE), Israel (PUA and NGA), Italy (AEEGSI), Jordan (EMRC and MEMR), Lebanon (LCEC), Libya (ME), Malta (REWS), Montenegro (REGAGEN), Morocco (ANRE and MEM), Palestine (PERC), Portugal (ERSE), Slovenia (AGEN-RS), Spain (CNMC), Tunisia (MIT) and Turkey (EMRA)).

MEDREG promotes a transparent, stable and harmonised regulatory framework in the Mediterranean region, with an emphasis on market integration and infrastructure investment, as well as consumer protection and stakeholder cooperation in the Mediterranean basin, with a view to implementing the conditions to create a future Mediterranean Energy Community (bottom-up approach).

MEDREG is actively supported by the European Union and CEER. The General Assembly of MEDREG meets twice a year.

In 2021, CERA participated in the 31st and 32nd MEDREG General Assembly meetings. Due to the measures for the containment of the coronavirus pandemic both General Assemblies of MEDREG were held online.

At the same time, CERA participated in institutionalized working groups on institutional issues, electricity, gas, renewable energy sources and energy efficiency and consumers.

Institutional Working Group (INS WG)

The objective of the Working Group is the periodic assessments of the current status of regulatory frameworks and carrying out case studies, where necessary, but also supporting regulatory authorities in training and exchange of experiences and other skills development tools. The Institutional Working Group also performs peer reviews to for its members' regulatory activities, while supporting the institutional development and establishment of MEDREG.

Deliverables 2021:

- Study on the interlink between Good Regulatory principles and the energy transformation challenge

CERA participated in the 30th and 31st online INS WG meeting.

Consumer Working Group (CUS WG)

The Consumer WG works to enhance the protection of household consumers in the MEDREG countries. It identifies and promotes best practices in consumer protection, including vulnerable customers and quality of service of electricity and gas, from the point of view of final consumers.

Deliverables 2021:

- Trilateral Workshop on Handling Technical and Non-Technical Losses of electricity
- Report on the role digitization and impact on consumer Issues

CERA participated in the 18th and 19th online CUS WG meeting.

Renewable Energy Sources and Energy Efficiency (RES WG)

The Renewable Energy Sources and Energy Efficiency Working Group (RES WG) focuses on the legislative and regulatory mechanisms used to promote renewable electricity generation, energy efficiency and RES deployment in the Mediterranean area, with attention to off-grid solutions and independent power producers (IPPs).

Deliverables 2021:

- Energy efficiency programmes

CERA participated in the 30th online RES WG meeting.

Natural Gas Working Group (GAS WG)

The Natural Gas Working Group assesses the current status of natural gas and liquefied natural gas markets in Mediterranean countries, their relevant regulatory frameworks and possible evolutions. The Group prepares the Guidelines of Good Practice (GGP) and recommendations for the development of an integrated, competitive, secure and effective gas market in the MEDREG countries.

Deliverables 2021:

- Analysis of gas infrastructure to improve flexibility and interoperability of energy systems

CERA participated in the 29th and 30th online GAS WG meeting.

Electricity Working Group (ELE WG)

The Electricity Working Group (ELE WG) is responsible for assessing the current status of electricity markets and regulatory frameworks in MEDREG countries and their possible developments. The mission of the Working Group is to identify and propose basic requirements that will lead to the compatibility of electricity regulation in the MEDREG region, by developing a competitive, strengthened and functional regional electricity market in the region.

Deliverables 2021:

- Security of supply

CERA participated in the 30th and 31st online ELE WG meeting.

Energy Community (European Community)

The Energy Community (European Community) (https://www.energy-community.org) was established by the International Treaty signed in Athens in 2005. The Treaty establishing the Energy Community unites the European Union and the countries of the region of Southeastern Europe and the Black Sea.

Main objectives of the Energy Community are to attract investments in energy generation and networks, to ensure a stable and sustainable energy supply, to contribute to the integration of the energy market, to enhance security of supply, to promote environmental protection and to strengthen the regional competition.

The Energy Community consists of nine Contracting Parties (Albania, Bosnia-Herzegovina, Kosovo, Northern Macedonia, Georgia, Moldova, Montenegro, Serbia and Ukraine), three Observers (Armenia, Norway and Turkey) and nineteen Participating EU Member States.

Energy Community Regulatory Board (ECRB)

The Energy Community Regulatory Board (ECRB) (https://www.energy-community.org) is the coordination platform for the exchange of knowledge and the development of best practices for the regulated electricity and natural gas markets in the Energy Community. The mission of ECRB is to facilitate the development of competitive and integrated electricity and natural gas markets for the benefit of the Energy Community, the businesses and the citizens.

According to the Treaty, the Regulatory Board:

- advises the Council of Ministers or the Permanent High Level Group on the details of legal, technical and regulatory rules,
- issues recommendations on cross-border disputes between two or more regulatory authorities, at the request of any of them,
- takes measures, if authorized accordingly by the Council of Ministers,
- adopts Procedural Acts.

ECRB is composed of representatives of the regulatory authorities of the eight Contracting Parties (Albania (ERE), Bosnia-Herzegovina (SERC), Former Yugoslav Republic of Macedonia (ERC), Montenegro (REGAGEN), Serbia (AERS), Moldavia (ANRE), Ukraine (NEURC) and Kosovo (ERO)). ECRB, also, includes ten representatives of non-voting regulators, the so-called Participants (Austria (E-Control), Bulgaria (SEWRC), Croatia (HERA), Cyprus (CERA), Germany (BNetzA), Greece (RAE), Hungary (MEKH), Italy (AEEGSI), Romania (ANRE) and one representative of ACER). In addition, the observer status has been assigned to two regulatory authorities (Georgia (GNERC) and Turkey (EMRA)).

European Commission Forum

The European Commission established in 1998 the European Electricity Regulatory Forum (Florence Forum) in order to create a common electricity market within the EU internal market. One year later, the European Natural Gas Regulatory Forum (Madrid Forum), equivalent of the Florence Forum for the natural gas sector, was established. The European Regulatory Forums are convened once or twice a year with the participation of the Commission, the Member States, the members of the European Parliament, representatives of energy regulators and transmission system operators, representatives of organizations of traders, consumers, transmission system users and organized energy markets and have now become informal Community advisory bodies and areas for highlighting internal market problems and promoting solutions to them. The European Regulatory Forums in Florence and Madrid were the basis for the establishment of the European Energy Forum of Citizens (London Forum), which provides support to the consumers for energy market problems and seeks solutions. They were also the basis for the establishment of the European Sustainable Energy Regulatory Forum (Bucharest Forum), which deals with the promotion of sustainable energy.

CERA regularly attends the European Energy Forums and participates in them. In October 2020, CERA participated in the 34th European Natural Gas Regulatory Forum, which was held online.

Other International Activities

In the reporting year, CERA participated with presentations in the following international activities:

- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Strategies for Cyprus' Transition to Hydrogen Economy", on 18 January 2021 in the context of the Congress "Possibilities & prospects of using Green Hydrogen", which took place at the Institute for Alternative Policies, Athens, Greece.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Energy Strategies towards Hydrogen Economy" at the online seminar "Green Hydrogen and its Application" which was organized on 13 September 2021 by the Pontifical Catholic University of Peru (PUPC) in Lima, Peru.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Challenges towards carbon neutral energy systems", in the context of the 85th Thessaloniki International Fair which took place on 15 September 2021, in Thessaloniki, Greece.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Energy transition regulatory challenges", on 29 September 2021 for the 6th "HAEE Energy Transition" Symposium, which was held in Athens, Greece.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Southern Regulators Informal Group - Aligning Interests & Strategies", at the first Regulator meeting of the "Southern Regulators Informal Group (SRIG) which was held on 20 October 2021 in Athens, Greece.

Local Activities

In the year under review, CERA participated with presentations in the following local activities:

- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Long-term Energy Strategy for Cyprus", on 19 January 2021 in the context of the Cyprus' Long-Term Sustainable Energy Strategy & Investment Opportunities" Congress in Nicosia, Cyprus.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, "Electricity Tariffs" to the Parliamentary Committee on Energy, Trade, Industry of the House of Representatives on 07 September 2021, Nicosia, Cyprus.
- Greeting by Dr. Andreas Poullikkas, Chairman of CERA, at the 9th Energy Symposium on 04 November 2021 in Nicosia, Cyprus.
- Speech by Dr. Andreas Poullikkas, Chairman of CERA, "The regulator view: The Cyprus future energy landscape", in the context of the Eastern Mediterranean Conference & Exhibition (EMC) Conference, which was held on 10 November 2021 in Nicosia, Cyprus.

Research and Development

Co-financed and other projects in which CERA participates

Integrated Platform for Increased FLEXIbility in smart TRANSmission grids with STORage Entities and large penetration of Renewable Energy Sources (FLEXITRANSTORE)

The FLEXITRANSTORE research project is an EU-funded project under HORIZON 2020 (Grant Agreement No. 774407), which started on 1st November 2017 and will last 48 months, namely until 31 October 2021.

In 2021, the project was granted a 6-month extension due to the delays that were presented in the sending the equipment and installing and commissioning the pilot systems as a result of the measures taken to restrict the spread of the COVID-19 virus. Thus, the project will run until the end of April 2022.

The project consortium consists of 30 partners, including transmission and distribution system operators, energy regulators, service providers and manufacturers. The partners of Cyprus are TSOC, DSO, the University of Cyprus and CERA.

In 2021, the 6th consortium plenary meeting was held on 2 February 2021 and the 7th consortium plenary meeting was held on 11 October 2021. CERA was represented at both meetings.

The FLEXITRANSTORE research project is essentially a platform that will offer flexibility in smart networks with storage and high infiltration of renewable energy sources. The program aims to contribute to the development of a pan-European transmission network with high flexibility and high levels of interconnection.

Through the program, 8 pilot installations (Greece, Bulgaria, Cyprus, Slovenia and Spain), innovative smart grid technologies, control and storage methods and new market approaches were developed, installed and are currently being tested. One of these installations was installed at the Athienou substation in Cyprus. It is an Active Distribution Node (ADN) in the Athienou substation, with a storage system capacity of 1MW and energy up to 2MWHh, in combination with additional facilities related to hardware and software at various points for the integration, monitoring and control of systems. Most of them are installed at the substation as the boundary point between the transmission and distribution systems with the aim of utilizing the substation as an ADN by the system operators (TSOC and DSO).

The installation at the Athienou substation was carried out in 2021. It will operate at least until the end of the FLEXITRANSTORE project (30 April 2022).

Empowering the Cyprus power system with sustainable and intelligent technologies (EMPOWER)

The EMPOWER project is part of the RESTART 2016-2020 programs of the Research and Innovation Foundation (RIF) for Research, Technological Development and Innovation.

EMPOWER brings together all key stakeholders in the electricity sector in Cyprus with the aim of developing sustainable and intelligent technologies and tools for the electricity system of Cyprus. EMPOWER aims to improve the efficiency of Research, Technological Development and Innovation in Cyprus, focusing on the energy priority sector.

The general objectives of EMPOWER are:

- Evolution of the electricity system of Cyprus
- Increase of the share of RES in the energy mix of Cyprus
- Develop important ties and synergies between members of the quadruple helix (research centers, tertiary education institutions, companies, policy makers and other stakeholders)

In 2021, CERA was an active participant in all the EMPOWER joint consortium meetings and at all the meetings of WP D6.3., in which CERA is the Task Leader. WP D6.3. aims at providing a detailed study on the basic technical requirements for the interconnection of storage, the study of the existing national and European legislation, as well as the development of a framework for ancillary services, to prepare the electricity market for the mass installation of the storage systems.

Integration of innovative green technologies on existing public transportation buses for 5% to 30% fuel savings (BUSFUELSAVINGS)

The BUSFUELSAVINGS project is part of the RESTART 2016-2020 programs of the Research and Innovation Foundation for Research, Technological Development and Innovation.

The public transport of Cyprus consists of 2600 buses, which consume approximately 60,000,000 liters of diesel per year. High fuel consumption is a significant cost for transport companies struggling to survive through government subsidies. Additionally, the massive use of diesel causes environmental pollution with all the negative effects on the quality of life of society.

The aim of the BUSFUELSAVINGS project is to reduce this problem by reducing bus fuel consumption by 5-30 % and reducing exhaust emissions (particles, unburnt hydrocarbons, CO2, CO, NOx) by >20 %. The only possible way to achieve this goal is to increase the engine efficiency of existing buses by integrating on existing engines an innovative, green technology, such as the HHO gas generator.

This a project of large-scale and multidisciplinary collaboration, which aims at enhancing the effectiveness of the Research, Technological Development and Innovation system and the interconnection with the productive base in transport. It is expected to bring concrete results to strengthen the competitiveness of the economy and will have an impact on economic growth and quality of life. It will, also, create new businesses and jobs that are expected to contribute to address the unemployment.

In 2021, CERA was an active participant in all the consortium meetings and at the BUSFUELSAVINGS technical meetings.

Storage and Renewables Electrifying Cyprus (SREC)

The SREC project is part of the RESTART 2016-2020 programs of the Research and Innovation Foundation for Research, Technological Development and Innovation. The project was finalized in November 2021. All the objectives of the project were successfully achieved.

Energy storage is a methodology that necessarily accompanies the conversion and use of energy from renewable sources. It is a significant parameter in the effort to increase the share of RES injected into the networks. In isolated networks, such as the one in Cyprus, the need for storage is a high priority for reasons of security of supply, utilization of infrastructure, inflow of RES, reduction of emissions, domestic added value and sustainability.

The purpose of the SREC project was the development and implementation of a regulatory framework that permits the operation and inclusion to the network of storage projects as well as the positioning and licensing of 2 medium-scale storage projects.

Having regard to all the important operating parameters of the electricity network and the existing power plants, an algorithm was developed to simulate the effects of various storage - hybrid power plants scenarios that are applied to the independent network of Cyprus. The main areas of the project that have been completed are:

- Selection of most appropriate storage technologies according to scale and application.
- Selection of hybridization storage technologies with RES and conventional power production plants for effective and innovative combinations.
- Development and testing of dynamic simulation models for the proposed technologies.
- Use of dynamic simulation models to conduct various studies on the dynamic efficiency of electricity systems and analysis of the dynamic behavior of the proposed technologies and their

impact on the electricity system of Cyprus.

- Simulation of the operation of system of Cyprus for the coming year with and without the proposed hybrid/storage solution with high analysis data provided by TSOC.
- Production cost and income analyses to evaluate the value of the technologies in the electricity system.

CERA reviewed the basic principles, methodology and criteria for regulating energy storage systems/ technologies regarding the licensing, operation, development of special costing, by proposing incentives for the promotion of such technologies and mechanisms that will be introduced for the development of such technologies.

Two medium-sized storage units for pumped-hydro and battery storage technologies were developed and submitted to CERA for approval, along with the relevant business plans, environmental impact assessment, grid connection design and detailed facility engineering.

The following results were achieved during the project:

- Cyprus must use a 500MW storage capacity to achieve 40% RES penetration and 25% reduction in energy costs.
- Existing water tanks will help to achieve the above targets with 40% reduced cost due to the use of Cyprus' existing reserves.
- It has been proven that the construction of new conventional power plants is not necessary since the storage units will decrease the units required for network safety purposes and are idle.
- Certain proposals have been created for the costing of stored electricity to allow both the penetration of RES and the development of storage units without this affecting the cost paid by consumers and without the need for government financial support.
- Collaborations have been achieved with organizations that provide know-how and an interest has been expressed for participation in the future development of the installations.
- Investors have shown an interest in participating in the construction and operation of energy storage plants.

In 2021, CERA was an active participant in all the consortium meetings and at the technical meetings of the SREC project. In addition, it actively participated in the two "Storage & Renewables Electrifying Cyprus" workshops. The main scientific and technological results and general energy storage issues were presented during these workshops.

Intelligent light sensing for next generation smart grids (LightSense)

The LightSense project is part of the RESTART 2016-2020 programs of the Research and Innovation Foundation for Research, Technological Development and Innovation.

The primary goal of the project is to holistically address the open challenges related to the availability, fault tolerance and security of energy distribution networks in Cyprus, with an emphasis on timely fault prevention and intrusion detection. In particular, it aims at:

- utilizing the capabilities of the optical measurement of the optical fibers that are installed in the network. The aim is to monitor continuously, remotely and automatically the condition and the integrity of the network infrastructure of the main energy supplier in Cyprus.
- Extracting the critical information, such as the exact location of faults, including hotspots, and provision of predictions on impending occurrence and fault detection, in order to ensure the

reliability and uninterrupted supply of energy.

- addressing the lack of network security and reliability policies that are adapted to real network data, in the context of active monitoring of future smart networks at an operational level.
- continuous and smart monitoring of the internet infrastructure to prevent unauthorized access or sabotage.

In 2021, CERA was an active participant in all the consortium meetings of the LIGHTSENSE project.

Modernizing the distribution grid for enabling high penetration of photovoltaic electricity through Advanced data analytic operational observability and management (ELECTRA)

The ELECTRA project is part of the RESTART 2016-2020 programs of the Research and Innovation Foundation for Research, Technological Development and Innovation.

Solar energy is vital for the future energy mix of Cyprus and in order to enable a larger scale development and to increase the competitiveness of photovoltaic technology (technical and economical), it is important to ensure, above all, their optimal integration into the network.

This is in line with the objectives of this call for smart development, S3Cy, Priority Area 2. Energy, focus area: 2.4.3 Energy transmission and distribution networks.

This is the background under which this project was launched for the creation of a strong research network, which will actively participate in the goal of applied research and specifically ensure the optimal integration of photovoltaic systems in the distribution network, securing high levels of penetration through the active participation of all the key components of the quadruple propeller (research, companies, end-user representatives, policy makers).

The integrated project is a project of large-scale and multidisciplinary collaboration that primarily addresses the timely challenge of reducing carbon in a holistic approach, allowing higher shares of photovoltaic systems in the distribution network. Coordinated and integrated project activities for the development and validation of an innovative adaptive multi-service distribution management architecture that enables the efficient, resilient and secure operation of future distribution systems with high distributed energy penetration.

Finally, the proposed project will try to enhance the research activities for the actual release of the real potential of photovoltaic systems and their high penetration into the energy mix.

In 2021, CERA was an active participant in all the consortium meetings of the ELECTRA project.

Transmission Cost Benchmarking project 2021 (TCB21)

TCB21, is a cost benchmarking project that is performed by CEER and its consultant Sumiscid and its main objective is the performance of a stable and regular process for performance assessment of energy transmission system operators (TSOs). The project covers both electricity and natural gas transmission and involves in total 46 TSOs from 16 countries in Europe. The project is extremely ambitious in an effort to mobilize national regulatory authorities, TSOs in a joint effort to develop robust and comprehensive data and models. During the course of the project, TSOs are requested to provide all the data pertaining to their capital flows and costs for assets, which the Regulatory Authorities will later assess. The first cost benchmarking project was performed in 2018 (TCB18), while the project is performed every three years.

CERA participates in this CEER initiative for the first time in 2021 with an active presence in all the project's meetings. The meetings aimed at helping national regulatory authorities familiarize themselves with the tools of the project for proper data validation (Data Validation Protocol) of transmission networks in Cyprus, which will be used to develop a cost-efficiency benchmarking model.

Participation in the Standardization of ACER terminology

In 2021, CERA participated in the joint effort of ACER, the Center for the Bodies of the European Union (CdT) and regulatory authorities to provide a common terminology database in the EU languages.

ACER invited national regulatory authorities to contribute in the creation of a terminology database in the EU language in the energy policy sector. CERA stated its availability and readiness to participate in this project.

The creation of a consolidated terminology database from English to other EU languages will support the development of a multi-language terminology platform, will be enriched and edited over time.

The objective of this project is to align the translation and use of technical terms by sharing the terminology data between regulatory authorities, EU institutional bodies and organizations, and to create a standardized terminology database for ACER translations.

4 ELECTRICITY MARKET

Introduction

CERA was established based on the provisions of the Law Regulating the Electricity Market of 2003. It is an independent public authority which is competent for granting licenses to participants involved in the generation, transmission, distribution and supply of electricity.

The activities of generation and supply of electricity concern competitive activities, meaning that the interested parties are given the opportunity, after obtaining the relevant licenses, to be involved and participate on a competitive basis in the electricity market and according to the regulations set by CERA, as independent producers and/or as independent electricity suppliers.

Although the activities of generation and supply belong to the competitive part of the electricity market, the EAC as producer and supplier, is regulated by CERA, because it occupies at this stage a dominant position in the market. More specifically, CERA controls and regulates its economic parameters, so as to achieve a healthy environment, allowing new independent producers and suppliers to enter in the market and compete on equal terms.

The activities of transmission and distribution of electricity are inherently monopolistic activities. These activities concern the operation and ownership of the transmission and distribution system. The transmission and distribution systems are overhead lines and/or underground cables for the transmission and distribution of electricity from power plants (power plants from conventional generating stations and RES stations) to the end consumers for consumption.

The ownership of the transmission and distribution systems belongs to EAC, which obtained the relevant licenses from CERA as OTS and ODS, respectively.

The transmission system operation belongs to TSOC following the granting of the relevant license by CERA, which is a legal entity governed by public law. The distribution system operation belongs to DSO, following the granting of the relevant license by CERA, which belongs to EAC.

Measure of Market Concentration - Herfindahl - Hirschman Index

During the period of this report, Cyprus is in a transitory regulation of the electricity market during which certain transactions are permitted. In particular, in the context of the market opening transitory period, RES producers and electricity suppliers are active. In the first quarter of 2021, in addition to the "EAC Supply", another two suppliers entered the electricity supply sector. These two private suppliers buy green energy which is produced by RES producers and primarily supply commercial and industrial electricity customers under bilateral contracts.

As a measure of supplier concentration in the competitive Cyprus electricity market, the Herfindahl-Hirschman Index (HHI) was used, which is calculated by taking the sum of the squared market shares of all the firms in the market. Market shares can be calculated based on final consumption and the number of customers or the metering points. For a result of

- HHI = 0 – 1500, is considered a competitive marketplace,
- HHI = 1500 – 2500, is considered moderately competitive (a partially concentrated market),
- HHI > 2500, cannot be considered competitive (highly concentrated marketplace)
- HHI = 10000, is considered a monopoly, i.e., with only one participant in the marketplace.

EAC is currently, in effect, the largest and only vertically integrated electricity corporation, a fact which:

- Classifies the EAC generation activity in a position of strength in the wholesale electricity market which is substantiated by historical data of the HHI Index (Figure 3). It is concluded that the wholesale electricity market of Cyprus is classified as a highly concentrated marketplace and in particular without competition and this is due to the position of strength of EAC's generation activity.
- Classifies the EAC Supply activity in a position of strength in the retail electricity market which is substantiated by historical data of the HHI Index (Figure 4). It is concluded that the retail electricity market of Cyprus is classified as a highly concentrated marketplace and in particular without competition and this is due to the position of strength of EAC's Supply activity.

Based on the above, it is ascertained that due to the size and position of the EAC, there is no effective competition in the wholesale and retail markets.

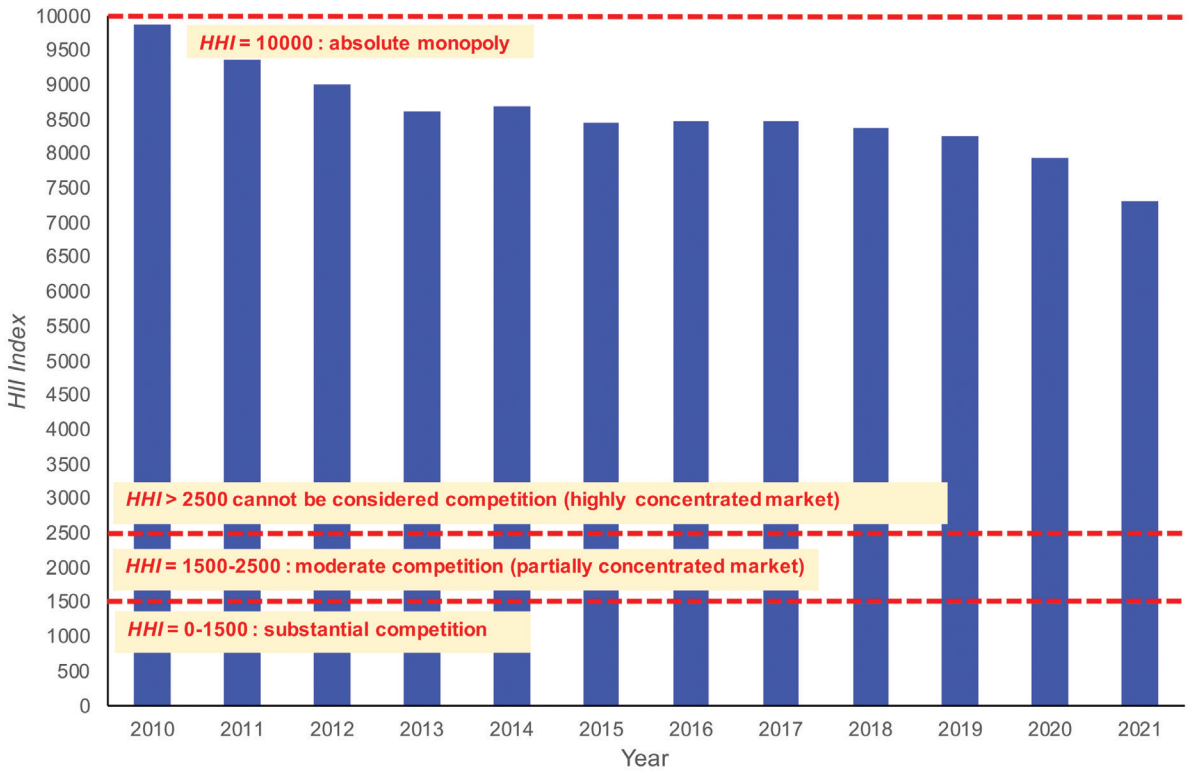


Figure 3 - Concentration of electricity market (wholesale market)

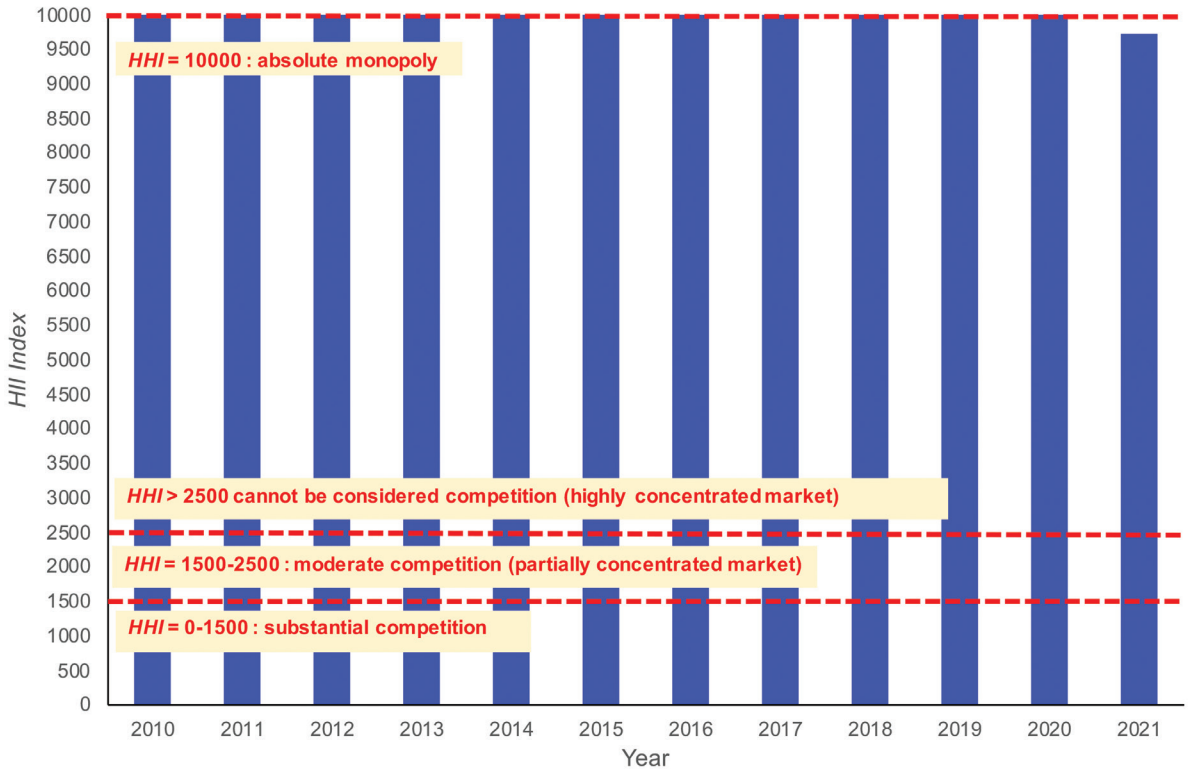


Figure 4 -Concentration of electricity market (retail market)

Figures 5 and 6 below present the HHI values in other Member States. As observed in the Figure 5, in the case of household electricity consumer market, 8 out of 26 Member States recorded low concentration levels (HHI<2000) in 2020 and 18 presented high concentration levels. In 2020, with respect to household electricity consumer market, Member States recorded a drop in HHI levels compared to previous years. Norway, Sweden and Finland recorded the best performance.

HHI values are less concentrated in non-household consumer markets. This may be due to the fact that non-household consumers are more active regarding their energy consumption and thus more open to new suppliers. As observed in Figure 6, in non-household electricity consumer market, 13 out of 24 Member States recorded low concentration levels in 2020. Romania, Norway, Great Britain and Italy had the best results.

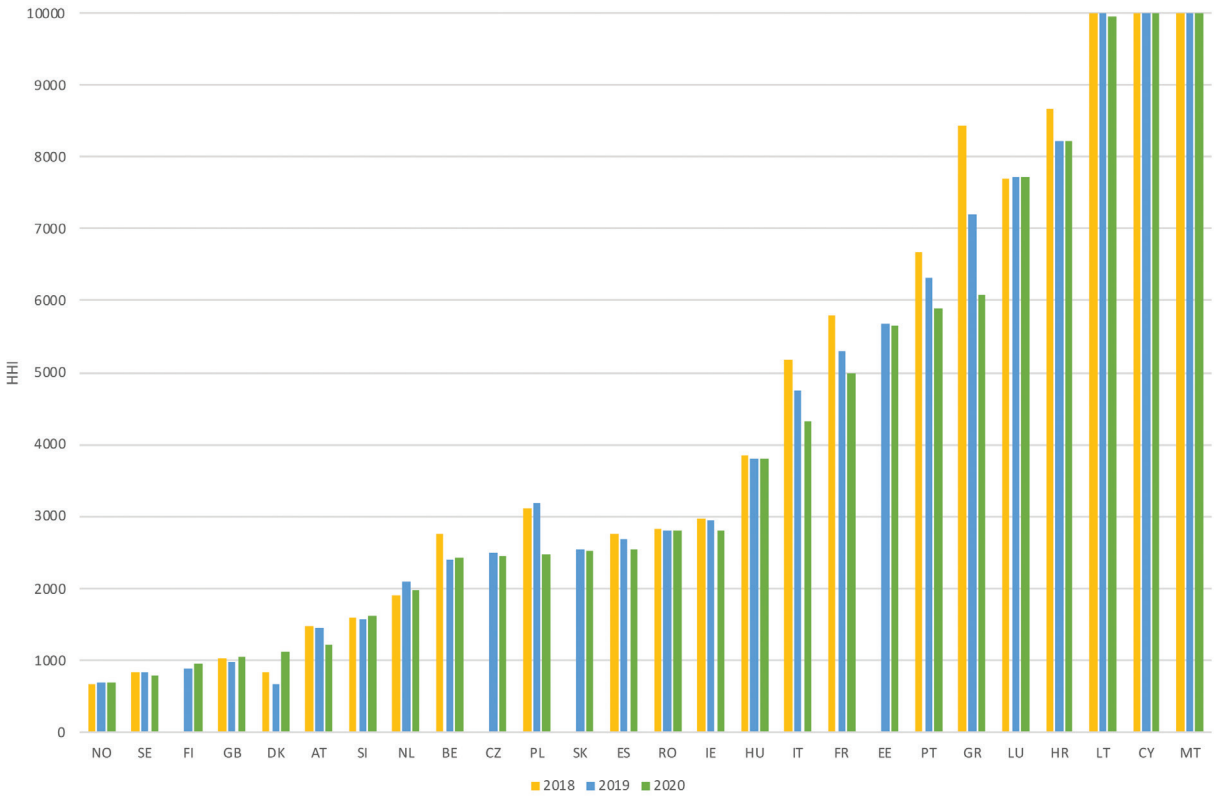


Figure 5 - Herfindahl-Hirschman Index (HHI) of the household electricity consumer market in Member States in the period 2018 - 2020[6]

[6] ACER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2020 - Energy Retail Markets and Consumer Protection Volume

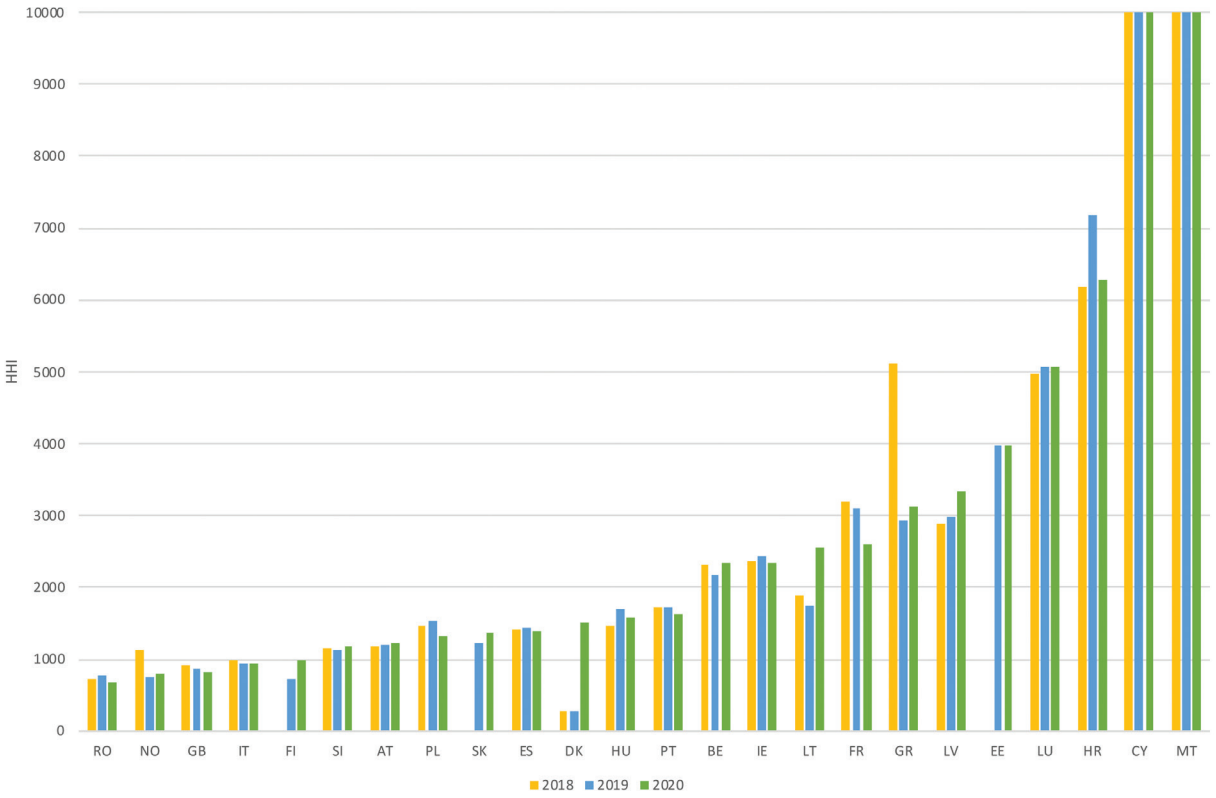


Figure 6 - Herfindahl-Hirschman Index (HHI) of the non-household electricity consumer market in Member States in the period 2018 - 2020[7]

Granting of a License, General License, and Exemption

The licensing of activities related to electricity is regulated by the Law Regulating the Electricity Market of 2021, the Rules on the Regulations Regulating the Electricity Market (Licensing) and Regulatory Decision 02/2021 entitled "Regulatory Framework for the Granting of the General License (KDP 523/2021).

The licenses issued by CERA, in accordance with Article 26 of Law Regulating the Electricity Market of 2021, concern the following activities:

- Construction and operation of a power plant with conventional fuels for commercial purposes.
- Construction and operation of a power plant with conventional fuels for self-consumption and reserve purposes with a generating capacity greater than 1MW.
- Construction and operation of a power plant using RES with a generating capacity of more than 8MW.
- Supply of electricity to final customers
- Supply of electricity to wholesale customers.
- Execution of the duties of the Balance Responsible Party.
- Execution of the duties of the Aggregator.

[7] ACER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2020 - Energy Retail Markets and Consumer Protection Volume

- Installation and/or operation of an electricity storage facility, with the exception of self-consumption electricity storage facilities
- Execution of responsibilities of TSOC.
- Execution of responsibilities of DSO.
- Execution of responsibilities of the Owner of Transmission System (OTS).
- Execution of responsibilities of the Owner of Distribution System (ODS).
- Execution of responsibilities of the Market Operator.
- Execution of duties of the Owner of Interconnector Owner.
- Execution of duties of the Owner of Interconnector Operator.
- Construction of direct line.

The License exemptions that are issued by CERA, in accordance with subparagraph (4) of Article 27 of Law Regulating the Electricity Market of 2021 concern the following activities:

- Construction and operation of a power plant using RES with a generating capacity of more than 50kW to 8MW.
- Construction and operation of a power plant with conventional fuels for self-consumption and reserve purposes with a generating capacity of 30kW up to 1MW.

The General licenses issued by CERA, in accordance with subparagraph (1) of Article 27 of Law Regulating the Electricity Market of 2021, concern the following activities:

- Generation of electricity from power plants that are not connected to the transmission system or distribution system.
- Generation of electricity from power plants with a maximum capacity of up to and including 20kW.
- Generation of electricity for own use from systems with a capacity of up to and including 30kW.
- Generation of electricity from renewable energy source power plants with a capacity of up to and including 50kW.
- Generation of electricity from small-scale high-efficiency cogeneration plants in accordance with the provisions of the Laws on the Promotion of Energy Efficiency in Heating and Cooling and Heat and Power Cogeneration.

Electricity supply license to final customers

In 2021, 3 applications were submitted, and 3 licenses have been granted for supply licence of electricity to end consumers for the period of validity of the transitory regulation of the electricity market.

For the period of validity of the transitory regulation of the electricity market, CERA has granted a total of 19 licenses for supply of electricity and has rejected one application.

License for the construction and operation of power production plants for commercial use

Conventional Units

In 2021, 1 application was submitted for the granting of a license to construct a power production plant with conventional fuel for commercial purposes with a total capacity of 284,004MWe.

The installed capacity of conventional power plants for commercial purposes did not change in the year 2021, it remains at 1478MWe, as in 2020. The geographical distribution of the power plants for commercial use is presented in Figure 7.

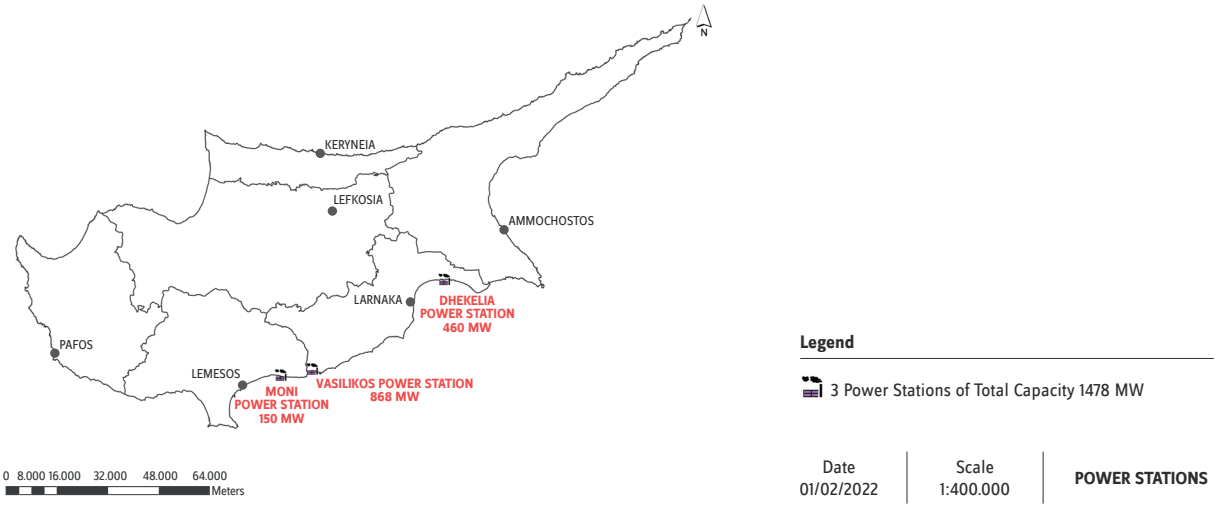


Figure 7 - Descriptive presentation and geographical distribution of installed conventional plants for commercial use until 2021

Renewable Energy Sources (RES)

Wind Farms:

The installed capacity of wind farms for commercial purposes did not change in the year 2021, it remains at 157.5MWe, as in 2020.

Photovoltaic Systems:

In 2021, 4 applications were submitted for the granting of a license to construct photovoltaic power plants for commercial purposes with a total capacity of 28MWe and 10 construction licenses were granted for the construction of photovoltaic power plants for commercial purposes with a total capacity of 76MWe.

The installed capacity of photovoltaic systems for commercial purposes did not change in the year 2021, it remains at 8MWe, as in 2020.

The following Figures 8, 9, 10 and 11 show statistical data on licenses for the construction and operation of power production plants for commercial purposes that were granted by CERA from conventional units and RES units for the period 2004 to 2021.

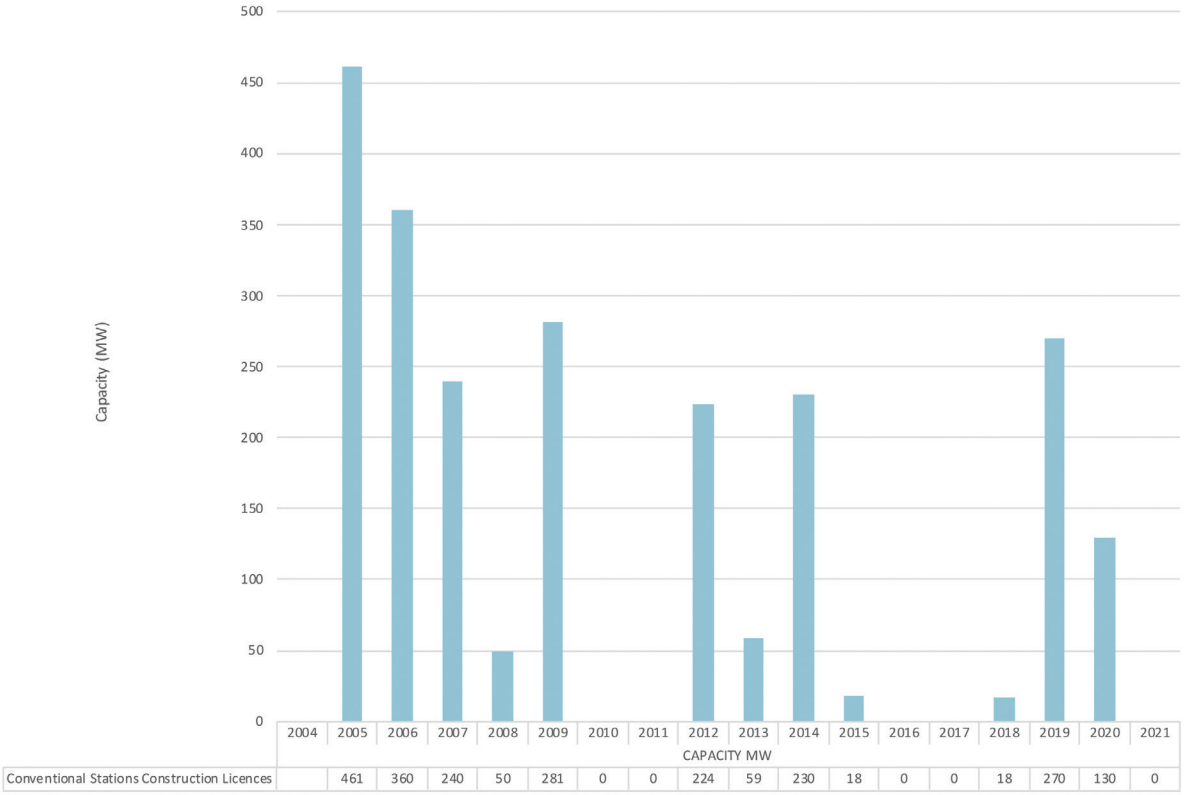


Figure 8 - Licenses for the construction of conventional plants for the generation of electricity granted between 2004 and 2021

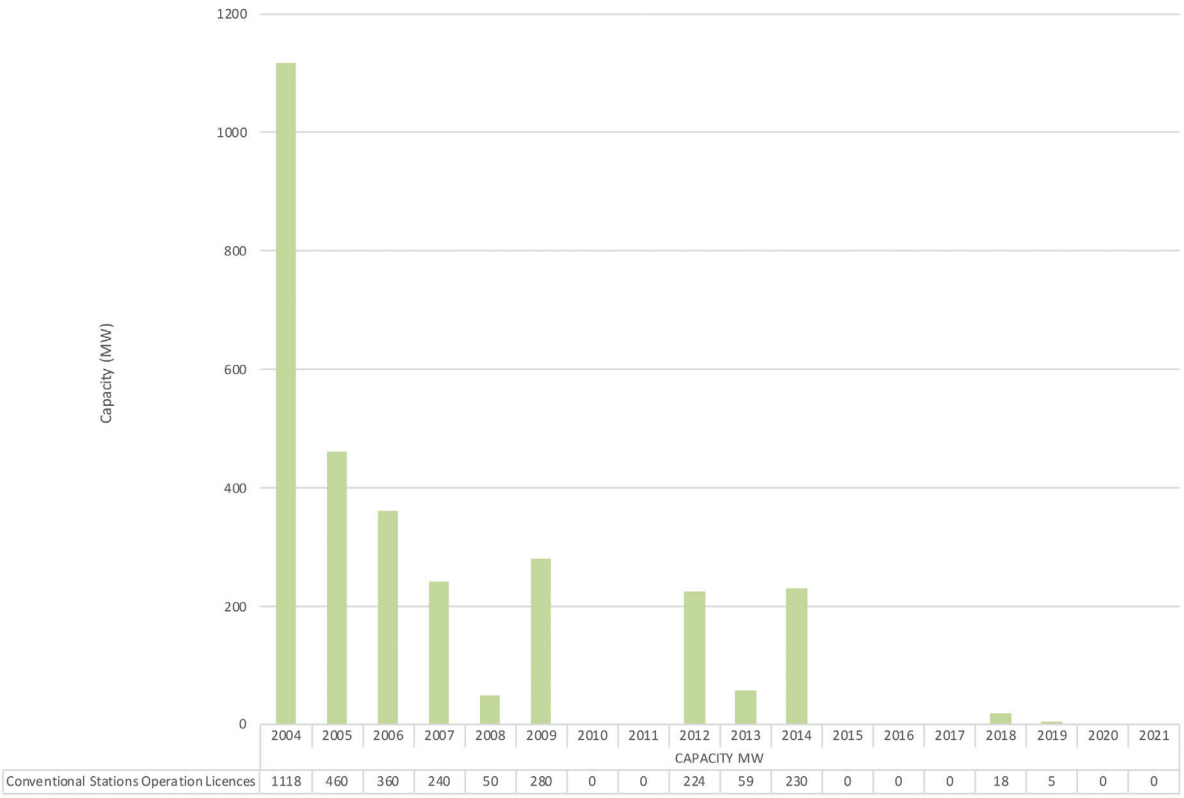


Figure 9 - Licenses for the operation of conventional plants for the generation of electricity granted between 2004 and 2021

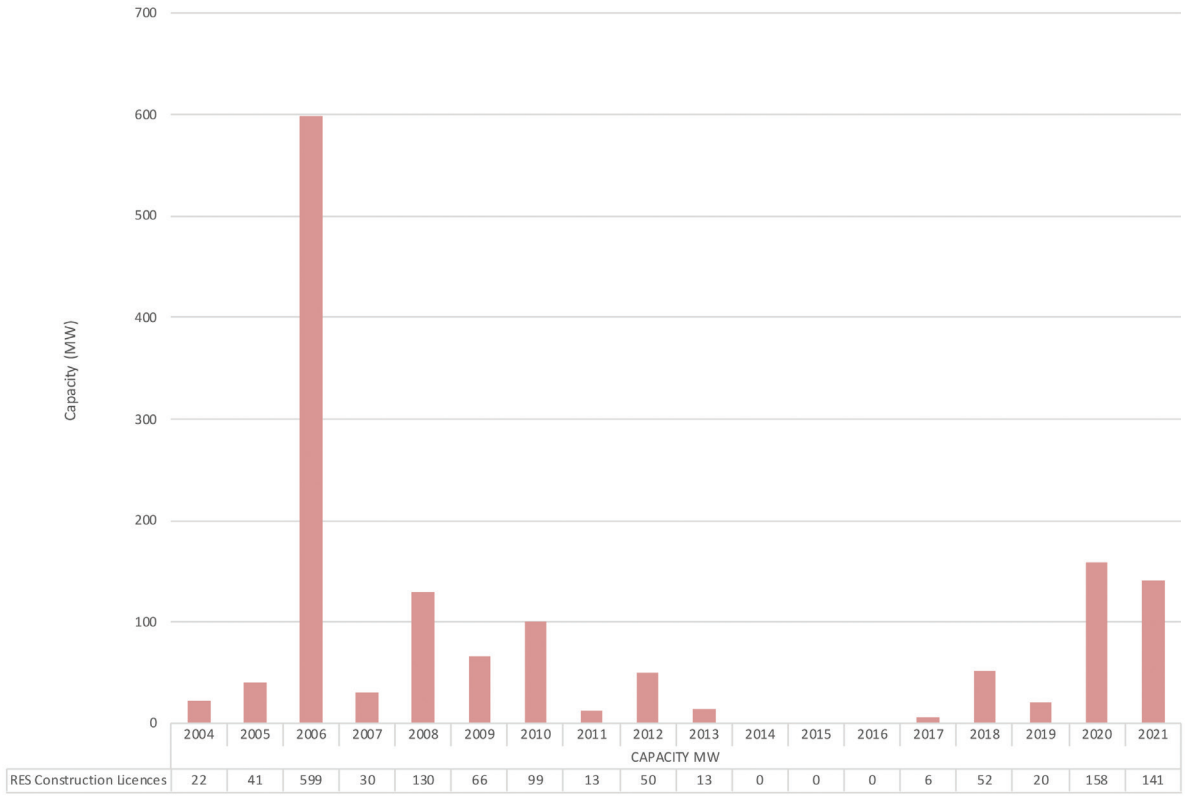


Figure 10 - Licenses for the construction of RES plants granted between 2004 to 2021

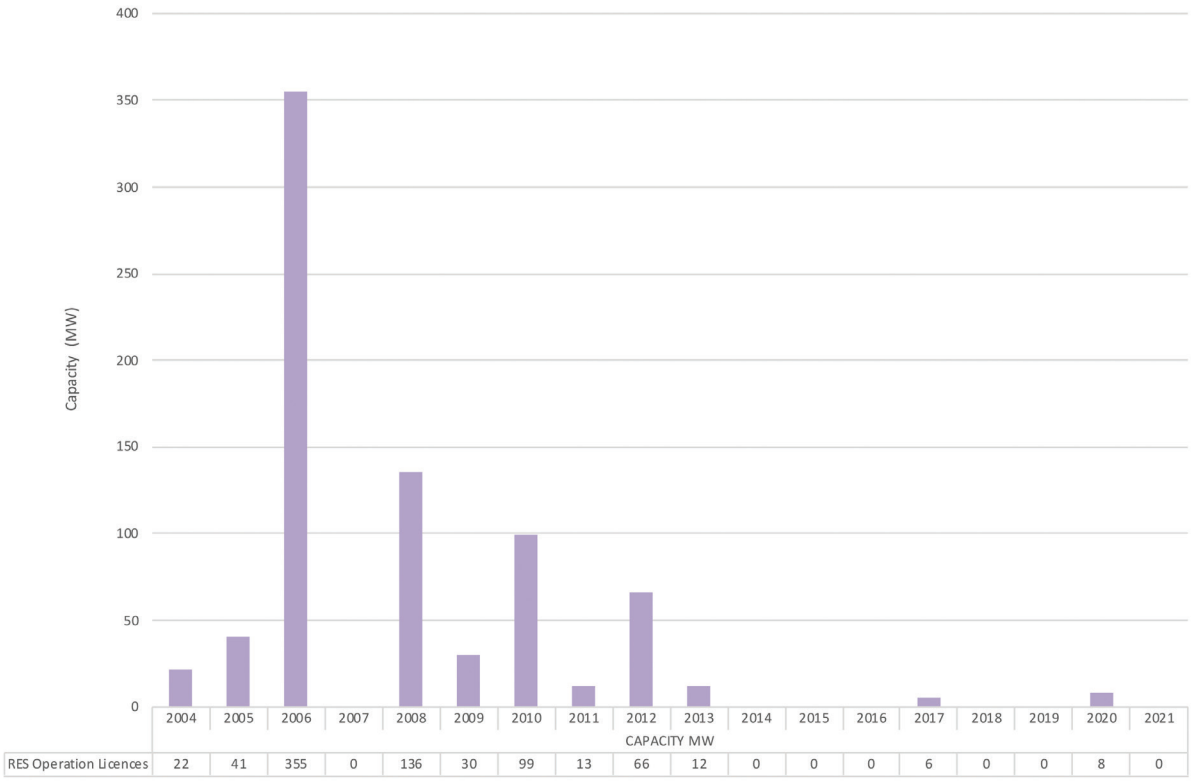


Figure 11 - Licenses for the operation of RES plants granted between 2004 and 2020

License for the construction and operation of power plants for self-consumption

Conventional units for self-consumption

In 2021 1 License for the Construction and Operation of a self-generation, conventional fuels, Power Production Plant with a total installed capacity of 1.6416MWe.

The installed capacity of the self-consumption conventional plants has been reduced in 2021, and stands at 29.1416MWe.

Exemption from a power production plant construction and operation license for commercial use

Renewable Energy Sources

Photovoltaic Systems:

In 2021, 81 Exemptions were granted for the construction of photovoltaic power plants with an installed capacity of 136.5MWe and 35 Exemptions were granted for the operation of photovoltaic power plants with an installed capacity of 50,2MWe.

The total installed capacity of photovoltaic systems for commercial use, which are included in the Support Schemes of MECI has been increased in 2021 and stands at 187.74MWe.

Biomass/Biogas Systems:

The installed capacity of biomass/biogas plants for commercial purposes did not change in the year 2021, it still stands at 9.7MWe, as in 2020.

Exemption from Licenses for the construction and operation of self-consumption power production plants

Conventional plants for self-consumption and reserve purposes connected that are connected to the grid and autonomous self-generation power systems

In 2021, 105 Exemptions were granted for the construction and operation of power plants using conventional fuels for self-consumption and reserve purposes and autonomous self-generation power systems, with a total installed capacity of 22.33MWe.

The total installed capacity of conventional plants for self-consumption and reserve purposes and autonomous self-generation power systems stands at 245.87MWe.

Renewable Energy Sources

Photovoltaic systems under the self-generation/net-billing scheme in commercial and industrial premises:

In 2021, 114 Exemptions were granted for the construction of photovoltaic power plants with an installed capacity of 10.6MWe and 59 Exemptions were granted for the operation of photovoltaic power plants with an installed capacity of 7,43MWe.

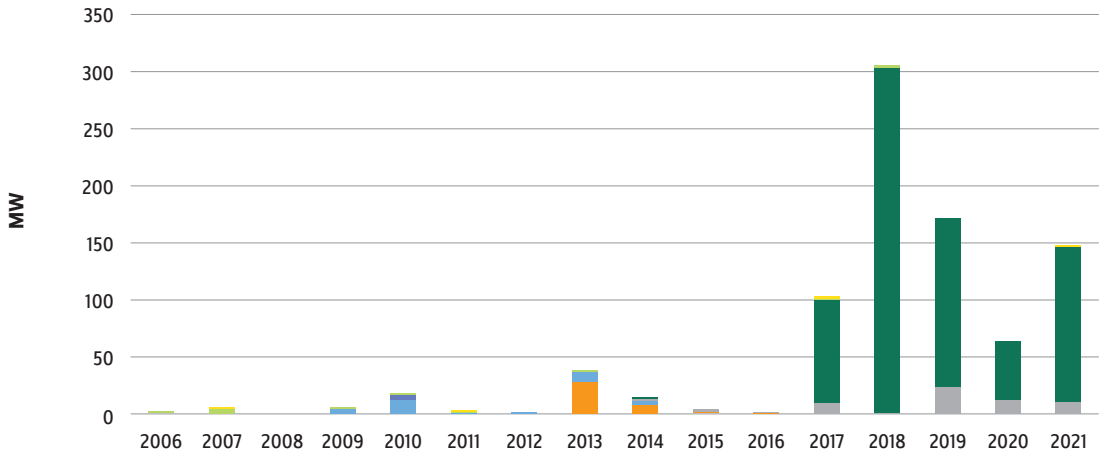
The total cumulative installed capacity of photovoltaic systems under the self-generation/net-billing scheme has increased in the year 2021 and has reached 22.6MWe.

Biomass/biogas systems under the self-generation/net-billing scheme:

In 2021, 1 License Exemption was granted for the construction of biomass/biogas energy generation systems with an installed capacity of 0.2MWe.

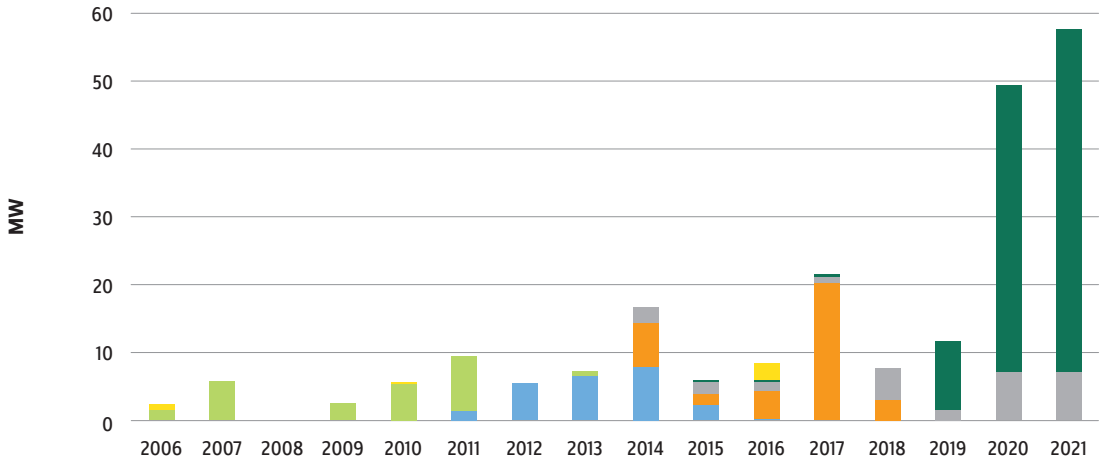
The installed capacity of biomass/biogas plants under the self-generation/net-billing scheme did not change in the 2021; it stands at 3.1MWe, as in 2020.

Figures 12 and 13 show the installed capacity of Exemptions that were granted in the period 2004 to 2021 for the construction of RES-generation plants and the operation of RES-generation plants, respectively.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Biosmass-Self-production		0.62				0.1						2.4				0.2
Biomass/Biogass-Commercial use	1.75	5.33		0.75	0.5	1.4		0.6				1	2.27			
Wind					4.25											
PV-Commercial								0.1	0.942			90.93	301.52	147.89	52.1	136.5
PV-Self-production									2.06	2.02	0.36	9.56	1.61	23.3	12.5	10.6
PV-FIT				5.19	12.81	0.97	1.69	9.55	4.09							
PV-Public tender								28.28	7.76	2.49	1.5					

Figure 12 - Capacity (MW) of exemptions from a RES construction license for the period 2004 - 2021



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Biosmass-Self-production	0.62				0.1						2.4					
Biomass/Biogass-Commercial use	1.75	5.93		2.54	5.46	7.9		0.6								
PV-Commercial										0.1	0.07	0.32		10.1	42.2	50.2
PV-Self-production									2.15	1.87	1.46	0.78	4.61	1.53	7.26	7.43
PV-Public tender									6.61	1.5	4	20.35	3.049			
PV-FIT						1.58	5.45	6.6	7.98	2.48	0.3					

Figure 13 - Capacity (MW) of exemptions from RES operation licenses for the period 2004 - 2021

Photovoltaic systems with the method of net-metering

"Net-metering" is addressed to all consumers in whose premises a small photovoltaic system with capacity up to 10kWe is installed. According to this scheme, the difference is calculated between the electricity that is generated from the photovoltaic, which is installed in the premises, and is injected to the grid, and the electricity that is imported from the grid of electricity, to meet the demands of the premises.

DSO was appointed by CERA as the implementing body for the net-metering scheme. In 2021, 4,989 photovoltaic systems with a total installed capacity of 23.41MWe have been installed.

In 2021, the total installed capacity of the photovoltaic systems under the net-metering category is 77.40MWe.

Figure 14 presents the number and capacity of installed photovoltaic systems with the method of net-metering for the period 2013 - 2021.

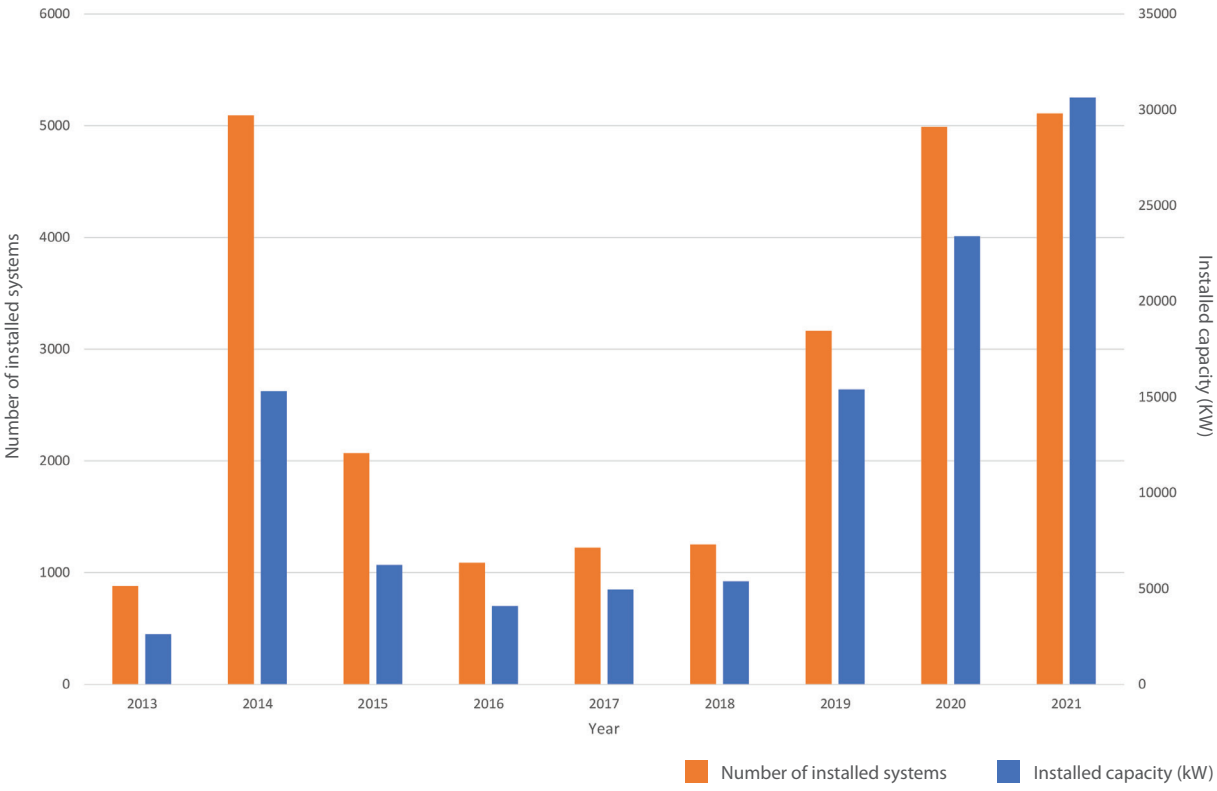


Figure 14 - Number of installed photovoltaic systems and installed capacity (kW) net-metering systems for the period 2013 - 2021

Figure 15 presents the geographical distribution of installed RES units with a capacity of more than 20kWp, until 2021. The Figure shows the equable distribution of RES units in the territory of the Republic of Cyprus.

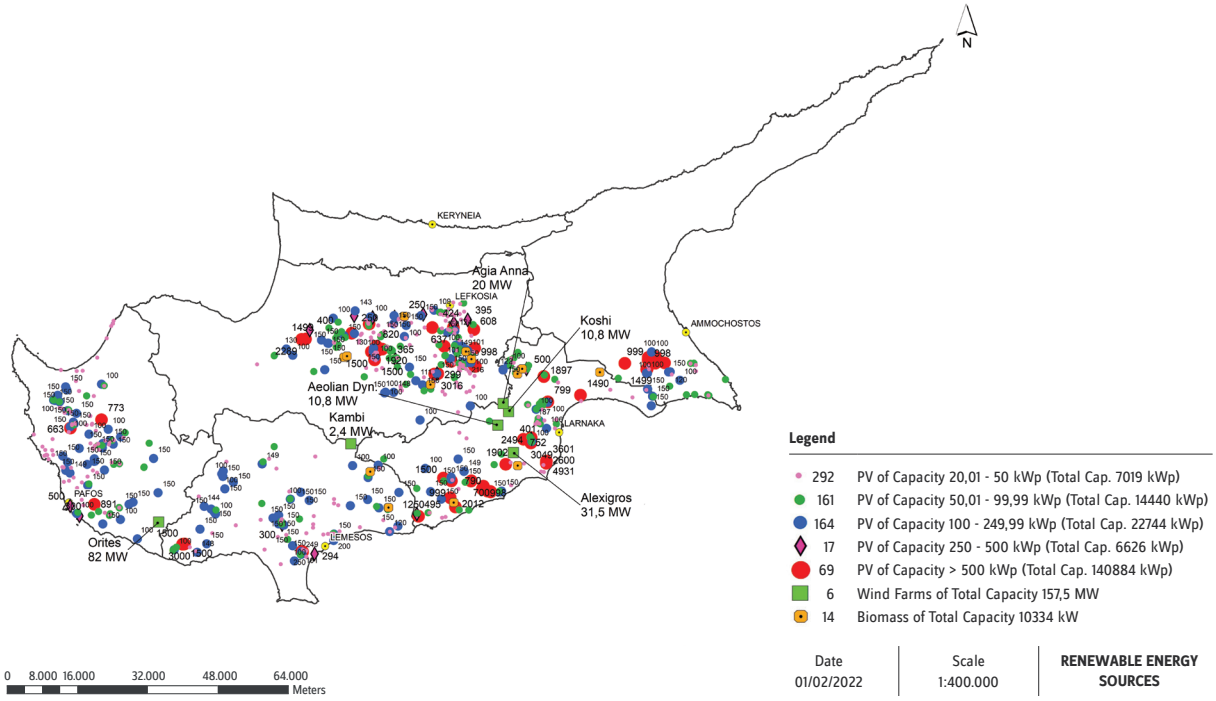


Figure 15 - Descriptive presentation and geographical distribution of installed RES plants with capacity of more than 20kWp, until 2021

Registry of Applications for License and Issued Licenses

All lists of applications for licenses as well as the granted licenses and exemptions are published on the CERA website.

Electricity Generation Data during 2021

Total maximum generation of capacity and electricity

Maximum demand for 2020 was recorded on Thursday, 5 August 2021 at 15.37, where the maximum electrical capacity stood at 1239 MW.

Total Generation of Energy (GWh)

Regarding the recorded total generation of electricity during 2021, the following important data have been registered:

- The total gross electricity generated reached 5,095,910 MWh.
- EAC-Generation contributed with 4,337,147 MWh.
- Producers using RES generated 758,786 MWh.

- EAC power plants generated 238,581 MWh for their local needs.
- Energy which was injected to the transmission system from the EAC-Generation conventional plants reached 4,098,566 MWh.
- Energy that was exported from the transmission system to the EAC substations and the large producers reached 4,396,090 MWh.
- Reported losses during the transmission amounted to 63,306 MWh, or 1.46%, of the energy that was injected into the transmission system.
- Reported losses during distribution amounted to 151,500 MWh, or 3.3%, of the energy that was injected into the distribution system.

Load Factor

The Load Factor of the conventional power generation plants stood at 46.95% in 2021 compared to 47.4% in 2020.

Figure 16 shows the total generation of electricity for 2021.

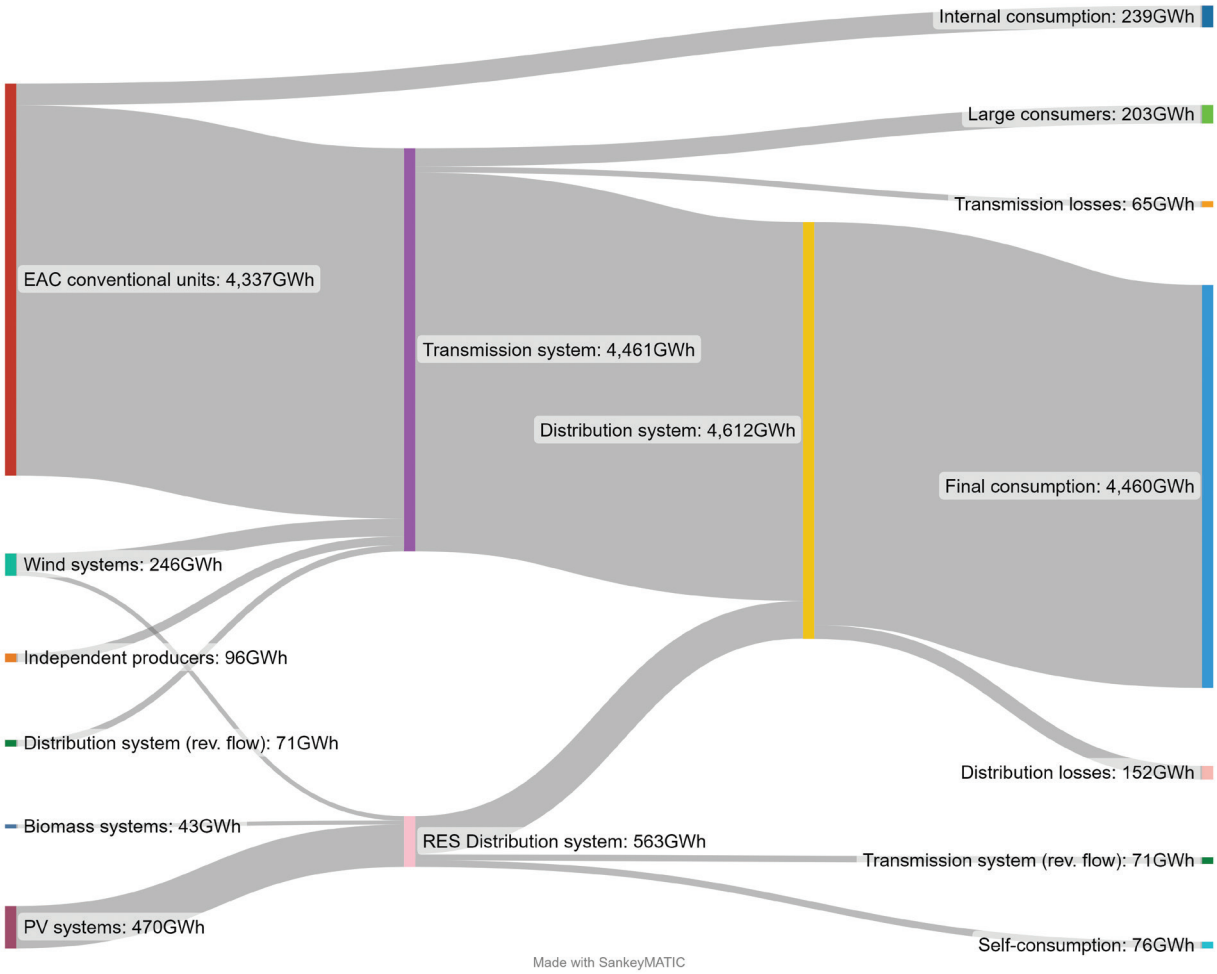
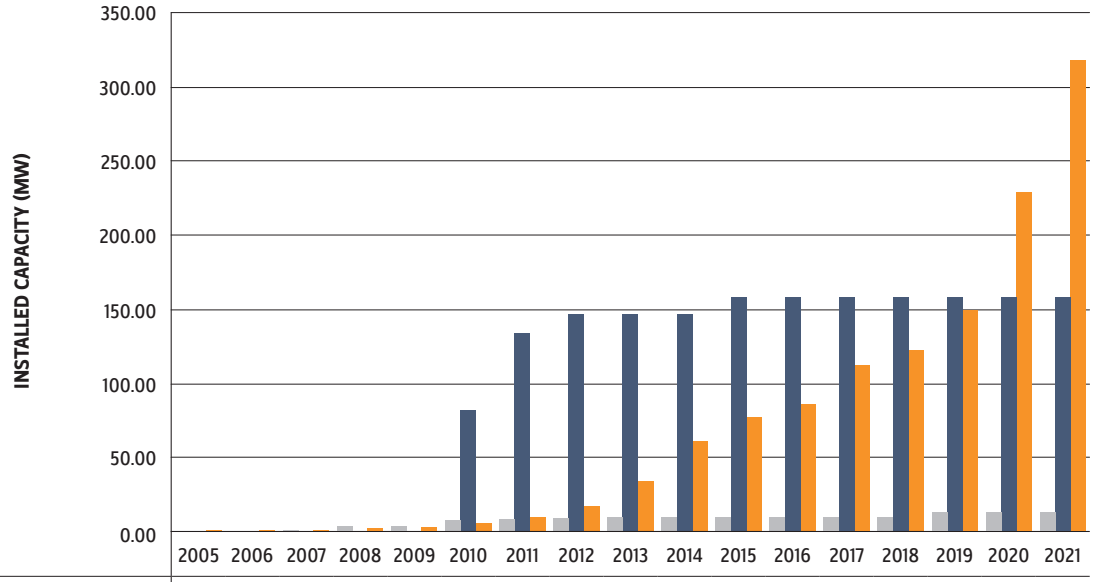


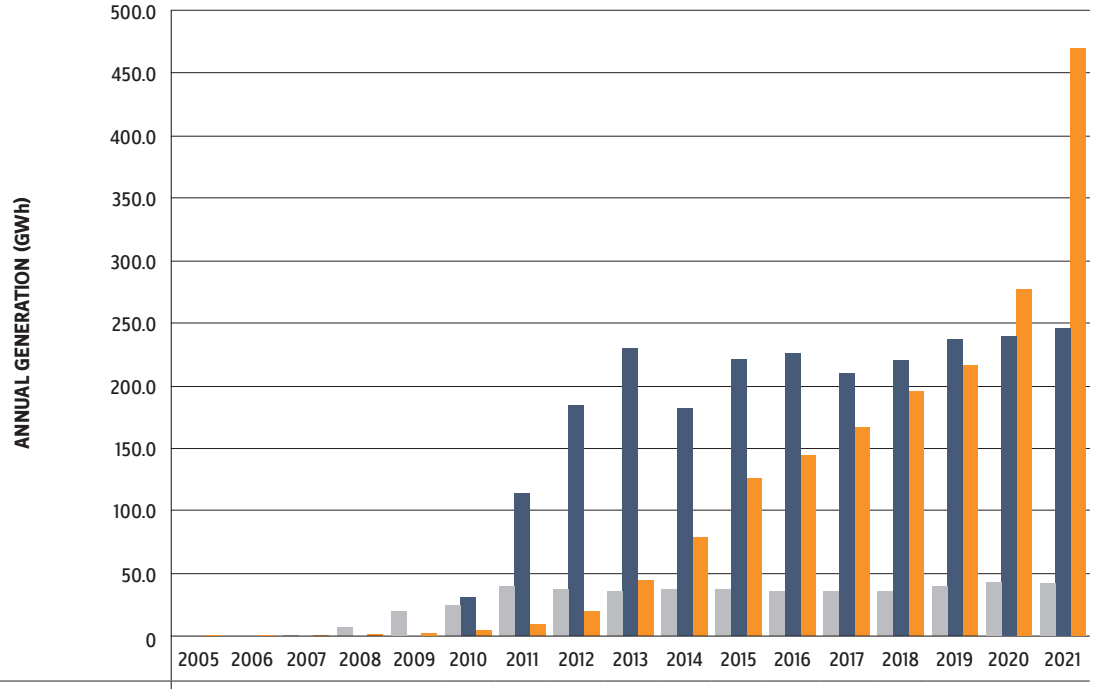
Figure 16 - Sankey diagram for the total generation of electricity (GWh) in 2021

Figures 17 and 18 depict historical data of the generation from RES, which are connected to the network.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BIOMASS/ BIOGAS UNITS	0.0	0.0	0.25	3.31	3.56	7.21	7.96	8.76	9.70	9.70	9.70	9.70	9.70	9.70	12.10	12.10	12.10
WIND TURBINES AND WIND PARKS	0.0	0.0	0.0	0.0	0.0	82.0	133.5	146.7	146.7	146.7	157.5	157.5	157.5	157.5	157.5	157.5	157.5
PHOTOVOLTAIC SYSTEMS	0.2	0.6	0.8	1.6	2.7	5.6	9.3	16.4	33.9	61.2	76.5	85.7	112.1	122.7	149.5	229.1	317.8

Figure 17 - Annually installed capacity (kW) of RES systems



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BIOMASS/ BIOGAS UNITS	0.0	0.0	0.0	7.8	19.9	24.8	39.7	37.6	35.8	37.5	37.4	36.6	36.5	36.1	39.3	43.1	42.5
WIND TURBINES AND WIND PARKS	0.0	0.0	0.0	0.0	0.0	31.4	114.3	185.1	230.6	182.4	221.4	226.3	211.0	220.6	238.1	240.0	246.5
PHOTOVOLTAIC SYSTEMS	0.1	0.3	0.9	1.6	2.9	4.8	10.2	19.8	45.3	79.9	125.9	145.1	167.8	195.3	216.3	277.9	469.8

Figure 18 - Annual generation (GWh) of RES systems

Environmental Indicators in relation to total annual conventional electricity generation

Given Cyprus' high dependence on electricity generation by conventional plants, its air quality is significantly impacted. To quantify these impacts, the environmental indicator that is associated with the annual emission of carbon dioxide (CO_2) and atmospheric emissions, and in particular carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen oxides (NO_x) and airborne particles (AP), from the large-scale conventional electricity generation sector in the Republic of Cyprus. The annual variation of the CO_2 emission index during the reporting period is presented in Figure 19.

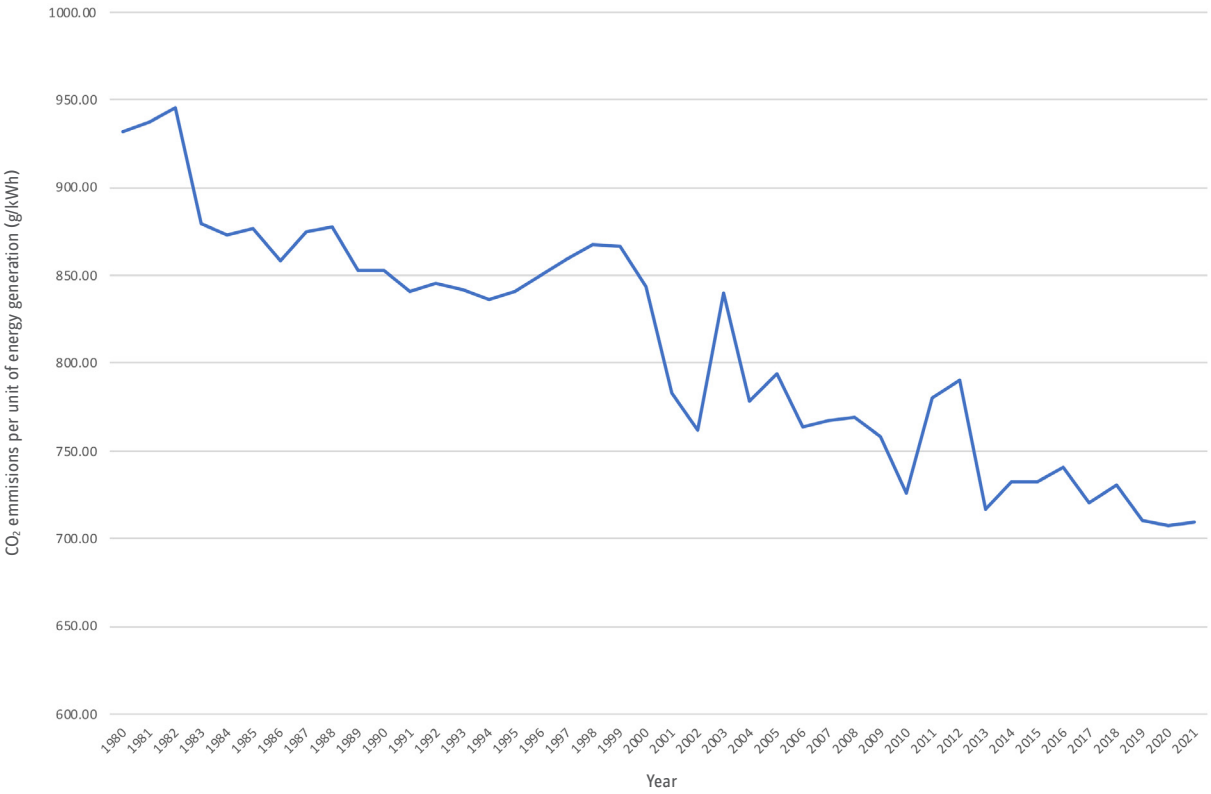


Figure 19 - Annual variation of the environmental indicator of carbon dioxide (CO_2) emissions from conventional large-scale electricity generation plants (g/kWh)

For easier comparison, Figure 20 shows the annual change in SO_2, NO_x, and AP emissions during the reporting period using common logarithmic scales.

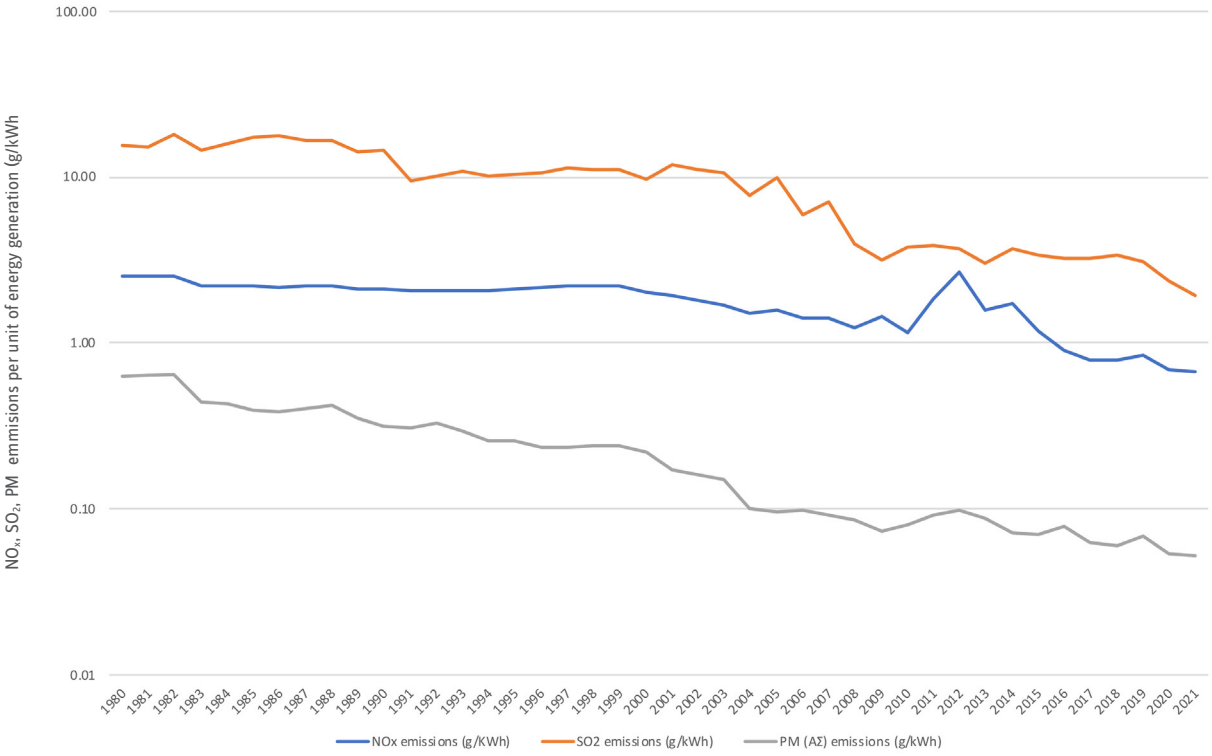


Figure 20 - Annual variation of the environmental indicators of AP, SO_2, NO_x emissions from conventional large-scale electricity generation plants (g/kWh) (logarithmic scale)

Approved Maximum Total Capacity (MW) and Total Generated Electricity (GWh) Forecast for the decade 2021 - 2030

Figures 21 and 22 show the total energy generation (GWh) and maximum total capacity (MW) forecast for the period 2021 - 2030. These forecasts were submitted to CERA by TSOC on 21 May 2021. CERA approved this recommendation with Decision 163/2021.

The upper limit represents the expected demand in extreme conditions, that is conditions of prolonged heat wave in summer and low temperature in winter. The lower limit represents the expected demand in mild temperatures.

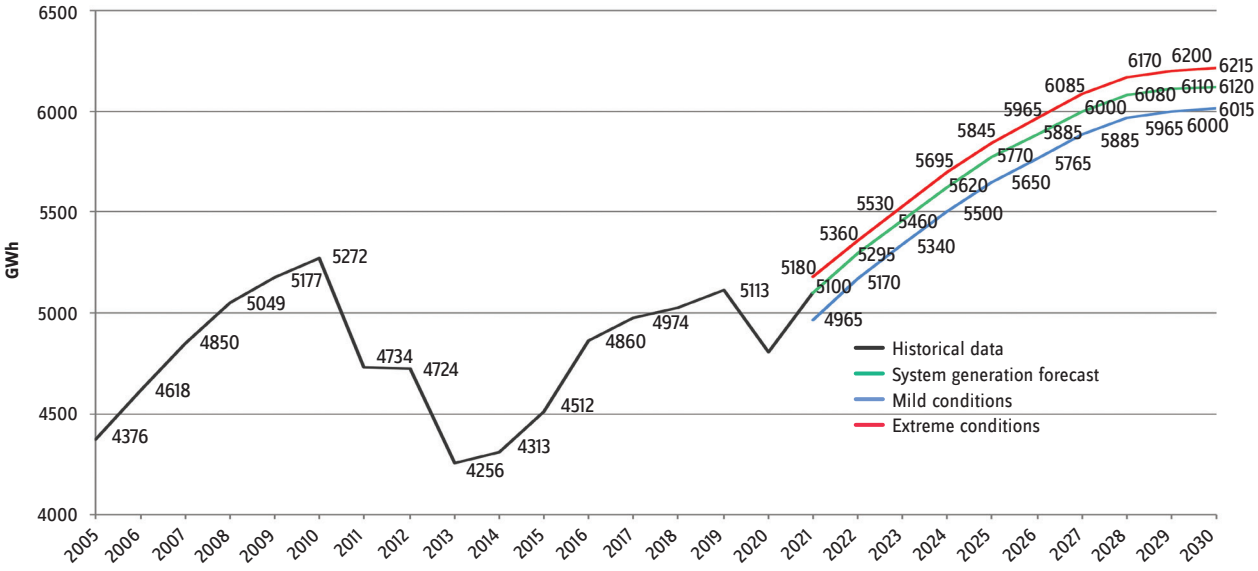


Figure 21 - Approved Total Generated Energy Forecast 2021 - 2030 (GWh)

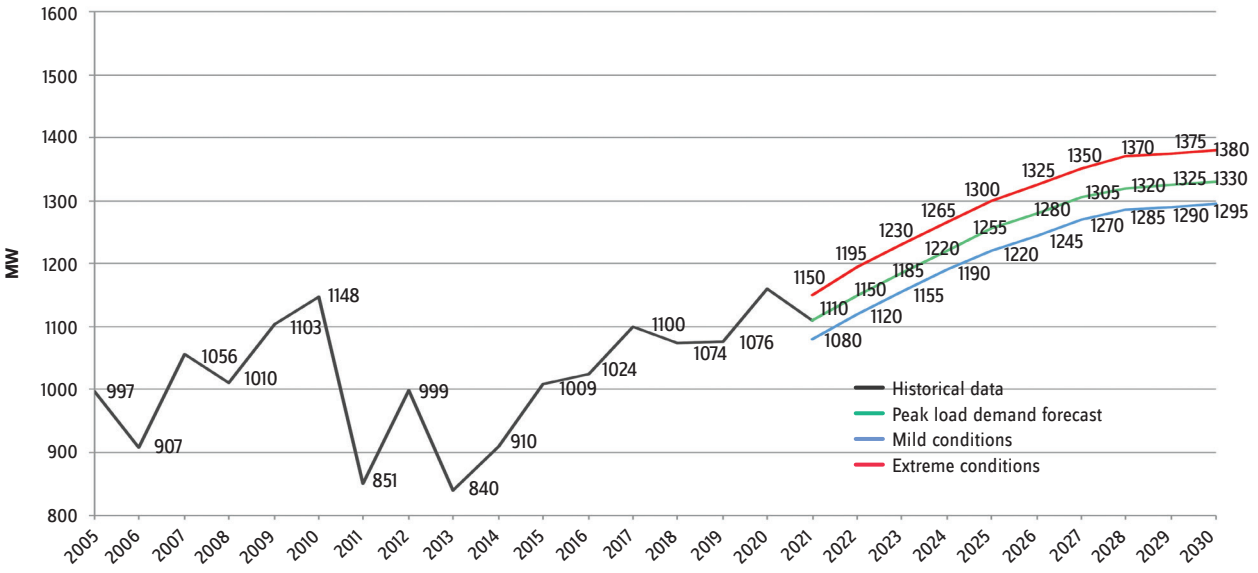


Figure 22 - Approved Maximum Total Capacity Forecast 2021 - 2030 (MW)

Adequacy of Electricity Supply

Pursuant to the Law Regulating the Electricity Market of 2021, CERA is responsible for the adequacy of electricity in Cyprus, the reliability and security of the generation, transmission and distribution systems, as well as the quality of electricity supply. CERA systematically monitors the adequacy, quality and reliability of the electricity supply and, whenever it detects any shortfalls, it informs the Minister of Energy, Commerce and Industry, who, after consulting with CERA and TSOC, takes all indicated corrective measures pursuant to the Law Regulating the Electricity Market of 2021.

As presented in Figure 23, provided all the generation plants are available, adequacy is at satisfactory levels.

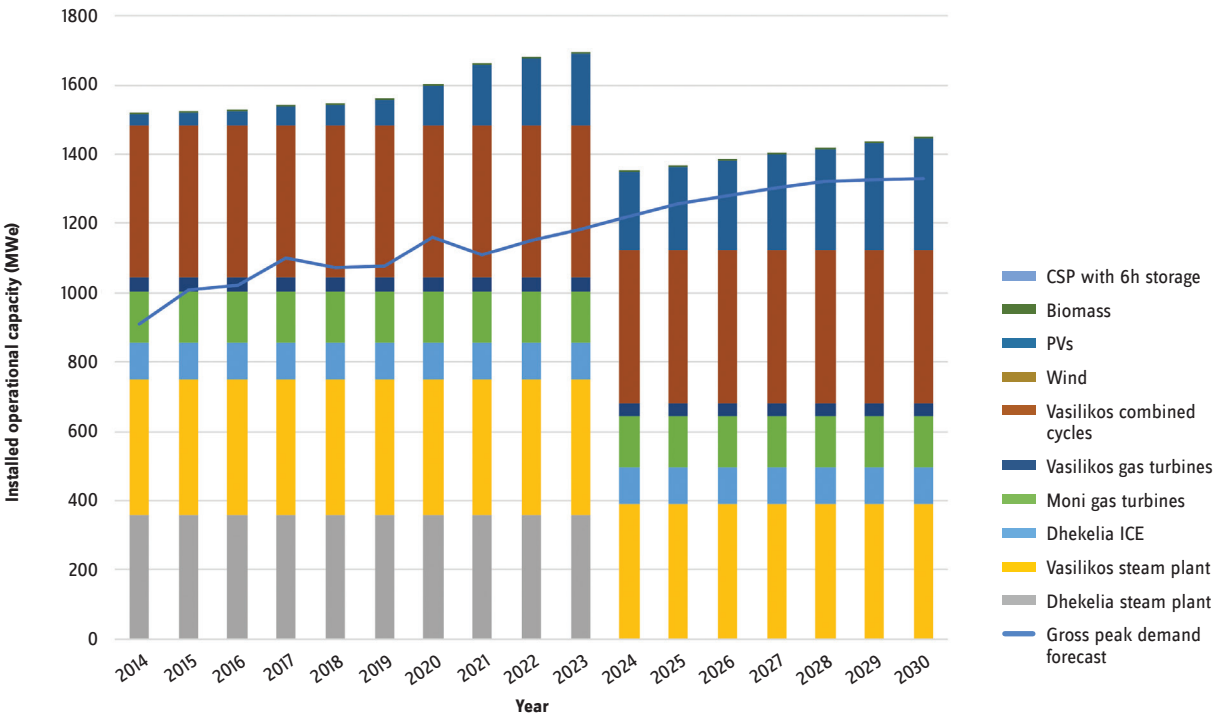


Figure 23 - Adequacy of Electricity Supply

Electricity prices

Figures 24, 25 and 26 present historical data for each year from 2016 until 2021 (in €c/kWh):

- Network usage fees for consumers connected to low voltage (it includes the Transmission System Tariff, Medium Voltage Distribution System Tariff, Low Voltage Distribution System Tariff, Tariff for the Recovery of Expenses of the TSOC and the Tariff of Ancillary Services and Long-Term Reserve).
- The allowed revenue of EAC per unit sold.
- The average price of the basic wholesale tariff (T-W) per unit exported.

It is noted that the new regulated tariffs of electricity of the EAC, which are based on the statement on the Regulatory Practice Statement and the methodology of electricity tariffs (Regulatory Decision 02/2015, KDP 208/2015 have entered into force since 2017.

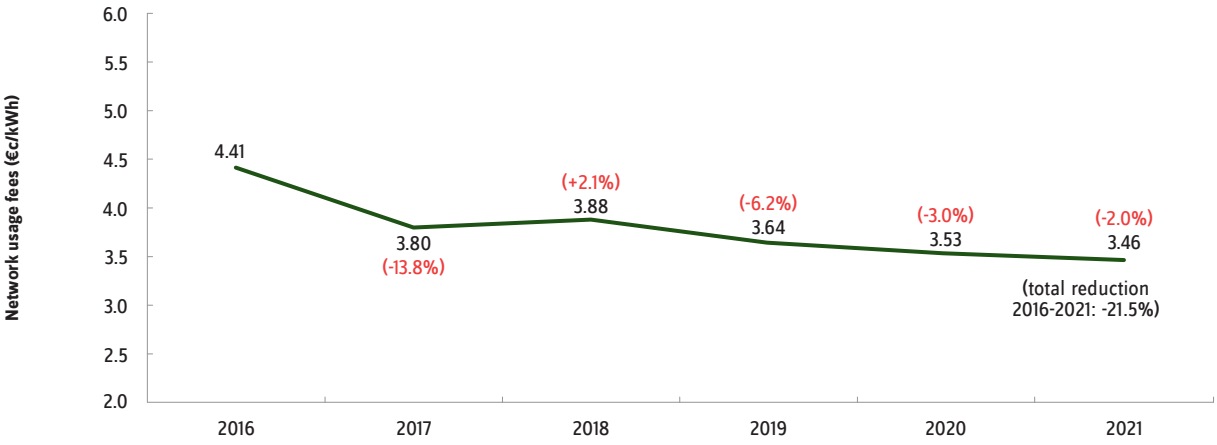


Figure 24 - Network usage fees for consumers connected to low voltage, 2016 - 2021

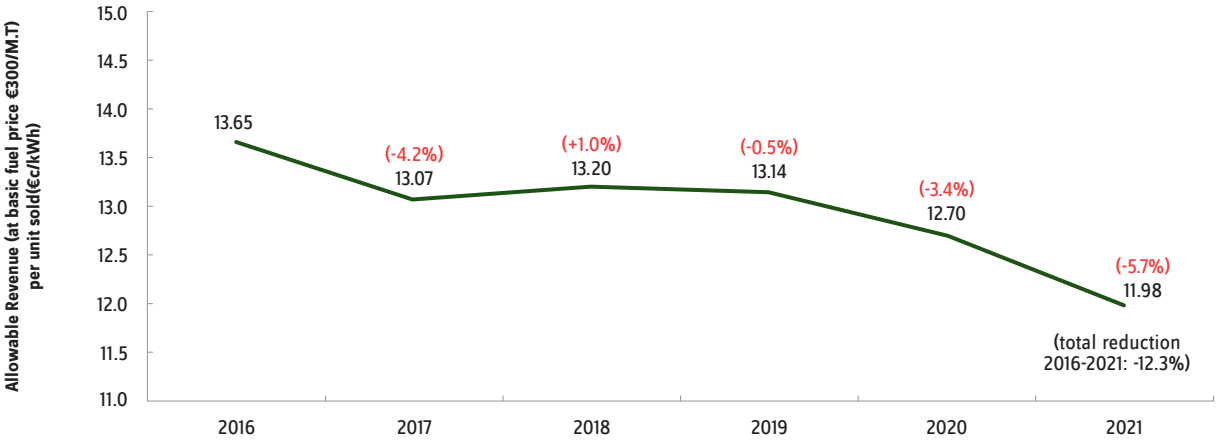


Figure 25 - The allowed revenue of EAC per unit sold, 2016 - 2021

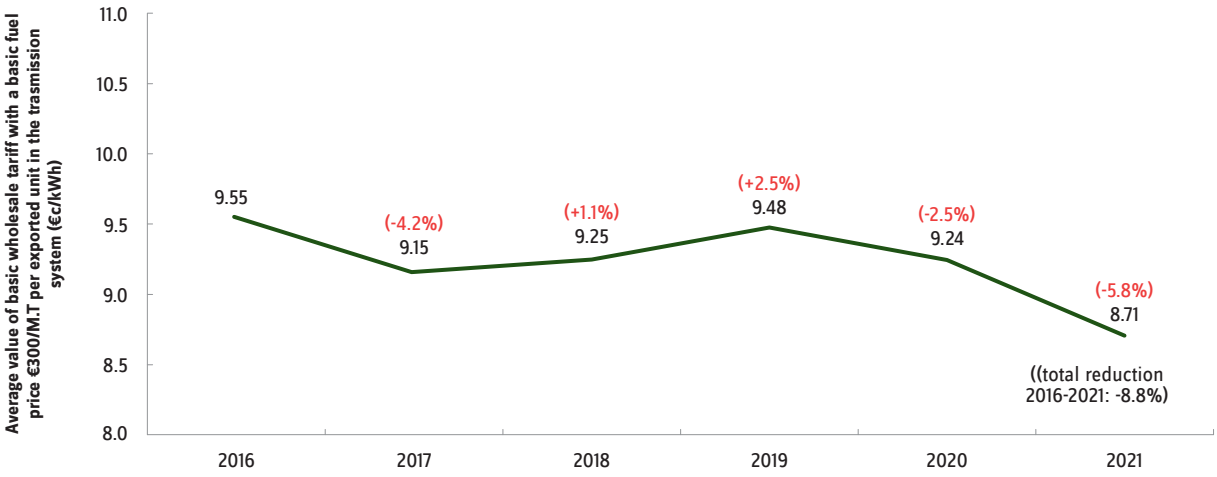


Figure 26 - Average price of basic wholesale tariff

The following Figures present data pertaining to the final electricity price for various tariffs (includes the cost of fuel and CO_2 emission allowances over €300/MT), as well as data that affect the tariff amounts.

Figure 27 presents the analysis of the fuel price adjustment (€¢/kWh) that was charged per kilo-watt-hour to Low-Voltage consumer bills from January 2017 to December 2021, regarding fuel, cost of purchasing CO_2 emissions allowances and the cost of the Cyprus Organization for Storage and Management of Oil Stock (COSMOS). From June 2020 to January 2021, there was a negative impact on the fuel adjustment cost since the cost of fuel fell below € 300/MT.

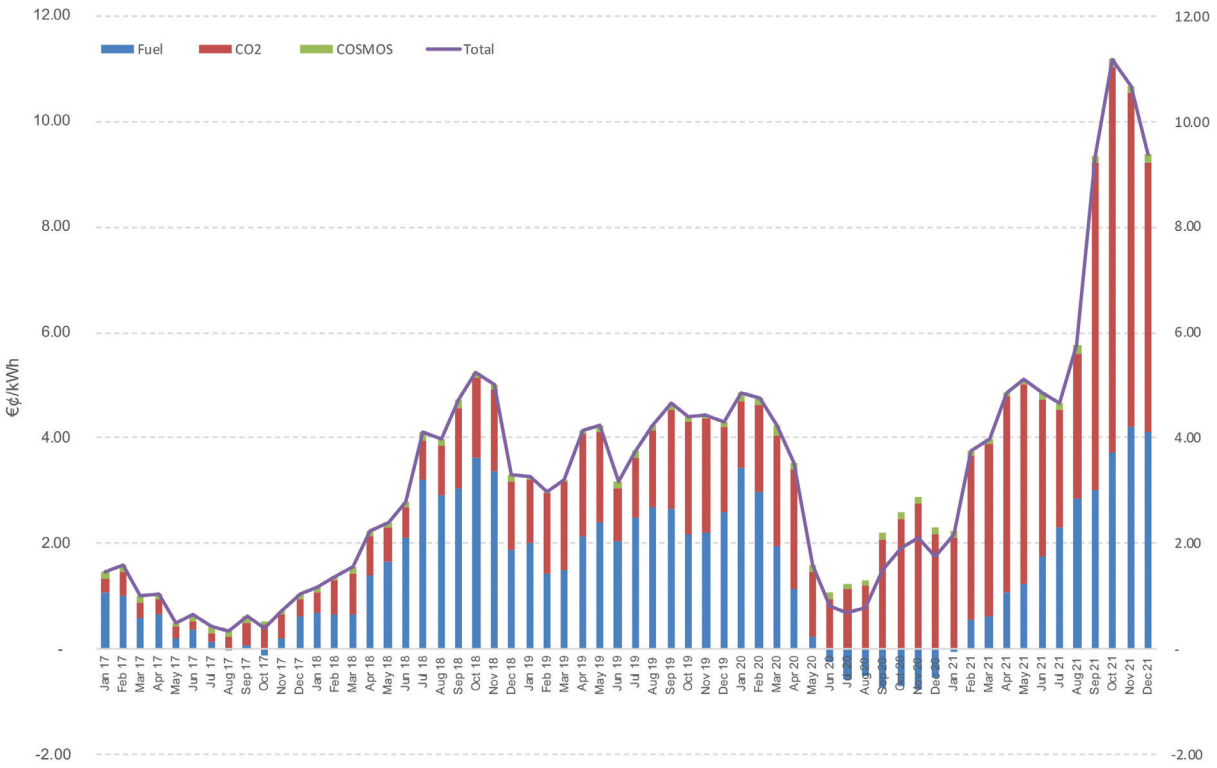


Figure 27 - Analysis of the cost of fuel adjustment, Low Voltage (€¢/kWh)

Figure 28 shows the movement of the Weighted Average Cost of Fuel (WACF) (including the cost of purchasing greenhouse gas emissions allowances) and the WACF that only includes the cost of fuel portion, from December 2012 to December 2021.

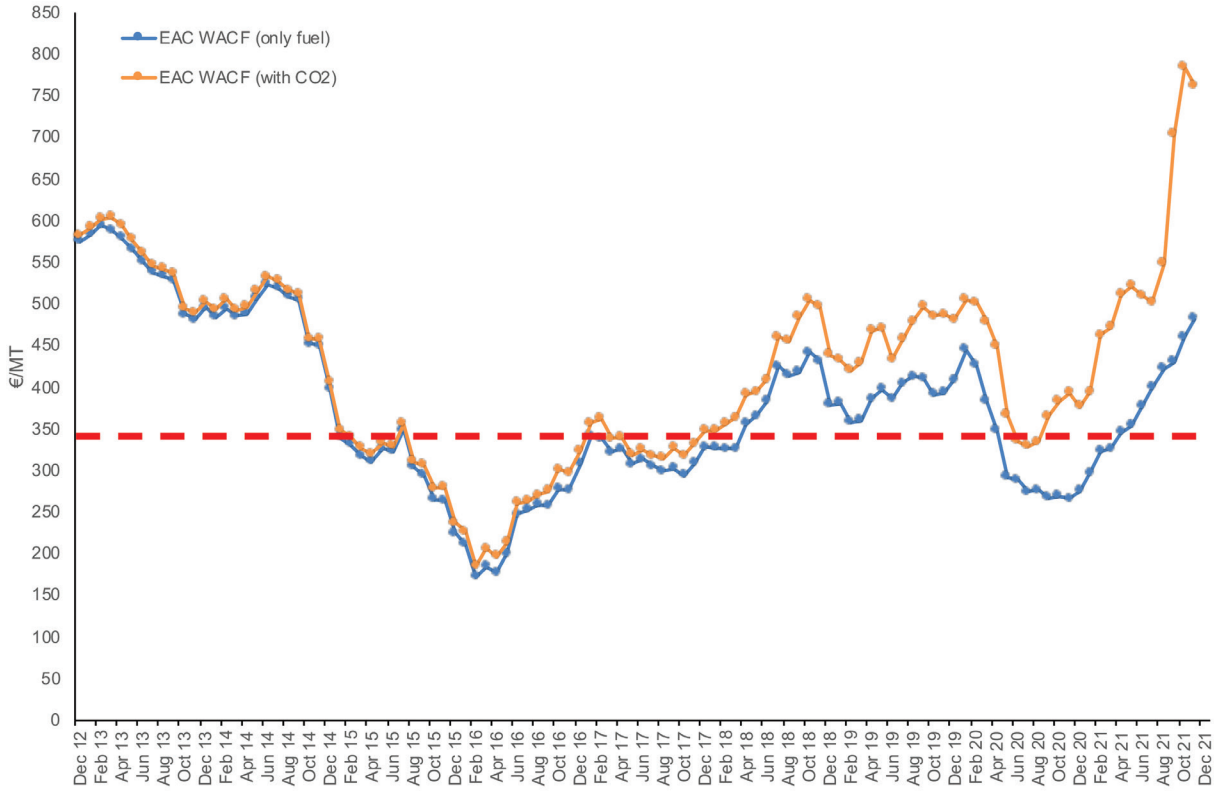


Figure 28 - WACF of EAC Generation (only fuel, including CO_2 cost)

Figure 29 shows the fuel mix from January 2015 to December 2021 that has been consumed for electricity generation. As it appears in the Figure, from March to May 2021, there was an increase in Heavy Fuel Oil consumption for electricity generation, which remains high (86%-87%). In the second half of 2021, the correlation was differentiated on average for HFO: 63%, GasOil: 37%.

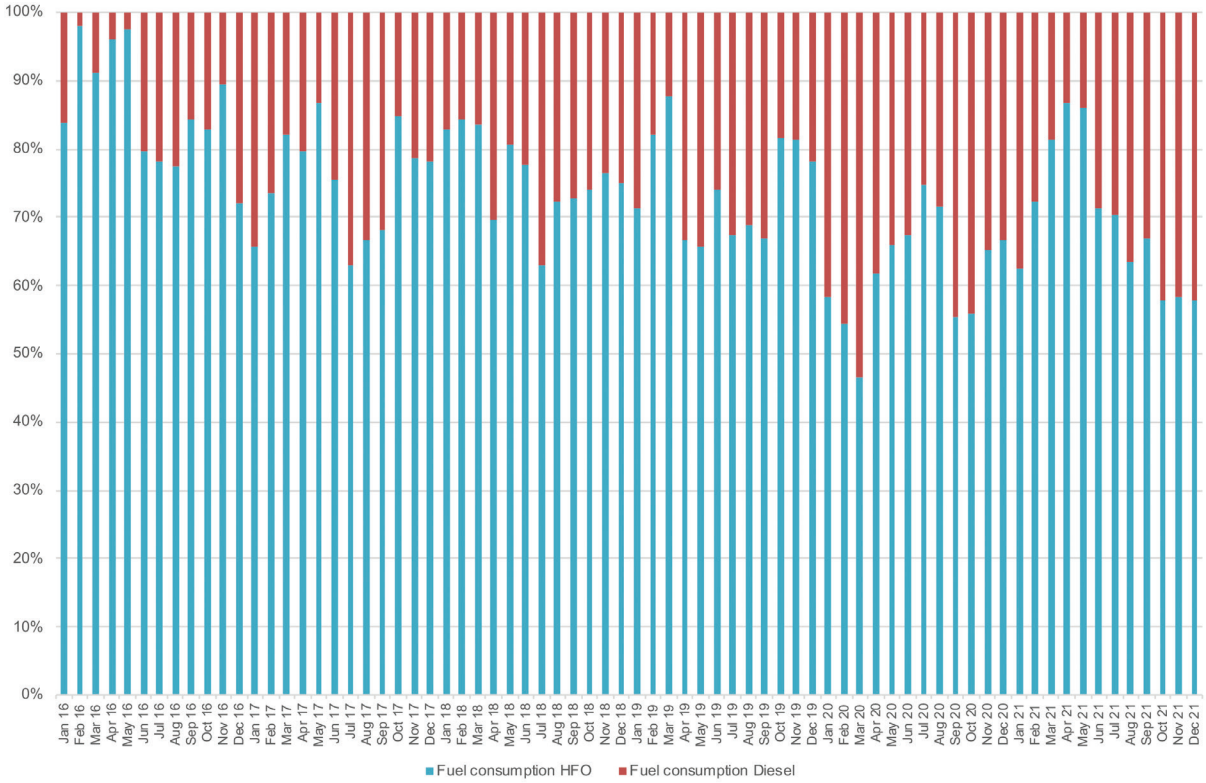


Figure 29 - Fuel mix for EAC electricity generation (consumption %)

Figure 30 shows the total and average unit cost for the purchase of greenhouse gas emission allowances from January 2017 to December 2021.

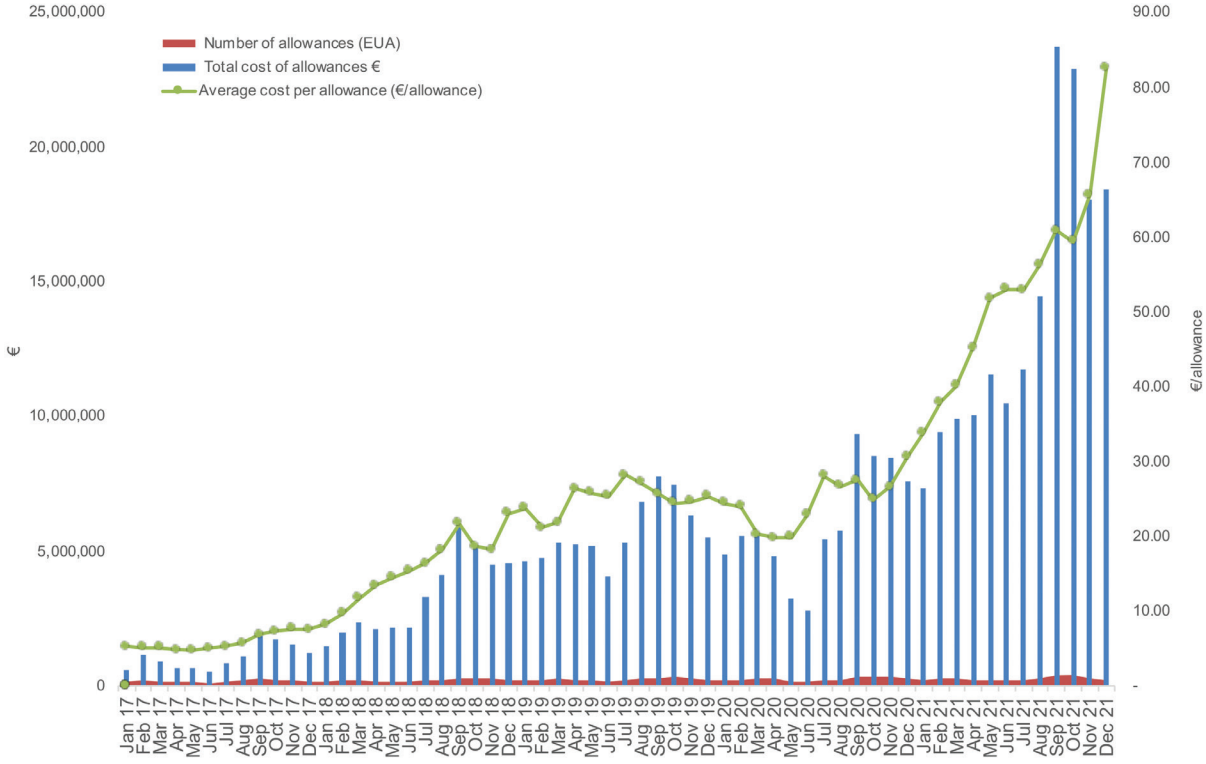


Figure 30 - Total cost of CO_2 emission allowances by EAC Generation, average cost per allowance

Figure 31 shows the number of greenhouse gas emission allowances that have been purchased by EAC Generation for the same period.

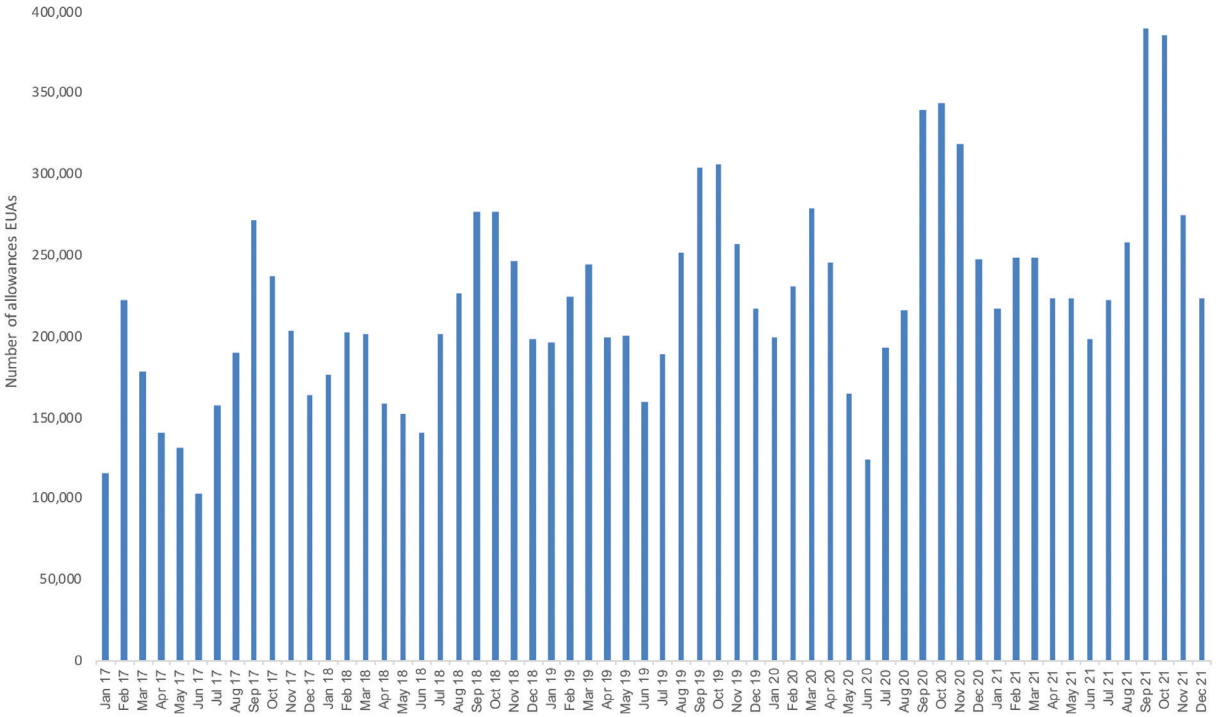


Figure 31 - Number of CO_2 allowances that were purchased by EAC Generation

Figure 32 shows the average tariff for household use (code 01) with a bi-monthly consumption of 600kWh from December 2012 to December 2021, inclusive of VAT and RES fee.

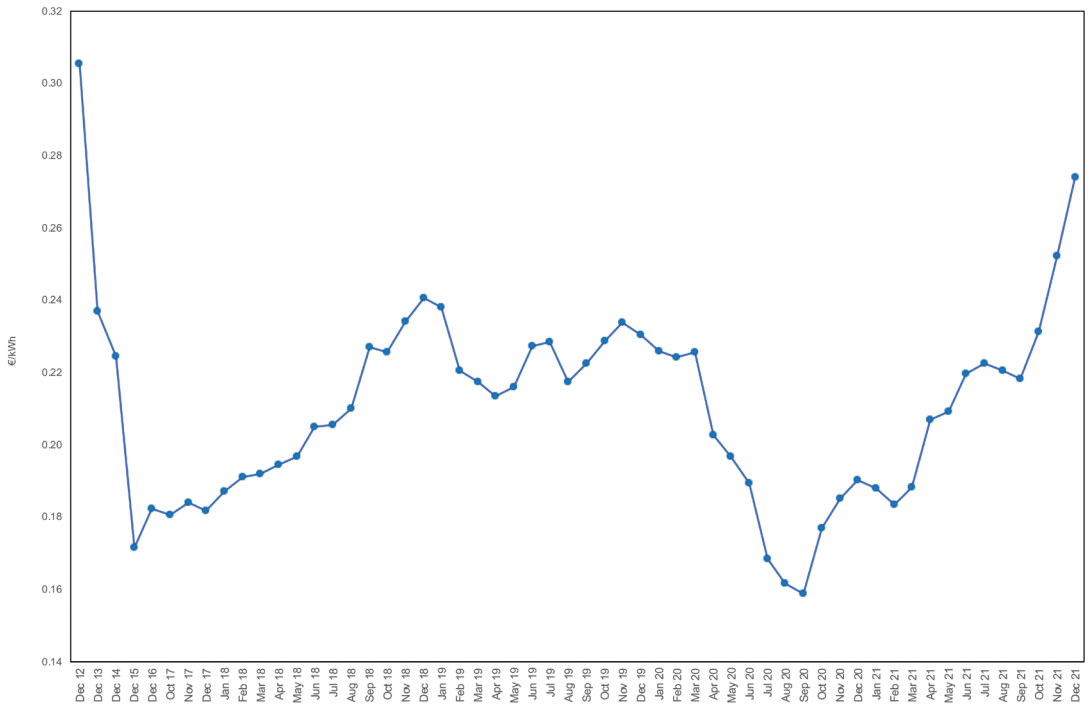


Figure 32 - Average tariff for household use (code 01)

Figure 33 shows the percentage of the Public Service Obligations (PSO), VAT and RES fee on the total bill amount for an average household consumer (bi-monthly consumption 600kWh) from October 2017 to December 2021.

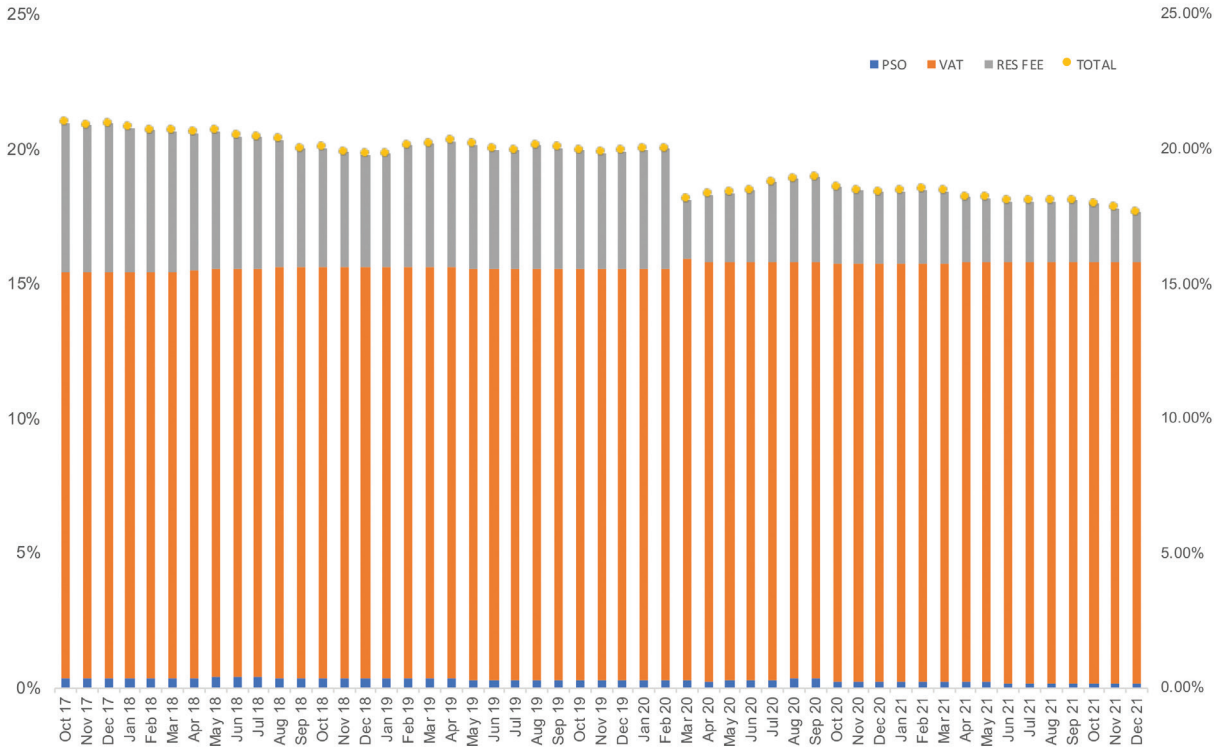


Figure 33 - PSO, VAT and RES analysis for Tariff 01

Figure 34 shows the average Tariff 10 - Bi-monthly Low Voltage Single Rate Commercial Use Tariff - from October 2017 to December 2021, inclusive of VAT and RES fee.

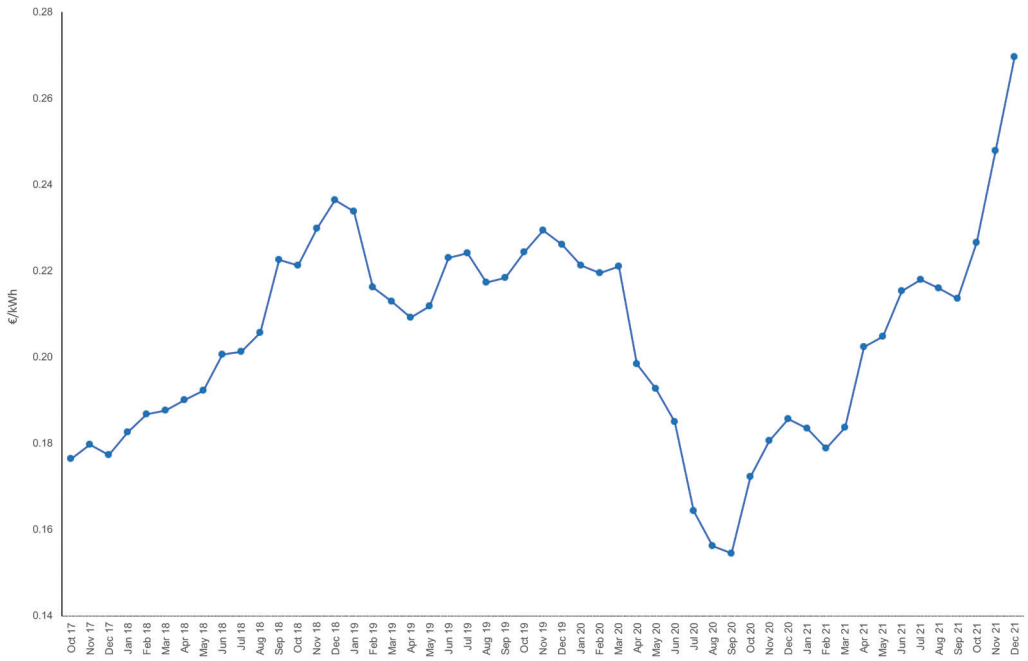


Figure 34 - Average Commercial and Industrial Use Tariff (code 10)

Figure 35 shows the average Tariff 30 - Monthly Low Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff - from October 2017 to December 2021, inclusive of VAT and RES fee.

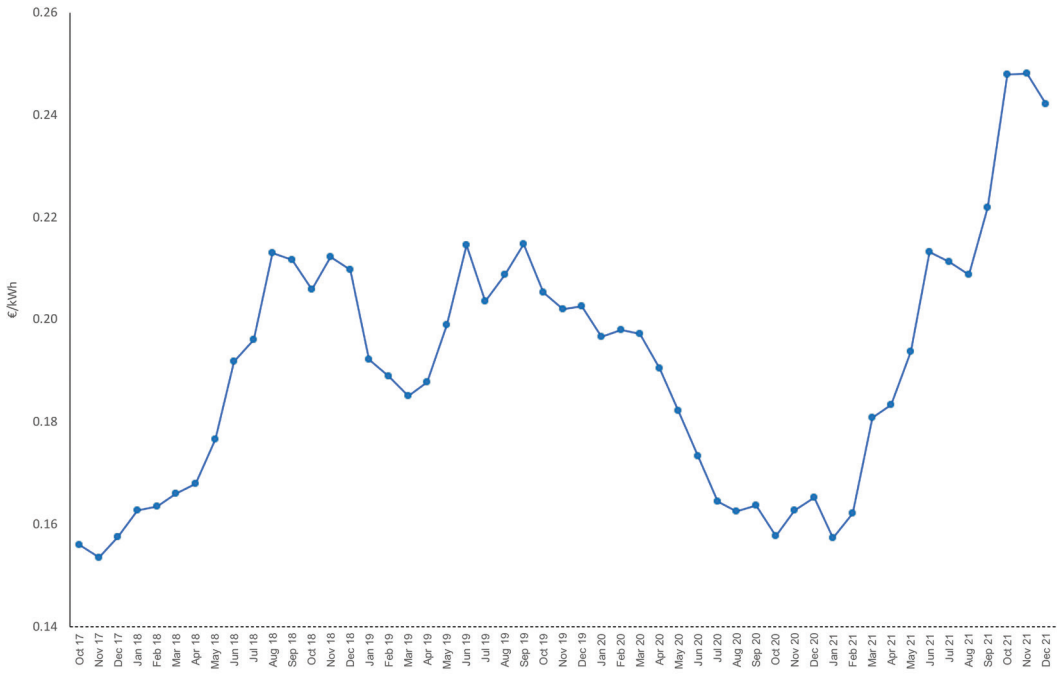


Figure 35 - Average Monthly Low Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff (code 30)

Figure 36 shows the average Tariff 40 - Monthly Medium Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff - from October 2017 to December 2021, inclusive of VAT and RES fee.

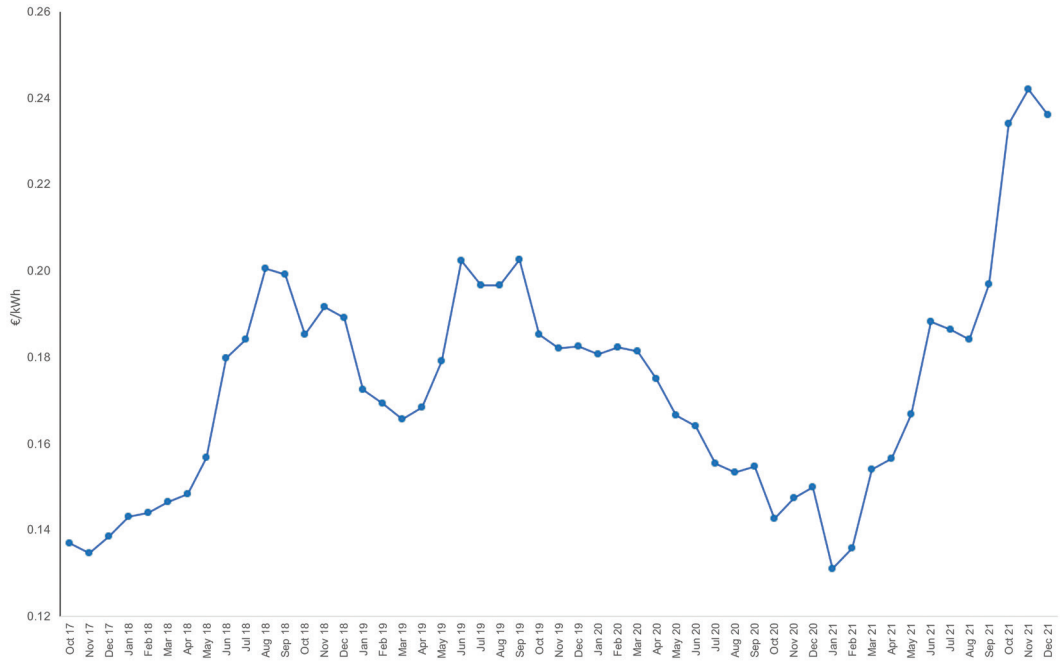


Figure 36 - Monthly Medium Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff (Code 40)

Figure 37 shows the average Tariff 50 - Monthly High Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff - from October 2017 to December 2021, inclusive of VAT and RES fee.

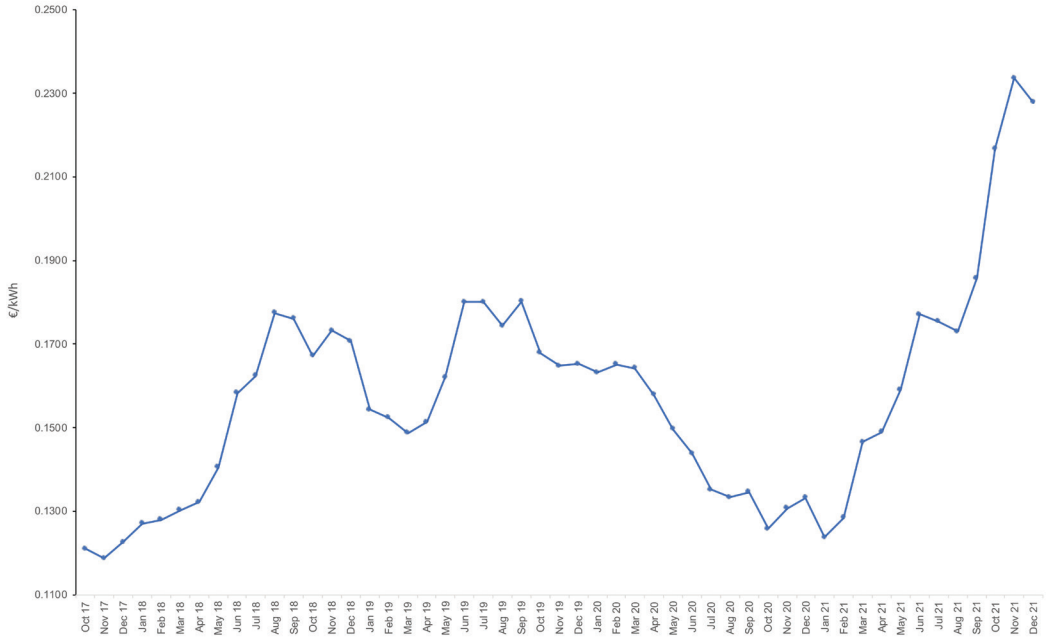


Figure 37 - Monthly High Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff (code 50)

Figure 38 shows the cost of purchasing energy from RES, at Low Voltage, from December 2012 to December 2021.

Figure 38 - Cost of purchasing energy from RES (Low Voltage) - in €c/kWh

We observe in the above Figures that in 2021, the electricity tariffs of all categories had an upward trend compared to the previous years of the regulatory period 2017 - 2021.

The increase in the average tariffs in 2021 is due to the increase in the cost of fuel in electricity generation, due to the global increase in the cost of fuel, but also due to the increase in the cost of purchasing greenhouse gas emission allowances.

Bill Analysis of EAC Supply

Figure 39 shows the analysis of the electricity bill per charge category, for a typical household consumer with bi-monthly consumption of 600kWh in December 2021, at the basic price (i.e., the basic fuel price €300/Metric Ton).

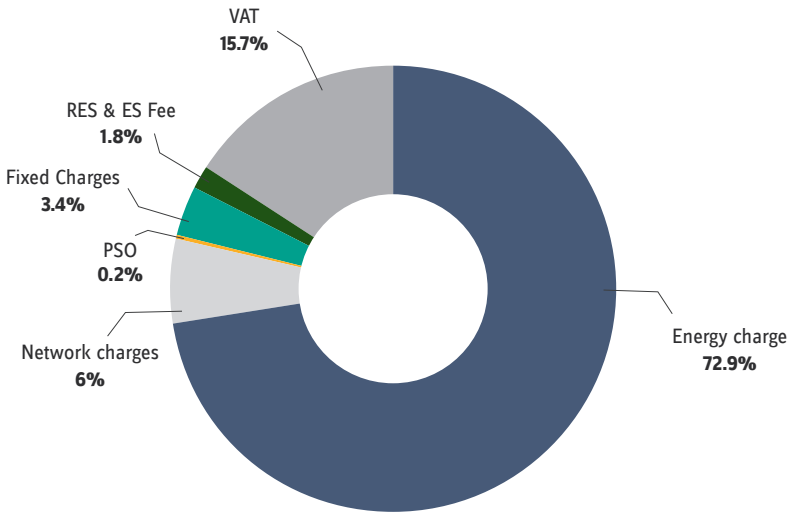


Figure 39 - Analysis of electricity bill for a typical household consumer with bi-monthly consumption of 600 kWh (% on the final bill), December 2021

Risk-Preparedness Plan

Regulation 2019/941 on risk-preparedness in the electricity sector lays down rules for cooperation between Member States with a view to preventing, preparing for and managing electricity crises in a spirit of solidarity and transparency and in full regard for the requirements of a competitive internal market for electricity. Further to Council of Ministers Decision No. 88,943, CERA was appointed the competent authority for the implementation of the provisions of Regulation 2019/941.

Pursuant to Regulation (EU) 2019/941, the competent authority shall identify the most relevant national electricity crisis scenarios in accordance with the regional electricity scenarios that have been determined by the European Network of Transmission System Operators for Electricity (ENTSO-E). In identifying the national electricity crisis scenarios, the competent authority shall consult the transmission system operators, the distribution system operators that the competent authority considers to be relevant, the relevant producers or their trade bodies, and the regulatory authority where it is not the competent authority.

Then, on the basis of the national electricity crisis scenarios identified, the competent authority of each Member State shall establish a risk-preparedness plan, after consulting distribution system operators

considered relevant by the competent authority, the transmission system operators, the relevant producers or their trade bodies, the electricity and natural gas undertakings, the relevant organizations that represent the interests of industrial and non-industrial electricity customers, and the regulatory authority where it is not the competent authority. The risk-preparedness plan shall be prepared in accordance with the template that is provided in Regulation (EU) 2019/941.

Although Cyprus has received a derogation from specific provisions of Regulation 2019/941, until is directly connected with another Member State, it has decided to move forward with the determination of national electricity crisis scenarios and its risk-preparedness plan.

On 26 May 2021, further to Decision 165/2021, having regard to the consultations that were carried out with TSOC, DSO, the relevant producers or their trade bodies, the relevant organizations that represent the interests of industrial and non-industrial electricity customers as well as the National Electricity Crisis Scenarios that had been developed with CERA Decision 432/2020, CERA decided to approve the Draft Risk-Preparedness Plan for Cyprus and to communicate this to the Electricity Coordination Group (ECG) for consultation.

The Risk-Preparedness Plan for Cyprus implements procedures and measures to reduce the possibility of electricity crises, where possible, and to mitigate the impact of crisis scenarios should they occur. These procedures and measures can be summarized into the following categories:

- Prevention/minimization of the probability of total or partial system downtime.
- Minimization of the probability of deficient generation adequacy. Preparing the system for high demand periods, when the system operates close to its stability limits, i.e., in the hot summer months
- Arrangements for the emergency operation of the Cyprus National Energy Control Center (NECC)
- Physical security and cyberspace measures.

5 NATURAL GAS MARKET

Legislative framework for the Natural Gas Market

The current Laws Regulating the Natural Gas Market of 2004 to 2021, which adopts the important features of the Third Energy Package, provides for the regulation of the natural gas market in the Republic of Cyprus and, among others, establishes the rules for the transmission, distribution, supply and storage of natural gas. In addition, it specifies the rules for the organization and operation of the natural gas sector, the access to the market, the exploitation of the networks and the criteria and procedures required to issue licenses for the transmission, distribution, supply and storage of natural gas. The Natural Gas Law also describes CERA's duties and responsibilities and specifies the range of activities and its role.

It is noted that the Laws Regulating the Natural Gas Market of 2004 to 2021 contain the key provisions for the imminent introduction of natural gas in the energy balance of the country. However, it does not specify the model of the market and the organizational framework that will be used for the development of the market, providing, therefore, reasonable flexibility to decision-makers to make the right choices. Furthermore, the Natural Gas Law provides the possibility of derogations, in accordance with the provisions of Directive 2009/73/EC concerning common rules for the internal market in natural gas. However, it does not specifically establish these derogations leaving the full definition of these derogations to the discretion of the Council of Ministers.

A key element of the new operating framework of natural gas and electricity markets, as it is described in the European legislative framework, is the unbundling of activities of generation and trade of natural gas. These activities should take place within a competitive environment, like the activities of transmission and distribution, for which the regulated access of third parties is allowed under the supervision of national regulatory authorities, ACER and the European Commission.

The Laws Regulating the Natural Gas Market of 2004 – 2021, allow Cyprus to derogate from certain articles, because it can be considered either an isolated or an emerging market. In the case of Cyprus, it is possible, on one hand, to derogate from applying the competition in the supply of natural gas to end consumers, especially as long as the natural gas market of Cyprus is considered emerging. On the other hand, it is possible not to separate the activities of the operators of natural gas (transmission, distribution, storage, LNG, etc.) from those of trade and supply, in the manner described in the Directive 2009/73/EC, for example, as regards ownership unbundled transmission facilities.

The Council of Ministers, by Decision 87.649, dated 5 June 2019, in accordance with the provisions of the Law, determined the operating framework of the natural gas market for the effective period of the emerging market or until the Council decides to terminate the derogations, and appointed the Operators. More specifically, according to the Decision, the competition is not applied in the supply of natural gas to the end consumers as long as the market is emerging. The supplier is, therefore, responsible for concluding all the relevant contracts of natural gas import, including the LNG, as well as all contracts of supply of natural gas to consumers of all categories. In addition, by this Decision, the Natural Gas Public Company (DEFA/CYGAS) was appointed as the TSO, DSO and LNG Operator for thirty years, starting from the date of issuance of the relevant licenses by CERA.

Furthermore, with Decision no. 91.503, dated 7 July 2020 and based on the provision of the Law, the Council of Ministers appointed the Natural Gas Public Company (DEFA/CYGAS) as the Storage System Operator for thirty years, starting from the date of issuance of the relevant licenses by CERA. In addition, it decided on the partial derogation of implementation until 2025:

- of Article 18 of the Law on the Independence of the Transmission System Operator, which provides that the Operator must be independent in terms of its organization and decision-making from monopolistic activities not related to transmission, namely the Distribution, Storage and Operation of the LNG System. As a result, the Transmission System Operator is not required to be independent in terms of its organization and decision-making from the Distribution, Storage and Operation of the LNG System. However, the Transmission System Operator shall be independent in terms of organization and not decision-making regarding the supply of natural gas, and
- Article 24 of the Law on the Independence of the Distribution System Operator, which provides that the Distribution System Operator must be independent in terms of its organization and decision-making from monopolistic activities not related to distribution, namely the Transmission, Storage and Operation of the LNG System. As a result, the Distribution System Operator is not required to be independent in terms of its organization and decision-making from the Transmission, Storage and Operation of the LNG System. However, the Distribution System Operator shall be independent in terms of organization and not decision-making regarding the supply of natural gas.

Organization and development of the natural gas market

In June 2016, following the report submitted by CERA regarding the options for the development of the natural gas market in Cyprus, the Council of Ministers decided on the arrival of LNG in Cyprus as soon as possible and before 2020. LNG will initially be the exclusive option of supplying the internal market with natural gas. Then, after supplying the internal market with natural gas from indigenous deposits, it will be an alternative option that will ensure the security of the energy supply.

Following the study conducted by DEFA LTD regarding the development of natural gas market in Cyprus, in order to make good use of the most suitable solution to import liquified natural gas by 2020 at the latest, the Council of Ministers decided, in June 2017, to assign to DEFA LTD the announcement of two invitations to tender for long-term supply of LNG and for a strategic investor for the required infrastructure.

Following a decision of the Council of Ministers of April 2018, a Special Purpose Vehicle - SPV under the name Natural Gas Infrastructure Company (ETYFA LTD) was established. This company will implement the required infrastructure for the arrival of LNG.

DEFA LTD, acting on behalf of ETYFA LTD, published in October 2018, an invitation to tender for the design, construction and operation of the terminal station of import of LNG in the bay of Vasilikos. The tender was awarded to an international consortium in December 2019.

The entry of natural gas in the energy balance, in the context of the objectives of the energy policy for the diversification of the energy sources of the country and the protection of the environment, is an important decision in the energy sector.

Considering that the natural gas market in Cyprus is developing, the main goal is to create an organized market, according to the standards of the advanced global markets, and the best practices of the European natural gas market, with the proper operation of all stakeholders in the market, whether they are gas undertakings or bodies established by law.

CERA gives high priority to the fast and effective penetration of natural gas on competitive terms in the market of Cyprus.

CERA's obligations pertaining to the purchase of natural gas and its regulatory jurisdiction are defined in the Natural Gas Law. In the period leading up to the arrival of natural gas, CERA is working towards setting up the regulatory framework of the market, knowing that it will act as the guarantor for the operation of the market and the protection of the consumers during the derogation period, as well as the smooth transition to a healthy open market.

In this context, by Decision 73/2021, dated 26 February 2021, CERA issued the Guidelines on conducting an estimate of natural gas demand in the natural gas transmission system by the Natural Gas Transmission System Operator and the Conclusion of Interconnection Agreements. In addition, by Decision 74/2021, dated 26 February 2021, CERA issued the Guidelines on preparing the natural gas transmission system development plan, which is prepared by the Transmission System Operator and concerns the coming ten (10) years.

Applications submitted to CERA

Application of Hoegh LNG Ltd for a license for the construction, ownership and exploitation of a LNG facility

On 31 March 2020, Hoegh LNG Ltd submitted an application to CERA for a license for the construction, ownership and exploitation of a LNG facility. CERA evaluated the application as to its completeness under Regulation 4 of the Licensing Regulations and requested from the applicant to submit additional information in order to complete the application. Following the extensions that were requested by the applicant which have been granted by CERA, the deadline for the submission of the supplementary information has been set for 30th June 2022.

Application by DEFA Ltd for the granting of a License for the construction, ownership, exploitation and operation of a natural gas transmission system

After evaluating the application by DEFA Ltd for a License for the construction, ownership, exploitation and operation of a natural gas transmission system, CERA issued Decision no. 55/2021 dated 23 February 2021, which grants the License to the applicant.

Application by DEFA Ltd for the granting of an LNG Facility Operation License

After evaluating the application by DEFA Ltd for an LNG Facility Operation License, CERA issued Decision no. 288/2021 of 14 September 2021, which grants the License to the applicant.

Amendment to the terms of the Natural Gas Transmission System Operator License

With Decision no. 384/2021 dated 21 December 2021, CERA decided to amend the terms of the Natural Gas Transmission System Operator License to fall in line with the Council of Ministers Decision (Decision No. 91,503) which was taken at the Session held on 7 July 2021 and to add the term concerning the requirement for proving metering data to the LNG Installation Operator (DEYFA).

Tender Procedures

Tender No 12/2020 for the conclusion of a framework agreement for the provision of consulting services to support CERA regarding issues related to the natural gas market of Cyprus

By Decision no. 339/2020 dated 09 November 2021, CERA decided to renew the Framework Agreement for another year, while by Decision no. 342/2020 dated 12 November 2021 it decided on the replacement of the Key Expert.

Tender No. 13/2021 "Consultancy Services for Establishing Guidelines on the Development of a Hydrogen Value Chain in the Republic of Cyprus"

By Decision no. 391/2020 dated 29 December 2021, CERA decided to award the Contract for the provision of Consultancy Services for Establishing Guidelines on the Development of a Hydrogen Value Chain in the Republic of Cyprus to EXERGIA Energy & Environment Consultants S.A.

6 PROTECTION OF CONSUMERS AND RESOLUTION OF COMPLAINTS

Protection of Consumers and Resolution of Complaints

The Council of European Energy Regulators - CEER, in cooperation with all NRAs, promote measures to implement the protection and upgrade of the rights of energy consumers and, in particular, vulnerable consumers. The support of CEER by NRAs is a key measure. The NRAs shall disclose the establishment of a new website which is intended solely for updating energy consumers.

The CEER website which is exclusively addressed to energy consumers is **https://www.ceer.eu/consumers.**

In order for CERA to ensure that consumers have access to all necessary information regarding their rights, current legislation and the means of appeal available in case of dispute, it is preparing informative material, which is available in electronic format at the Points of Single Contact, namely Citizen Service Centers, in the District Offices of the MECI.

Performance Indicators

Exercising the powers conferred on it by the Law Regulating the Electricity Market and its amendments, following the approval of the Council of Ministers and the submission to and approval by the House of Representatives, CERA has adopted the Law Regulating the Electricity Market (Performance Indicators) Regulations of 2005 - KDP 571/2005.

Based on these Regulations, "Performance Indicators" are defined as the indicators of the electricity supply and include the obligations of the Supplier and the Owner of the Distribution System, the rights of the consumers, the performance standards and their minimum performance levels, as well as the fine imposed if the Supplier and/or the Owner of the Distribution System fail to comply.

In the context of applying and complying with the above provisions, provided below for each Performance Indicator are the fine amounts paid to the electricity consumers by EAC as Owner of the Distribution System and Licensed Supplier. These amounts have been recorded for the period from1 January 2021 to 31 December 2021. Also presented, for comparison purposes, are the corresponding results in previous years.

PERFORMANCE INDICATORS FOR THE OWNER OF THE DISTRIBUTION SYSTEM (EAC)

Fine paid by EAC (€) to electricity consumers

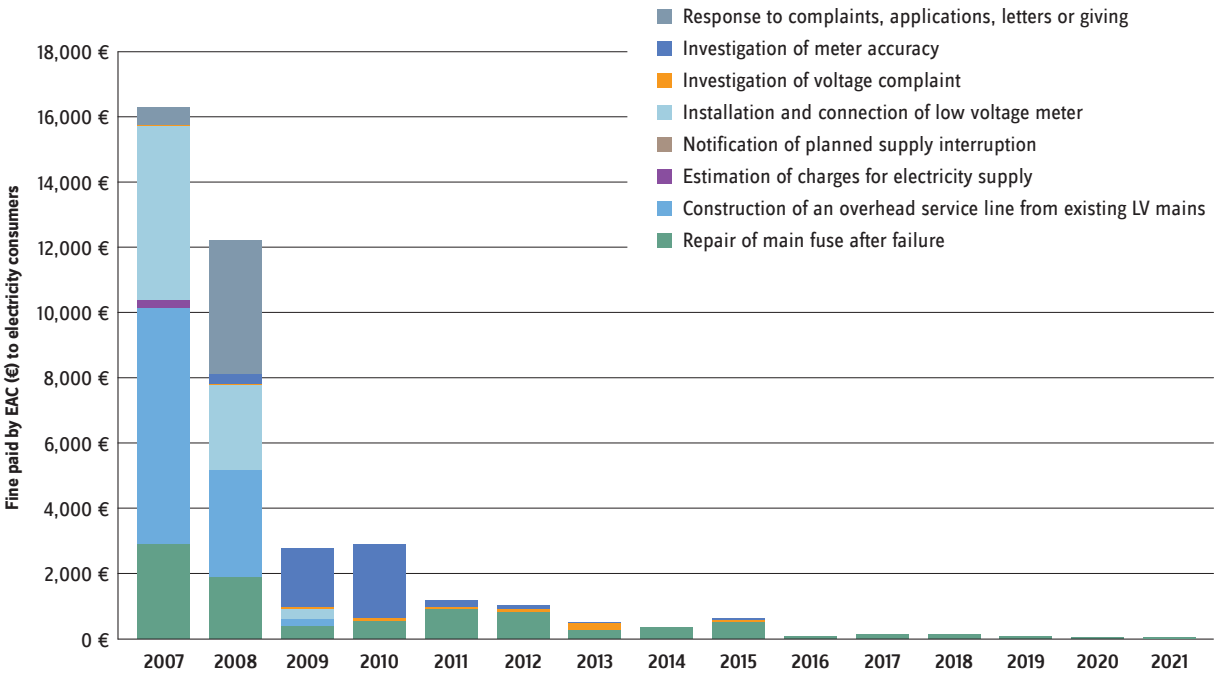


Figure 40 - Performance Indicators of ODS (EAC)

	PERFORMANCE INDICATOR	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	Repair of main fuse after failure	2.905€	1.896€	393€	529€	914€	828€	265€	367€	521€	60€	137€	137€	94€	34€	43€
2	Installation and connection of low voltage meter	5.331€	2.605€	290€												
3	Construction of an overhead service line from existing LV mains	7.227€	3.264€	205€	17€											
4	Estimation of charges for electricity supply	239€														
5	Notification of planned supply interruption															
6	Investigation of voltage complaint	34€	34€	68€	68€	34€	68€	205€		34€						
7	Investigation of meter accuracy		308€	1.811€	2.289€	239€	137€	31€		34€						
8	Response to complaints, applications, letters or giving	530€	4.102€					17€								

Table 5 - Performance Indicators of ODS (EAC)

PERFORMANCE INDICATORS FOR THE SUPPLIER (EAC)

Fine paid by EAC (€) to electricity consumers

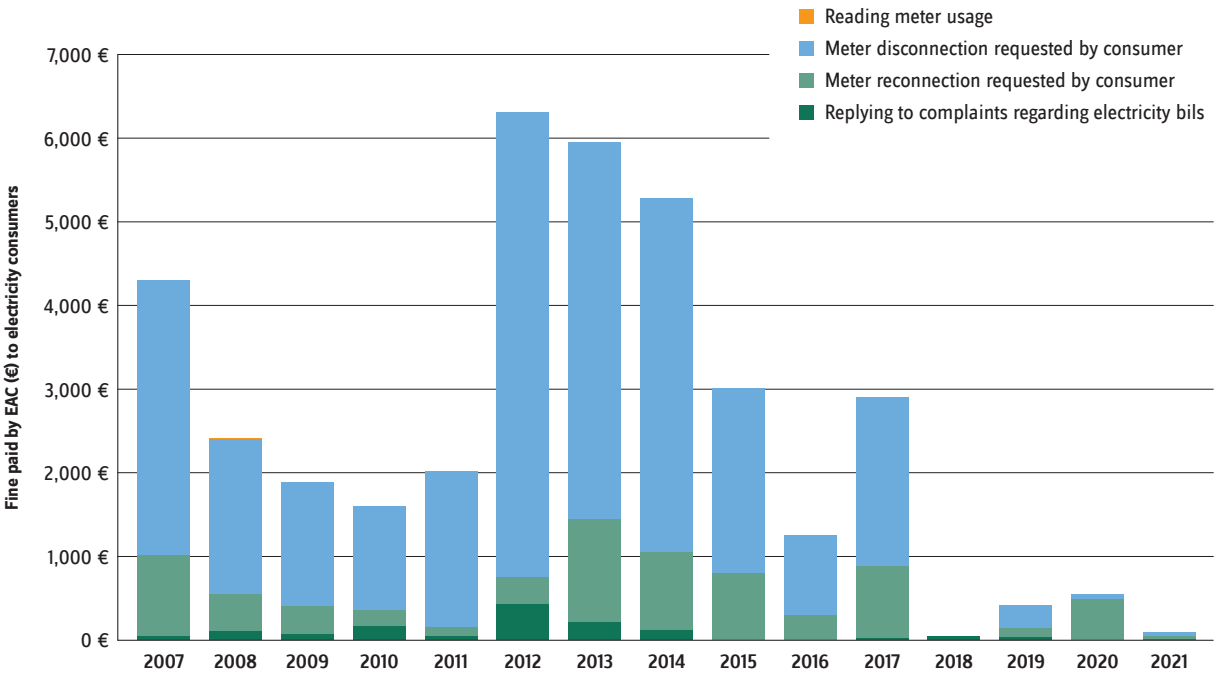


Figure 41 - Performance Indicators of EAC supplier

PERFORMANCE INDICATORS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	Replying to complaints regarding electricity bils	51€	103€	68€	171€	51€	427€	222€	120€			17€	51€	34€		17€
2	Arrangement of appointments															
3	Meter reconnection requested by consumer	957€	453€	333€	188€	111€	333€	1.230€	931€	803€	299€	868€		102€	470€	26€
4	Meter disconnection requested by consumer	3.298€	1.853€	1.477€	1.238€	1.853€	5.551€	4.501€	4.231€	2.203€	948€	2.015€		273€	60€	34€
5	Reading meter usage		9€													
6	Response to complaints, applications, letters or giving informations															

*** This indicator is included in indicator (8) of EAC as ODS**

Table 6 - Performance Indicators of EAC Supply

From Tables 5 and 6 and Figures 40 and 41, it appears that in the year under review, the performances of EAC both as an ODS and Supplier showed improvement compared to previous years and are therefore considered satisfactory.

Complaints submitted to CERA

Figure 42 below details the type and number of complaints submitted to CERA in 2021. It should be noted that all complaints have been examined and consumers have been informed accordingly.

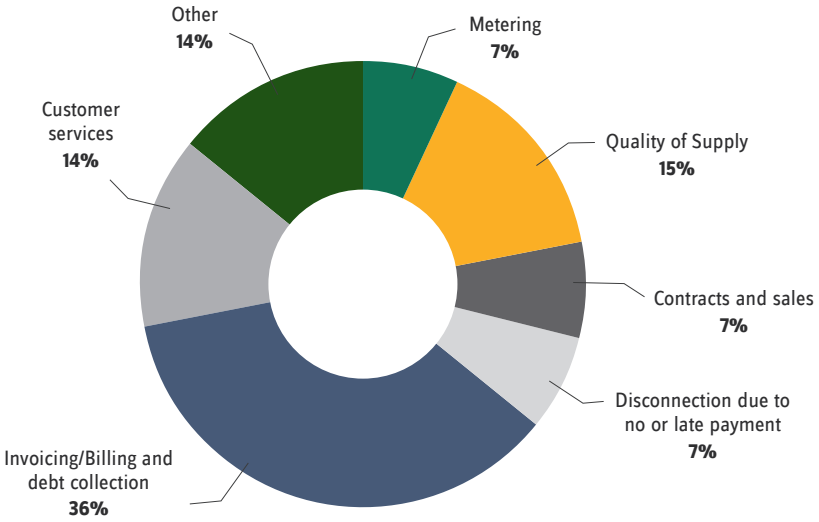


Figure 42 - Complaints submitted to CERA in 2021

7 REPORT AND FINANCIAL STATEMENTS OF CERA

CONTENTS

TOP MANAGEMENT

Top Management:	Dr. Andreas Poullikkas - Chairman Philippos Philippou - Vice Chairman Neophytos Hadjigeorgiou - Member
Coordinating Contracting Authority:	The Auditor General of the Republic of Cyprus
Independent Auditors:	VGDA Accountants Limited Certified Accountants and Registered Auditors 25th Martiou Street 35 (Kennedy corner) 2nd floor 1087 Nicosia Cyprus
Financial Advisors:	Alliott Partellas Kiliaris Ltd Certified Public Accountants 77 Strovolos Avenue Strovolos Center, Office 201 2018 Strovolos, Nicosia Cyprus
Legal Advisers:	Orphanides, Christofides & Co LLC 41, Themistoclis Dervis, Hawai Tower Offices 301-303, 3rd floor 1066 Nicosia, Cyprus Stelios Americanos & Co LLC 12, Demostheni Severi Ave Office 601, 6th Floor 1080 Nicosia, Cyprus
Registered office:	20, Agias Paraskevis P.O.Box 24936 2002 Strovolos, Nicosia Cyprus
Bankers:	Bank of Cyprus Public Company Ltd Hellenic Bank Public Company Ltd Eurobank Cyprus Ltd RCB Bank Ltd Housing Finance Corporation

TOP MANAGEMENT REPORT

The Senior Management of the Cyprus Energy Regulatory Authority (CERA) presents its report and audited financial statements of the Authority for the year ended 31 December 2021.

Principal activities and nature of operations of the Authority

The establishment of CERA arises from the obligations of Cyprus towards the European Union. CERA's basic mission is the supervision of the operation of the Energy Market (Electricity and Natural Gas) in a new and liberalised environment without monopolies.

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

The Authority's development to date, financial results and position as presented in the financial statements are considered satisfactory.

Principal risks and uncertainties

The principal risks and uncertainties faced by the Authority are disclosed in notes 6, 7, 30 and 32 of the financial statements.

Results

The Authority's results for the year are set out on page 114.

Top Management

The members of the Authority's Top Management as at 31 December 2021 and at the date of this report are presented on page 108.

In accordance with the Law on the Establishment and Operation of the Cyprus Energy Regulatory Authority of 2021 (Law 129 (I)/2021), article 6 'Appointment, terms of appointment, remuneration and pension of the members of the Senior Management', the appointment of a person to the position of a member of the Senior Management is for a period of five to seven years and is limited to a maximum of two consecutive terms.

Mr. Andreas Poullikkas and Mr. Philippos Philippou were reappointed on 15 October 2021 for seven years.

Mr. Neophytos Hadjigeorgiou was appointed on 26 April 2016 for six years and his term has been renewed on 4 April 2022 for seven more years.

Operating Environment of the Authority

Any significant events that relate to the operating environment of the Authority are described in note 30 to the financial statements.

Events after the reporting period

Any significant events that occurred after the end of the reporting period are described in note 34 to the financial statements.

Related party transactions

Disclosed in note 31 of the financial statements.

Independent Auditors

The Auditor of the Authority is the Auditor General of the Republic who has assigned the independent auditors, VGDA Accountants Limited, the audit of the financial statements of the Authority and, will continue to provide their services for the next year.

By order of the Top Management,

Dr. Andreas Poullikkas
Chairman

Nicosia, Cyprus, 3 May 2022

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF CYPRUS ENERGY REGULATORY AUTHORITY (CERA)

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Cyprus Energy Regulatory Authority (the "Authority"), which are presented in pages 114 to 152 and comprise the statement of financial position as at 31 December 2021, and the statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Authority as at 31 December 2021, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and the requirements of the law regulating the Electricity Market.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the "Auditor's Responsibilities for the Audit of the Financial Statements" section of our report. We are independent of the Authority in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Cyprus, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information

The Top Management is responsible for the other information. The other information comprises the information included in the management report and the additional information to the statement of profit or loss and other comprehensive income in pages 153 to 156, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Top Management for the Financial Statements

The Senior Management is responsible for the preparation of financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of the law regulating the Electricity Market, and for such internal control as the Senior Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Top Management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Top Management either intends to liquidate the Authority or to cease operations, or has no realistic alternative but to do so.

The Top Management is responsible for overseeing the Authority's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Top Management.
- Conclude on the appropriateness of the Top Management' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves a true and fair view.

We communicate with the Top Management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on Other Legal Requirements

Pursuant to the additional requirements of the Auditors Law of 2017, we report the following:

- In our opinion, the Senior Management Report has been prepared in accordance with the requirements of the law regulating the Electricity Market, and the information given is consistent with the financial statements.
- In our opinion, and in the light of the knowledge and understanding of the Authority and its environment obtained in the course of the audit, we have not identified material misstatements in the Top Management Report.

Other Matter

This report, including the opinion, has been prepared for and only for the Authority's members as a body in accordance with Section 69 of the Auditors Law of 2017 and for the Auditor General of the Republic of Cyprus 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.

Antonis Antoniou
Certified Public Accountant and Registered Auditor
for and on behalf of
VGDA Accountants Limited
Certified Public Accountants

25th Martiou street 35 (Kennedy corner)
2nd floor
1087 Nicosia, Cyprus

Nicosia, Cyprus, 3 May 2022

VGDA
Audit – Tax – Advisory

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2021

	Note	**2021** **€**	2020 €
Revenue	8	**2.224.650**	2.201.458
Other operating income	9	**140.252**	69.644
Selling and distribution expenses		**(140)**	-
Administration expenses		**(2.294.016)**	(2.197.280)
Net impairment profit/(loss) on financial and contract assets		**25.423**	(41.520)
Other expenses	10	**-**	(47.966)
Operating surplus/(deficit)	11	**96.169**	(15.664)
Finance income		**49.288**	40.930
Finance costs		**(36.377)**	(37.588)
Net finance income	14	**12.911**	3.342
Surplus/(deficit) before tax		**109.080**	(12.322)
Tax	15	**(2.247)**	(3.658)
Net surplus/(deficit) for the year		**106.833**	(15.980)
Other comprehensive income			
Items that will not be classified subsequently to profit or loss:			
Remeasurements of post-employment benefit obligations		**433.084**	(446.181)
		433.084	(446.181)
Items that may be classified subsequently to profit or loss:			
Financial assets at fair value through other comprehensive income - Fair value (losses)/gains		**(98.130)**	289.693
		(98.130)	289.693
Other comprehensive income/(loss) for the year		**334.954**	(156.488)
Total comprehensive income/(loss) for the year		**441.787**	(172.468)

The notes on pages 121 to 152 form an integral part of these financial statements.

STATEMENT OF FINANCIAL POSITION

As at 31 December 2021

	Note	**2021** **€**	2020 €
ASSETS			
Non-current assets			
Property, plant and equipment	17	**168.081**	107.390
Right-of-use assets	18	**432.724**	634.948
Intangible assets	19	**-**	836
Financial assets at fair value through other comprehensive income	20	**3.181.950**	3.280.080
Financial assets at fair value through profit or loss	22	**112.088**	77.510
		3.894.843	4.100.764
Current assets			
Trade and other receivables	21	**111.730**	106.669
Cash at bank and in hand	23	**7.629.414**	7.487.369
		7.741.144	7.594.038
Total assets		**11.635.987**	11.694.802
RESERVES AND LIABILITIES			
Reserves			
Other reserves		**191.563**	289.693
Retained surplus		**6.357.557**	5.821.027
Total reserves		**6.549.120**	6.110.720
Non-current liabilities			
Lease liabilities	25	**258.473**	464.817
Provisions for other liabilities and charges	13, 26	**2.386.826**	2.698.178
		2.645.299	3.162.995
Current liabilities			
Trade and other payables	27	**147.482**	160.102
Deferred income	28	**2.098.699**	2.076.009

The notes on pages 121 to 152 form an integral part of these financial statements.

(continued)

	Note	2021 €	2020 €
Borrowings	24	**6.729**	-
Lease liabilities	25	**187.190**	184.976
Current tax liabilities	29	**1.468**	-
		2.441.568	2.421.087
Total liabilities		**5.086.867**	5.584.082
Total reserves and liabilities		**11.635.987**	11.694.802

On 3 May 2022 the Top Management of Cyprus Energy Regulatory Authority (CERA) authorised these financial statements for issue.

Dr. Andreas Poullikkas
Chairman

Philippos Philippou
Vice chairman

Neophytos Hadjigeorgiou
Member

The notes on pages 121 to 152 form an integral part of these financial statements.

STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2021

	Note	Fair value reserve - Financial assets at fair value through other comprehensive income	Retained surplus	Total
		€	€	€
Balance at 1 January 2020		**-**	**6.291.081**	**6.291.081**
Comprehensive income				
Net deficit for the year		-	(15.980)	(15.980)
Other comprehensive income for the year		289.693	-	289.693
Defence and GHS contribution on deemed distribution	16	-	(7.894)	(7.894)
Other movements				
Actuarial loss for the year		-	(446.180)	(446.180)
Balance at 31 December 2020/ 1 January 2021		**289.693**	**5.821.027**	**6.110.720**
Comprehensive income				
Net surplus for the year		-	106.833	106.833
Other comprehensive income for the year		(98.130)	-	(98.130)
Defence and GHS contribution on deemed distribution	16	-	(3.389)	(3.389)
Other movements				
Actuarial gain for the year		-	433.086	433.086
Balance at 31 December 2021		**191.563**	**6.357.557**	**6.549.120**

The fair value reserve for investments represents accumulated gains and losses arising on the revaluation of available-for-sale financial assets that have been recognised in other comprehensive income, net of amounts reclassified to profit or loss when those assets have been disposed of or are determined to be impaired.

The notes on pages 121 to 152 form an integral part of these financial statements.

Companies, which do not distribute 70% of their profits after tax, as defined by the Special Contribution for the Defence of the Republic Law, within two years after the end of the relevant tax year, will be deemed to have distributed this amount as dividend on the 31 of December of the second year. The amount of the deemed dividend distribution is reduced by any actual dividend already distributed by 31 December of the second year for the year the profits relate. The Company pays special defence contribution on behalf of the shareholders over the amount of the deemed dividend distribution at a rate of 17% (applicable since 2014) when the entitled shareholders are natural persons tax residents of Cyprus and have their domicile in Cyprus. In addition, from 2019 (deemed dividend distribution of year 2017 profits), the Company pays on behalf of the shareholders General Healthcare System (GHS) contribution at a rate of 2,65% (2019: 1,70%), when the entitled shareholders are natural persons tax residents of Cyprus, regardless of their domicile. This special contribution for defence is payable by the Authority.

In the case of public bodies, the term profit is limited to profits arising from the conduct of business. In the case of CERA deemed distribution is calculated on interest receivable.

The notes on pages 121 to 152 form an integral part of these financial statements.

STATEMENT OF CASH FLOWS

For the year ended 31 December 2021

	Note	**2021** **€**	2020 €
CASH FLOWS FROM OPERATING ACTIVITIES			
Surplus/(deficit) before tax		**109.080**	(12.322)
Adjustments for:			
Depreciation of property, plant and equipment	17	**227.692**	219.220
Amortisation of computer software	19	**836**	836
Fair value (gains)/losses on financial assets at fair value through profit or loss		**(34.578)**	47.268
Actuarial gain/(loss)		**433.084**	(446.180)
Impairment charge - property, plant and equipment	17	**-**	699
(Reversal of impairment)/impairment charge on cash and cash equivalents	23	**(15.931)**	40.449
(Reversal of impairment)/impairment charge of trade receivables	21	**(905)**	1.071
Interest income	14	**(49.288)**	(40.930)
Interest expense	14	**21.293**	25.905
		691.283	(163.984)
Changes in working capital:			
(Increase)/decrease in trade and other receivables		**(4.177)**	48.065
Increase in other financial liabilities		**6.727**	-
(Decrease)/increase in trade and other payables		**(12.620)**	50.845
Increase in deferred income		**22.690**	2.793
(Decrease)/increase in provisions	26	**(311.352)**	791.999
Cash generated from operations		**392.551**	729.718
Tax paid		**(779)**	(6.649)
Net cash generated from operating activities		**391.772**	723.069
CASH FLOWS FROM INVESTING ACTIVITIES			
Payment for purchase of property, plant and equipment	17	**(107.961)**	(51.226)
Payment for purchase of financial assets at fair value through other comprehensive income		**-**	(2.990.387)

The notes on pages 121 to 152 form an integral part of these financial statements.

(continued)

	Note	2021 €	2020 €
Interest received		**49.288**	40.930
Net cash used in investing activities		**(58.673)**	(3.000.683)
CASH FLOWS FROM FINANCING ACTIVITIES			
Payments of leases liabilities		**(198.000)**	(198.000)
Interest paid		**(5.598)**	(3.544)
Defence contribution on deemed distribution paid		**(3.389)**	(7.894)
Net cash used in financing activities		**(206.987)**	(209.438)
Net increase/(decrease) in cash and cash equivalents		**126.112**	(2.487.052)
Cash and cash equivalents at beginning of the year		**7.487.371**	10.014.872
(Reversal of impairment)/impairment charge on cash and cash equivalents		**15.931**	(40.449)
Cash and cash equivalents at end of the year	23	**7.629.414**	7.487.371

The notes on pages 121 to 152 form an integral part of these financial statements.

1. Incorporation and principal activities

Country of incorporation

The Cyprus Energy Regulatory Authority (the "Authority") was established in Cyprus on 21 January 2004 as a public law legal entity, according to Law 122(I)/2003 which has been replaced by the Law 129 (I)/2021. On the same date and under the same law the Office of CERA was incorporated, which operates as a separate legal entity. The CERA supervises and controls the Office of CERA. Its registered office is at 20, Agias Paraskevis, P.O.Box 24936, 2002 Strovolos, Nicosia, Cyprus.The financial statements relate to CERA and the Office of CERA.

Principal activities

The establishment of CERA arises from the obligations of Cyprus towards the European Union. CERA's basic mission is the supervision of the operation of the Energy Market (Electricity and Natural Gas) in a new and liberalised environment without monopolies.

2. Basis of preparation

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and the requirements of the Law regulating the Electricity Market. The financial statements have been prepared under the historical cost convention as modified by the revaluation of, and financial assets and financial liabilities at fair value through profit or loss.

The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates and requires Top Management to exercise its judgment in the process of applying the Authority's accounting policies. It also requires the use of assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on Top Management's best knowledge of current events and actions, actual results may ultimately differ from those estimates.

3. Adoption of new or revised standards and interpretations

During the current year the Authority 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 2021. This adoption did not have a material effect on the accounting policies of the Authority.

4. Significant accounting policies

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

Revenue

Recognition and measurement

Revenue represents the amount of consideration to which the Authority expects to be entitled in exchange for transferring the promised goods or services to the customer, excluding amounts collected on behalf of third parties (for example, value-added taxes). The Authority includes in the transaction price an amount of variable consideration as a result of rebates/discounts only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Estimations for rebates and discounts are based on the Authority's experience with similar contracts and forecasted sales to the customer.

The Authority recognises revenue when the parties have approved the contract (in writing, orally or in accordance with other customary business practices) and are committed to perform their respective obligations, the Authority can identify each party's rights and the payment terms for the goods or services to be transferred, the contract has commercial substance (i.e. the risk, timing or amount of the Authority's future cash flows is expected to change as a result of the contract), it is probable that the Authority will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer and when specific criteria have been met for each of the Authority's contracts with customers.

The Authority bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement. In evaluating whether collectability of an amount of consideration is probable, the Authority considers only the customer's ability and intention to pay that amount of consideration when it is due.

Estimates of revenues, costs or extent of progress toward completion are revised if circumstances change. Any resulting increases or decreases in estimates are reflected in the statement of profit or loss and other comprehensive income in the period in which the circumstances that give rise to the revision become known by Top Management.

Identification of performance obligations

The Authority assesses whether contracts that involve the provision of a range of goods and/or services contain one or more performance obligations (that is, distinct promises to provide a service) and allocates the transaction price to each performance obligation identified on the basis of its standalone selling price. A good or service that is promised to a customer is distinct if the customer can benefit from the good or service, either on its own or together with other resources that are readily available to the customer (that is the good or service is capable of being distinct) and the Authority's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (that is, the good or service is distinct within the context of the contract).

Revenue is measured based on the consideration to which the Authority expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties. The Authority recognises revenue when it transfers control of a product or service to a customer.

- **Revenue from fees**

  Income from fees consist of the invoiced amount for charges relating to granting of licenses. Fee income is recognized in the period to which the relevant license has been granted.

- **Interest income**

  Interest revenue is recognised when it is probable that the economic benefits will flow to the Authority and the amount of revenue can be measured reliably. Interest revenue is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Employee benefits

The Authority operates a defined benefit plan which will be funded as in the Public Sector, via the Annual Budget. Benefits will be paid on retirement, death or resignation of an employee. The amount of the benefit will depend on the duration of service and the level of income of the employee.

The Authority and its employees contribute to the Government Social Insurance Fund based on employees' salaries. In addition, the Authority provides its employees with retirement benefits in the form of a lump sum based on a defined benefit retirement plan. The Authority's contributions are expensed as incurred and are included in staff costs. The Authority has no legal or constructive obligations to pay further contributions if the scheme does not hold sufficient assets to pay all employees benefits relating to employee service in the current and prior periods.

The present value of obligations and the cost of current service for the defined benefit plan are estimated annually with the projected unit credit method. Actuarial gains or losses result from changes in the interest rate by which estimated future cash outflows for benefits and other actuarial assumptions are discounted. Non-recorded actuarial gain or loss is recognized by the Authority at the beginning of the year.

Finance income

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

Finance costs

Interest expense and other borrowing costs are charged to profit or loss as incurred.

Tax

The fees received by the Authority under the Law regulating the Electricity Market and the relevant Regulations, as a result of executing its supervisory role, are not deemed to be income as this is defined in article 5(1)(a) of the Income Tax Law and are not subject to taxation. The same applies to government grants that the Authority has received in order to be able to exercise its supervisory role. Income from rent or any other source, is subject to taxation with the tax rate of 12.5% and to defense contribution, after deducting any allowable deduction as provided by the Law.

Current tax liabilities and assets are measured at the amount expected to be paid to or recovered from the taxation authorities, using the tax rates and laws that have been enacted, or substantively enacted, by the reporting date.

Property, plant and equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and any accumulated impairment losses.

Depreciation is calculated on the straight-line method so as to write off the cost of each asset to its residual value over its estimated useful life. The annual depreciation rates used are as follows:

	%
Computer hardware	20
Office equipment	10
Motor vehicles	20
Furniture, fixtures and equipment	10
Books	10

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

Where the carrying amount of an asset is greater than its estimated recoverable amount, the asset is written down immediately to its recoverable amount.

Expenditure for repairs and maintenance of property, plant and equipment is charged to profit or loss of the year in which it is incurred. The cost of major renovations and other subsequent expenditure are included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Authority. Major renovations are depreciated over the remaining useful life of the related asset.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Deferred income

Deferred income represents income receipts which relate to future periods.

Computer software

Costs that are directly associated with identifiable and unique computer software products controlled by the Authority and that will probably generate economic benefits exceeding costs beyond one year are recognised as intangible assets. Subsequently computer software is carried at cost less any accumulated amortisation and any accumulated impairment losses. Expenditure which enhances or extends the performance of computer software programs beyond their original specifications is recognised as a capital improvement and added to the original cost of the computer software. Costs associated with maintenance of computer software programs are recognised as an expense when incurred. Computer software costs are amortised using the straight-line method over their useful lives, not exceeding a period of three years. Amortisation commences when the computer software is available for use.

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

Leases

At inception of a contract, the Authority assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Authority assesses whether:

- the contract involves the use of an identified asset - this may be specified explicitly or implicitly, and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified;
- the Authority has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and
- the Authority has the right to direct the use of the asset. The Authority has this right when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used. In rare cases where the decision about how and for what purpose the asset is used is predetermined, the Authority has the right to direct the use of the asset if either:
  - the Authority has the right to operate the asset; or
  - the Authority designed the asset in a way that predetermines how and for what purpose it will be used.

At inception or on reassessment of a contract that contains a lease component, the Authority allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, the Authority has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Authority as lessee

The Authority recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of the right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Authority's incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Authority is reasonably certain to exercise, lease payments in an optional renewal period if the Authority is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Authority is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Authority's estimate of the amount expected to be payable under a residual value guarantee, or if the Authority changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Authority presents its right-of-use assets that do not meet the definition of investment property in 'Property, plant and equipment' in the statement of financial position.

The lease liabilities are presented in 'loans and borrowings' in the statement of financial position.

Short-term leases and leases of low-value assets

The Authority has elected not to recognise the right of use assets and lease liabilities for short term leases that have a lease term of 12 months or less and leases of low value assets (i.e. IT equipment, office equipment etc.). The Authority recognises the lease payments associated with these leases as an expense on a straight line basis over the lease term.

Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment. Assets 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.

Financial assets

Financial assets - Classification

The Authority classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss), and
- those to be measured at amortised cost.

The classification and subsequent measurement of debt financial assets depends on: (i) the Authority's business model for managing the related assets portfolio and (ii) the cash flow characteristics of the asset. On initial recognition, the Authority may irrevocably designate a debt financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI or at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

For investments in equity instruments that are not held for trading, the classification will depend on whether the Authority has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI). This election is made on an investment-by-investment basis.

All other financial assets are classified as measured at FVTPL.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Authority has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

Financial assets - Recognition and derecognition

All purchases and sales of financial assets that require delivery within the time frame established by regulation or market convention ("regular way" purchases and sales) are recorded at trade date, which is the date when the Authority commits to deliver a financial instrument. All other purchases and sales are recognised when the entity becomes a party to the contractual provisions of the instrument.

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Authority has transferred substantially all the risks and rewards of ownership.

Financial assets - Measurement

At initial recognition, the Authority measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVTPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVTPL are expensed in profit or loss. Fair value at initial recognition is best evidenced by the transaction price. A gain or loss on initial recognition is only recorded if there is a difference between fair value and transaction price which can be evidenced by other observable current market transactions in the same instrument or by a valuation technique whose inputs include only data from observable markets.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

Financial assets - impairment - credit loss allowance for ECL

The Authority assesses on a forward-looking basis the ECL for debt instruments (including loans) measured at amortised cost and FVOCI and exposure arising from loan commitments and financial guarantee contracts. The Authority measures ECL and recognises credit loss allowance at each reporting date. The measurement of ECL reflects: (i) an unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes, (ii) time value of money and (iii) all reasonable and supportable information that is available without undue cost and effort at the end of each reporting period about past events, current conditions and forecasts of future conditions.

The carrying amount of the financial assets is reduced through the use of an allowance account, and the amount of the loss is recognised in the statement of profit or loss and other comprehensive income within "net impairment losses on financial and contract assets. Subsequent recoveries of amounts for which loss allowance was previously recognised are credited against the same line item.

Debt instruments carried at amortised cost are presented in the statement of financial position net of the allowance for ECL. For loan commitments and financial guarantee contracts, a separate provision for ECL is recognised as a liability in the statement of financial position.

For debt instruments at FVOCI, an allowance for ECL is recognised in profit or loss and it affects fair value gains or losses recognised in OCI rather than the carrying amount of those instruments.

The impairment methodology applied by the Authority for calculating expected credit losses depends on the type of financial asset assessed for impairment. Specifically:

For trade receivables and contract assets, including trade receivables and contract assets with a significant financing component, and lease receivables the Authority applies the simplified approach permitted by IFRS 9, which requires lifetime expected credit losses to be recognised from initial recognition of the financial assets.

For all other financial instruments that are subject to impairment under IFRS 9, the Authority applies general approach - three stage model for impairment. The Authority applies a three stage model for

impairment, based on changes in credit quality since initial recognition. A financial instrument that is not credit-impaired on initial recognition is classified in Stage 1.

Financial assets in Stage 1 have their ECL measured at an amount equal to the portion of lifetime ECL that results from default events possible within the next 12 months or until contractual maturity, if shorter ("12 Months ECL"). If the Authority identifies a significant increase in credit risk ("SICR") since initial recognition, the asset is transferred to Stage 2 and its ECL is measured based on ECL on a lifetime basis, that is, up until contractual maturity but considering expected prepayments, if any ("Lifetime ECL"). Refer to note 6, Credit risk section, for a description of how the Authority determines when a SICR has occurred. If the Authority determines that a financial asset is credit-impaired, the asset is transferred to Stage 3 and its ECL is measured as a Lifetime ECL. The Authority's definition of credit impaired assets and definition of default is explained in note 6, Credit risk section.

Additionally the Authority has decided to use the low credit risk assessment exemption for investment grade financial assets. Refer to note 6, Credit risk section for a description of how the Authority determines low credit risk financial assets.

Financial assets - Reclassification

Financial instruments are reclassified only when the business model for managing those assets changes. The reclassification has a prospective effect and takes place from the start of the first reporting period following the change.

Financial assets - write-off

Financial assets are written-off, in whole or in part, when the Authority exhausted all practical recovery efforts and has concluded that there is no reasonable expectation of recovery. The write-off represents a derecognition event. The Authority may write-off financial assets that are still subject to enforcement activity when the Authority seeks to recover amounts that are contractually due, however, there is no reasonable expectation of recovery.

Financial assets - modification

The Authority sometimes renegotiates or otherwise modifies the contractual terms of the financial assets. The Authority assesses whether the modification of contractual cash flows is substantial considering, among other, the following factors: any new contractual terms that substantially affect the risk profile of the asset (e.g. profit share or equity-based return), significant change in interest rate, change in the currency denomination, new collateral or credit enhancement that significantly affects the credit risk associated with the asset or a significant extension of a loan when the borrower is not in financial difficulties.

If the modified terms are substantially different, the rights to cash flows from the original asset expire and the Authority derecognises the original financial asset and recognises a new asset at its fair value. The date of renegotiation is considered to be the date of initial recognition for subsequent impairment calculation purposes, including determining whether a SICR has occurred. The Authority also assesses whether the new loan or debt instrument meets the SPPI criterion. Any difference between the carrying amount of the original asset derecognised and fair value of the new substantially modified asset is recognised in profit or loss.

In a situation where the renegotiation was driven by financial difficulties of the counterparty and inability to make the originally agreed payments, the Authority compares the original and revised expected cash flows to assets whether the risks and rewards of the asset are substantially different as a result of the contractual modification. If the risks and rewards do not change, the modified asset is not substantially different from the original asset and the modification does not result in derecognition. The Authority recalculates the gross carrying amount by discounting the modified contractual cash flows by the original effective interest rate, and recognises a modification gain or loss in profit or loss.

Cash and cash equivalents

For the purpose of the statement of cash flows, cash and cash equivalents comprise cash on hand, deposits held at call with banks and bank overdrafts. In the statement of financial position, bank overdrafts are included in borrowings in current liabilities. Cash and cash equivalents are carried at amortised cost because: (i) they are held for collection of contractual cash flows and those cash flows represent SPPI, and (ii) they are not designated at FVTPL.

Classification as financial assets at amortised cost

These amounts generally arise from transactions outside the usual operating activities of the Authority. They are held with the objective to collect their contractual cash flows and their cash flows represent solely payments of principal and interest. Accordingly, these are measured at amortised cost using the effective interest method, less provision for impairment. Financial assets at amortised cost are classified as current assets if they are due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current assets.

Classification as trade receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If 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 loss allowance.

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, in which case they are recognised at fair value. The Authority holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method.

Trade receivables are also subject to the impairment requirements of IFRS 9. The Authority applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. See note 6, Credit risk section.

Trade receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Authority, and a failure to make contractual payments for a period of greater than 180 days past due.

Financial liabilities - measurement categories

Financial liabilities are initially recognised at fair value and classified as subsequently measured at amortised cost, except for (i) financial liabilities at FVTPL: this classification is applied to derivatives, financial liabilities held for trading (e.g. short positions in securities), contingent consideration recognised by an acquirer in a business combination and other financial liabilities designated as such at initial recognition and (ii) financial guarantee contracts and loan commitments.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

Trade payables

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

Financial liabilities - Modifications

An exchange between the Authority and its original lenders of debt instruments with substantially different terms, as well as substantial modifications of the terms and conditions of existing financial liabilities, are accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. (In addition, other qualitative factors, such as the currency that the instrument is denominated in, changes in the type of interest rate, new conversion features attached to the instrument and change in loan covenants are also considered.)

If an exchange of debt instruments or modification of terms is accounted for as an extinguishment, any costs or fees incurred are recognised as part of the gain or loss on the extinguishment. If the exchange or modification is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

Modifications of liabilities that do not result in extinguishment are accounted for as a change in estimate using a cumulative catch up method, with any gain or loss recognised in profit or loss.

Offsetting financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. This is not generally the case with master netting agreements, and the related assets and liabilities are presented gross in the statement of financial position.

Prepayments

Prepayments are carried at cost less provision for impairment. A prepayment is classified as non-current when the goods or services relating to the prepayment are expected to be obtained after one year, or when the prepayment relates to an asset which will itself be classified as non-current upon initial recognition. Prepayments to acquire assets are transferred to the carrying amount of the asset once the Authority has obtained control of the asset and it is probable that future economic benefits associated with the asset will flow to the Authority. Other prepayments are written off to profit or loss when the goods or services relating to the prepayments are received. If there is an indication that the assets, goods or services relating to a prepayment will not be received, the carrying value of the prepayment is written down accordingly and a corresponding impairment loss is recognised in profit or loss.

Provisions

Provisions are recognised when the Authority 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 a reliable estimate of the amount can be made. Where the Authority expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

Non-current liabilities

Non-current liabilities represent amounts that are due more than twelve months from the reporting date.

Comparatives

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

5. New accounting pronouncements

At the date of approval of these financial statements, standards and interpretations were issued by the International Accounting Standards Board which were not yet effective. Some of them were adopted by the European Union and others not yet. The Top Management expects that the adoption of these accounting standards in future periods will not have a material effect on the financial statements of the Authority.

6. Financial risk management

Financial risk factors

The Authority is exposed to market price risk, interest rate risk, credit risk, liquidity risk, other market price risk and reputation risk arising from the financial instruments it holds. The risk management policies employed by the Authority to manage these risks are discussed below:

6.1 Market price risk

The Authority is exposed to equity securities price risk because of equity investments held by the Authority and classified on the statement of financial position either as fair value through other comprehensive income or at fair value through profit or loss. The Authority is not exposed to commodity price risk.

6.2 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 Authority's income and operating cash flows are substantially independent of changes in market interest rates as the Authority has no significant interest-bearing assets. The Authority is exposed to interest rate risk in relation to its non-current borrowings. Borrowings issued at variable rates expose the Authority to cash flow interest rate risk. Borrowings issued at fixed rates expose the Authority to fair value interest rate risk. The Top Management monitors the interest rate fluctuations on a continuous basis and acts accordingly.

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

	2021	2020
	€	€
Fixed rate instruments		
Financial assets	**7.643.315**	7.520.618
	7.643.315	7.520.618

Sensitivity analysis

An increase of 100 basis points in interest rates at 31 December 2021 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 profit and other equity.

	Profit or loss	
	2021	2020
	€	€
Variable rate instruments	**76.433**	75.206
	76.433	75.206

6.3 Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to meet an obligation. Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at amortised cost, at fair value through other comprehensive income (FVOCI) and at fair value through profit or loss (FVTPL), favourable derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and contract assets as well as lease receivables. Further, credit risk arises from financial guarantees and credit related commitments.

i. Risk management

Credit risk is managed on a group basis. For banks and financial institutions, the Authority has established policies whereby the majority of bank balances are held with independently rated parties with a minimum rating of ['C'].

If wholesale customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, Top Management assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual credit limits and credit terms are set based on the credit quality of the customer in accordance with limits set by the Top Management. The utilisation of credit limits is regularly monitored. Sales to retail customers are settled in cash or using major credit cards.

There are no significant concentrations of credit risk, whether through exposure to individual customers, specific industry sectors and/or regions.

The Authority's investments in debt instruments are considered to be low risk investments. The credit ratings of the investments are monitored for credit deterioration.

These policies enable the Authority to reduce its credit risk significantly.

ii. Impairment of financial assets

The Authority has the following types of financial assets that are subject to the expected credit loss model:

- trade receivables
- financial assets carried at FVOCI
- cash and cash equivalents
- credit commitments

The impairment methodology applied by the Authority for calculating expected credit losses depends on the type of financial asset assessed for impairment. Specifically:

- For trade receivables the Authority applies the simplified approach permitted by IFRS 9, which requires lifetime expected losses to be recognised from initial recognition of the financial assets.
- For all other financial assets that are subject to impairment under IFRS 9, the Authority applies general approach - three stage model for impairment. The Authority applies a three-stage model for impairment, based on changes in credit quality since initial recognition. A financial asset that is not credit-impaired on initial recognition is classified in Stage 1. Financial assets in Stage 1 have their ECL measured at an amount equal to the portion of lifetime ECL that results from default events possible within the next 12 months or until contractual maturity, if shorter ("12 Months ECL"). If the Authority identifies a significant increase in credit risk ("SICR") since initial recognition, the asset is transferred to Stage 2 and its ECL is measured based on ECL on a lifetime basis, that is, up until contractual maturity but considering expected prepayments, if any ("Lifetime ECL"). If the Authority determines that a financial asset is credit-impaired, the asset is transferred to Stage 3 and its ECL is measured as a Lifetime ECL.

Impairment losses are presented as net impairment losses on financial and contract assets within operating profit. Subsequent recoveries of amounts previously written off are credited against the same line item.

Significant increase in credit risk

The Authority considers the probability of default upon initial recognition of the asset and whether there has been a significant increase in credit risk on an ongoing basis throughout each reporting period. To assess whether there is a significant increase in credit risk the Authority compares the risk of a default occurring on the financial asset as at the reporting date with the risk of default as at the date of initial recognition. It considers available reasonable and supportive forwarding-looking information. Especially the following indicators are incorporated:

- internal credit rating
- external credit rating (as far as available)
- actual or expected significant adverse changes in business, financial or economic conditions that are expected to cause a significant change to the borrower's/counterparty's ability to meet its obligations
- actual or expected significant changes in the operating results of the borrower/counterparty
- significant increases in credit risk on other financial instruments of the same borrower/counterparty
- significant changes in the value of the collateral supporting the obligation or in the quality of third-party guarantees or credit enhancements
- significant changes in the expected performance and behaviour of the borrower/counterpaty, including changes in the payment status of counterparty in the Authority and changes in the operating results of the borrower/counterparty.

Macroeconomic information (such as market interest rates or growth rates) is incorporated as part of the internal rating model. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Authority has identified the GDP and the unemployment rate of the countries in which it sells its goods and services to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors. No significant changes to estimation techniques or assumptions were made during the reporting period.

Regardless of the analysis above, a significant increase in credit risk is presumed if a debtor is more than 30 days past due in making a contractual payment.

Low credit risk

The Authority has decided to use the low credit risk assessment exemption for investment grade financial assets. Management consider 'low credit risk' for listed bonds to be an investment grade credit rating with at least one major rating agency. Other instruments are considered to be low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Default

A default on a financial asset is when the counterparty fails to make contractual payments within 90 days of when they fall due.

Write-off

Financial assets are written off when there is no reasonable expectation of recovery, such as a debtor failing to engage in a repayment plan with the Authority. The Authority categorises a debt financial asset for write off when a debtor fails to make contractual payments greater than 180 days past due. Where debt financial assets have been written off, the Authority continues to engage in enforcement activity to attempt to recover the receivable due. Where recoveries are made, these are recognised in profit or loss.

The Authority's exposure to credit risk for each class of (asset/instrument) subject to the expected credit loss model is set out below:

Trade receivables and contract assets

The Authority applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables (including those with a significant financing component, and contract assets.

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Authority has therefore concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

The expected loss rates are based on the payment profiles of sales over a period of 36 months before 31 December 2021 or 1 January 2021 respectively and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Authority has identified the GDP and the unemployment rate of the countries in which it sells its goods and services to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

The Authority always measures the loss allowance for trade receivables at an amount equal to lifetime ECL.

There were no significant trade receivable and contract asset balances written off during the year that are subject to enforcement activity.

Financial assets at amortised cost, debt investments carried at FVOCI

All of the entity's debt investments at amortised cost and FVOCI are considered to have low credit risk, and the loss allowance recognised during the year was therefore limited to 12 months expected losses. Refer to section above for a description of how the Authority determines low credit risk financial assets.

There were no significant financial assets at amortised costs and debt investments carried at FVOCI written off during the year that are subject to enforcement activity.

The Authority does not hold any collateral as security for any financial assets at amortised cost and debt investments carried at FVOCI balances.

Cash and cash equivalents

The Authority assesses, on a group basis, its exposure to credit risk arising from cash at bank. This assessment takes into account, ratings from external credit rating institutions and internal ratings, if external are not available.

Bank deposits held with banks with investment grade rating are considered as low credit risk.

The gross carrying amounts below represent the Authority's maximum exposure to credit risk on these assets as at 31 December 2021 and 31 December 2020:

		2021	2020
Authority internal credit rating	**External credit rating from Moody's agency**	**€**	€
Performing	Caa1	**-**	3.496.398
Performing	Ba3	**4.991.183**	-
Performing	B1	**2.652.132**	2.013.702
Performing	N/A	**-**	2.017.720
Total		**7.643.315**	7.527.820

The ECL on current accounts is considered to be approximate to 0, unless the bank is subject to capital controls. The ECL on deposits accounts is calculated by considering published PDs for the rating as per Moody's and an LGD of 40-60% as published by ECB.

The Authority does not hold any collateral as security for any cash at bank balances.

There were no significant cash at bank balances written off during the year that are subject to enforcement activity.

iii. Net impairment losses on financial and contract assets recognised in profit or loss

During the year, the following gains/(losses) were recognised in profit or loss in relation to impaired financial assets and contract assets:

	2021	2020
Impairment losses	**€**	€
Impairment charge on cash and cash equivalents	**(15.931)**	(40.449)
Impairment charge - trade receivables	**(166)**	(1.071)
Reversal of impairment-cash and cash equivalents	**40.449**	-
Reversal of impairment - trade receivables	**1.071**	-
Net impairment profit/(loss) on financial and contract assets	**25.423**	(41.520)

6.4 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 Authority 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.

The following tables detail the Authority's remaining contractual maturity for its financial liabilities. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Authority can be required to pay. The table includes both interest and principal cash flows.

31 December 2021	Carrying amounts	Contractual cash flows	3 months or less	3-12 months	1-2 years	2-5 years
	€	€	€	€	€	€
Lease liabilities	445.663	445.663	46.273	140.917	258.473	-
Bank overdrafts	6.729	6.729	6.729	-	-	-
Trade and other payables	105.127	105.127	105.127	-	-	-
	557.519	**557.519**	**158.129**	**140.917**	**258.473**	**-**

31 December 2020	Carrying amounts	Contractual cash flows	3 months or less	3-12 months	1-2 years	2-5 years
	€	€	€	€	€	€
Lease liabilities	649.793	649.793	44.738	140.238	395.233	69.584
Trade and other payables	108.086	108.086	108.086	-	-	-
	757.879	757.879	152.824	140.238	395.233	69.584

6.5 Other market price risk

The general economic environment prevailing in Cyprus and internationally may affect the Authority's operations to a great extent. Economic conditions such as inflation, unemployment, and development of the gross domestic product (GDP) are directly linked to the economic course of every country and any variation in these and the economic environment in general may create chain reactions in all areas hence affecting the Authority.

6.6 Reputation risk

The risk of loss of reputation arising from the negative publicity relating to the Authority's operations, whether true or false, may result in a reduction of its clientele, reduction in revenue and legal cases against the Authority. The Authority applies procedures to minimize this risk.

Fair value estimation

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

The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. The quoted market price used for financial assets held by the Authority is the current bid price. The appropriate quoted market price for financial liabilities is the current ask price.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Authority uses a variety of methods, such as estimated discounted cash flows, and makes assumptions that are based on market conditions existing at the reporting date.

7. Critical accounting estimates and judgments

The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates and requires Top Management to exercise its judgment in the process of applying the Authority's accounting policies. It also requires the use of assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on Top Management's best knowledge of current events and actions, actual results may ultimately differ from those estimates.

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.

Critical accounting estimates and assumptions

The Authority makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related 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.

- **Leases**
  The Authority has an enforceable extension option in relatio to the lease for three years. The Authority has assessed whether the extension option is reasonably certain to exercise by considering the terms of the agreement and has concluded that it is not reasonably certain to exercise.

- **Amount payable under residual value guarantees**
  The Authority initially estimates and recognises amounts expected to be payable under residual value guarantees as part of the lease liability. Typically, the expected residual value at lease commencement is equal to or higher than the guaranteed amount, and so the Authority does not expect to pay anything under the guarantees.

  At the end of each reporting period, the expected residual values are reviewed to reflect actual residual values achieved on comparable assets and expectations about future prices.

- **Calculation of loss allowance**
  When measuring expected credit losses the Authority uses reasonable and supportable forward looking information, which is based on assumptions for the future movement of different economic drivers and how these drivers will affect each other.

  Loss given default is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, taking into account cash flows from collateral and integral credit enhancements.

  Probability of default constitutes a key input in measuring ECL. Probability of default is an estimate of the likelihood of default over a given time horizon, the calculation of which includes historical data, assumptions and expectations of future conditions.

Critical judgements in applying the Authority's accounting policies

- **Impairment of financial assets**
  The loss allowances for financial assets are based on assumptions about risk of default and expected loss rates. The Authority uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Authority's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. Details of the key assumptions and inputs used are disclosed in note 6, Credit risk section.

- **Retirement benefits**
  The cost of defined benefit pension plans is determined using actuarial valuations. The actuarial valuation involves making assumptions about discount rates, expected rate of return on plan assets, future salary increases, mortality rates and future pension increases where necessary. The Authority sets these assumptions based on market expectations at the reporting date using best-estimates for each parameter covering the period over which obligations are to be settled. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty.

- **Impairment of non-financial assets**
  The impairment test is performed using the discounted cash flows expected to be generated through the use of non-financial assets, using a discount rate that reflects the current market estimations and the risks associated with the asset. When it is impractical to estimate the recoverable amount of an asset, the Authority estimates the recoverable amount of the cash generating unit in which the asset belongs to.

- **Impairment of intangible assets**
  Intangible assets are initially recorded at acquisition cost and are amortized on a straight line basis over their useful economic life. Intangible assets that are acquired through a business combination are initially recorded at fair value at the date of acquisition. Intangible assets with indefinite useful life are reviewed for impairment at least once per year. The impairment test is performed using the discounted cash flows expected to be generated through the use of the intangible assets, using a discount rate that reflects the current market estimations and the risks associated with the asset. When it is impractical to estimate the recoverable amount of an asset, the Authority estimates the recoverable amount of the cash generating unit in which the asset belongs to.

- **Useful live of depreciable assets**
  The Top Management assesses the useful lives of depreciable assets at each reporting date, and revises them if necessary so that the useful lives represent the expected utility of the assets to the Authority. Actual results, however, may vary due to technological obsolescence, mis-usage and other factors that are not easily predictable.

- **Provisions**
  The amount recognised for provisions is estimated based on Top Management' past experience and its future expectations. However, the actual outcome may vary from the amount recognised.

8. Revenue

Disaggregation of revenue	2021 €	2020 €
Annual fees	**2.099.410**	2.040.582
Rendering of services	**125.240**	160.876
	2.224.650	2.201.458

9. Other operating income

	2021 €	2020 €
Fair value gains on financial assets at fair value through profit or loss	**34.578**	-
Sundry operating income	**105.674**	69.644
	140.252	69.644

10. Other expenses

	2021 €	2020 €
Fair value losses on financial assets at fair value through profit or loss	**-**	47.267
Impairment charge of property, plant and equipment	**-**	699
	-	47.966

11. Operating surplus/(deficit)

Operating surplus/(deficit) is stated after charging the following items:	2021 €	2020 €
Amortisation of computer software (included in "Administration expenses") (Note 19)	**836**	836
Depreciation of property, plant and equipment	**227.692**	219.220
Staff costs including Top Management in their executive capacity (Note 12)	**1.447.421**	1.405.304
Auditors' remuneration	**3.083**	3.083
Trade receivables - impairment charge for bad and doubtful debts	**140**	-

12. Staff costs

	2021	2020
	€	€
Salaries	**1.114.557**	909.024
Social security costs	**173.907**	135.289
Expenses related to defined benefits plan (Note 13)	**158.957**	360.991
	1.447.421	1.405.304

13. Employee benefits

The Authority provides retirement benefits in the form of lump sum amounts based on a fixed benefit retirement plan to its employees. The Authority's policy is to carry out every year an independent actuarial valuation of the liabilities with regard to the retirement benefit scheme.

The most recent actuarial valuation was made as at 31 December 2021 and it was based on the following assumptions:

	2021	2020
Discount rate	**1,24%**	0,68%
Expected return on assets	**1,24%**	0,68%
Inflation	**1,50%**	1,50%
General salary increase	**0,50%**	0,50%
Total salary increase	**1,25% + for the general increase of salaries and increamental promotions**	1,25% + for the general increase of salaries and increamental promotions
Percentage increase in pensions	**1%**	1%
Increase of pension insurable earnings	**1,50%**	1,50%
Increase of basic insurable earnings	**2%**	2%
Morality table	**60% of PA90 for men and 65% of PA90 for women**	60% of PA90 for men and 65% of PA90 for women

During the year an amount of €158,957 (2020: €360,991) was charged to profit or loss based on the above actuarial valuation. Amounts charged to profit or loss are analysed as follows:

	2021	2020
	€	€
Current service costs	**104.056**	77.087
Interest on obligation	**18.575**	24.795
Pre-service cost	**36.326**	259.109
	158.957	360.991

Movement in the accumulated provision with respect to the retirement plan liabilities as shown in other liabilities is as follows:

	2021	2020
	€	€
Balance at 1 January	**2.698.178**	1.906.179
Provision for the year	**158.957**	360.991
Actuarial (gain)/loss on obligation	**(433.084)**	446.181
Payment of benefits	**(55.709)**	(33.270)
Contributions by members	**18.483**	18.099
Balance at 31 December	**2.386.825**	2.698.178

At 31 December 2021 the actuarial position in respect of the defined benefit plan was as follows:

	2021	2020
	€	€
Present value of accrued plan obligations	**2.386.825**	2.698.178
Provision for plan liabilities recognised in the statement of financial position	**2.386.825**	2.698.178

14. Finance income/(costs)

	2021	2020
	€	€
Interest income	**49.288**	40.930
Finance income	**49.288**	40.930
Interest expense on lease liabilities	**(15.695)**	(22.361)
Other interest expense	**(5.598)**	(3.544)
Sundry finance expenses	**(15.084)**	(11.683)
Finance costs	**(36.377)**	(37.588)
Net finance income	**12.911**	3.342

15. Tax

	2021	2020
	€	€
Defence contribution	**2.247**	3.658
Charge for the year	**2.247**	3.658

Under certain conditions interest income may be subject to defense contribution at the rate of 30%.

According to the Laws Regulating the Electricity Market and related Regulations, the fees collected by the Authority by practising its supervisory role are not considered an income under the Law of Income Taxation and article 5 (1)(a), and are not subject to taxation. The same applies for the government grants the Authority receives in order to be able to perform its supervisory duties. Income from rent or other sources are subject to taxation at the rate of 12.5% and the Special Defence Contribution, after the discount deductions provided by the Legislation.

Due to tax losses sustained in the year, no tax liability arises on the Authority. Under current legislation, tax losses may be carried forward and be set off against taxable income of the five succeeding years.

16. Dividends

	2021	2020
	€	€
Defence contribution on deemed distribution	**3.389**	7.894
	3.389	7.894

Deemed dividends are subject to special contribution for defence at 17% for shareholders that are both Cyprus tax resident and Cyprus domiciled.

17. Property, plant and equipment

	Computer hardware	Office equipment	Motor vehicles	Furniture, fixtures and equipment	Books	Total
	€	€	€	€	€	€
Cost						
Balance at 1 January 2020	106.373	99.170	47.812	107.541	5.491	366.387
Additions	16.768	22.167	-	11.654	637	51.226
Disposals	-	-	(22.844)	-	-	(22.844)
Impairment charge	-	(999)	-	-	-	(999)
Balance at 31 December 2020/ 1 January 2021	**123.141**	**120.338**	**24.968**	**119.195**	**6.128**	**393.770**
Additions	102.184	4.258	-	1.360	159	107.961
Balance at 31 December 2021	**225.325**	**124.596**	**24.968**	**120.555**	**6.287**	**501.731**
Depreciation						
Balance at 1 January 2020	88.947	72.123	37.825	76.834	5.060	280.789
Charge for the year	10.114	7.202	4.994	6.289	136	28.735
On disposals	-	-	(22.844)	-	-	(22.844)
Impairment charge	-	(300)	-	-	-	(300)
Balance at 31 December 2020/ 1 January 2021	**99.061**	**79.025**	**19.975**	**83.123**	**5.196**	**286.380**
Charge for the year	29.114	7.281	4.993	5.731	151	47.270
Balance at 31 December 2021	**128.175**	**86.306**	**24.968**	**88.854**	**5.347**	**333.650**
Net book amount						
Balance at 31 December 2021	**97.150**	**38.290**	**-**	**31.701**	**940**	**168.081**
Balance at 31 December 2020	**24.080**	**41.313**	**4.993**	**36.072**	**932**	**107.390**

18. Right-of-use assets

	Buildings
	€
Cost	
Additions	825.432
Balance at 31 December 2020/ 1 January 2021	**825.432**
Adjustment to right-of-use asset	(21.802)
Balance at 31 December 2021	**803.630**
Depreciation	
Charge for the year	190.484
Balance at 31 December 2020/ 1 January 2021	**190.484**
Charge for the year	180.422
Balance at 31 December 2021	**370.906**
Net book amount	
Balance at 31 December 2021	**432.724**
Balance at 31 December 2020	**634.948**

	2021	2020
Amounts recognised in profit and loss:	€	€
Interest expense on lease liabilities	**(15.672)**	(22.361)

19. Intangible assets

	Computer software
	€
Cost	
Balance at 1 January 2020	16.841
Balance at 31 December 2020/ 1 January 2021	**16.841**
Balance at 31 December 2021	**16.841**
Amortisation	
Balance at 1 January 2020	15.169
Amortisation for the year (Note 11)	836
Balance at 31 December 2020/ 1 January 2021	**16.005**
Amortisation for the year (Note 11)	836
Balance at 31 December 2021	**16.841**
Net book amount	
Balance at 31 December 2021	**-**
Balance at 31 December 2020	**836**

20. Financial assets at fair value through other comprehensive income

	2021	2020
	€	€
Balance at 1 January	**3.280.080**	-
Additions	**-**	2.990.387
Revaluation difference transferred to equity	**(98.130)**	289.693
Balance at 31 December	**3.181.950**	3.280.080

	Cost		**Fair values**	
	2021	2020	**2021**	2020
	€	€	**€**	€
Bonds	**2.990.387**	2.990.387	**3.181.950**	3.280.080
	2.990.387	2.990.387	**3.181.950**	3.280.080

The details of the investments are as follows:

Name	**2021**	2020
	€	€
Government Bonds of the Republic of Cyprus	**3.181.950**	3.280.080
	3.181.950	3.280.080

21. Trade and other receivables

	2021	2020
	€	€
Trade receivables	**19.507**	12.342
Less: credit loss on trade receivables	**(166)**	(1.071)
Trade receivables - net	**19.341**	11.271
Deposits and prepayments	**58.759**	63.898
Accrued income	**33.630**	31.500
	111.730	106.669

The Authority does not hold any collateral over the trading balances.

Movement in provision for impairment of receivables:

	2021	2020
	€	€
Balance at 1 January	**1.071**	-
Impairment losses recognised on receivables	**(905)**	1.071
Balance at 31 December	**166**	1.071

The exposure of the Authority to credit risk and impairment losses in relation to trade and other receivables is reported in note 6 of the financial statements.

22. Financial assets at fair value through profit or loss

	2021	2020
	€	€
Balance at 1 January	**77.510**	124.777
Change in fair value	**34.578**	(47.267)
Balance at 31 December	**112.088**	77.510

Financial assets at fair value through profit or loss represent 105.743 Class A shares of nominal value €0.10 each in Bank of Cyprus Holding Public Ltd.

The above mentioned shares are listed in Cyprus Stock Exchange and London Stock Exchange and on 31 December 2021 their market value was €1.06 per share (2020: €0.733 per share).

The financial assets at fair value through profit or loss are marketable securities and are valued at market value at the close of business on 31 December by reference to Stock Exchange quoted bid prices. Financial assets at fair value through profit or loss are classified as current assets because they are expected to be realised within twelve months from the reporting date.

In the statement of cash flows, financial assets at fair value through profit or loss are presented within the section on operating activities as part of changes in working capital. In the statement of profit or loss and other comprehensive income, changes in fair values of financial assets at fair value through profit or loss are recorded in operating income.

23. Cash at bank and in hand

	2021	2020
	€	€
Cash in hand	**2.030**	2.198
Cash at bank	**3.344.826**	3.558.102
Bank deposits	**4.298.489**	3.967.518
Accumulated impairment losses on cash and cash equivalents	**(15.931)**	(40.449)
	7.629.414	7.487.369

For the purposes of the statement of cash flows, the cash and cash equivalents include the following:

	2021	2020
	€	€
Cash at bank and in hand	**3.330.925**	3.519.851
Bank overdrafts (Note 24)	**(6.729)**	-
	3.324.196	3.519.851

The exposure of the Authority to credit risk and impairment losses in relation to cash and cash equivalents is reported in note 6 of the financial statements.

24. Borrowings

	2021	2020
	€	€
Current borrowings		
Bank overdrafts (Note 23)	**6.729**	-

25. Lease liabilities

	2021	2020
	€	€
Balance at 1 January	**649.793**	-
Additions	**-**	825.432
Repayments	**(198.000)**	(198.000)
Interest	**16.335**	22.361
Adjustments	**(22.465)**	-
Balance at 31 December	**445.663**	649.793

	Minimum lease payments	**Interest**	**Principal**	Minimum lease payments	Interest	Principal
	2021	**2021**	**2021**	2020	2020	2020
	€	**€**	**€**	€	€	€
Within one year	**198.000**	**10.810**	**187.190**	201.960	16.984	184.976
Between one and five years	**264.000**	**5.527**	**258.473**	481.978	17.161	464.817
	462.000	**16.337**	**445.663**	683.938	34.145	649.793

All lease obligations are denominated in Euro.

26. Provisions for other liabilities and charges

	Pension and other post retirement obligations
	€
Balance at 1 January 2020	1.906.179
Charged/(credited) to profit or loss	360.991
Payment of benefits	(33.270)
Contributions by members	18.098
Actuarial loss	446.180
Balance at 31 December 2020/ 1 January 2021	**2.698.178**
Charged/(credited) to profit or loss	158.957
Payment of benefits	(55.709)
Contributions by members	18.484
Actuarial gain	(433.084)
Balance at 31 December 2021	**2.386.826**

27. Trade and other payables

	2021	2020
	€	€
Trade payables	**12.297**	44.257
Prepayments from clients	**3.125**	1.918
Social insurance and other taxes	**-**	453
VAT	**576**	13.600
Deferred income	**16.793**	793
Accruals	**38.390**	30.069
Other creditors	**72.912**	61.118
Defence tax on deemed distribution	**3.389**	7.894
	147.482	160.102

28. Deferred income

	2021	2020
	€	€
Client advances	**2.098.699**	2.076.009
	2.098.699	2.076.009

29. Current tax liabilities

	2021	2020
	€	€
Special contribution for defence	**1.468**	-
	1.468	-

30. Operating Environment of the Authority

With the recent and rapid development of the Coronavirus disease (COVID-19) pandemic the world economy entered a period of unprecedented health care crisis that has caused considerable global disruption in business activities and everyday life.

Many countries have adopted extraordinary and economically costly containment measures. Certain countries have required companies and organisations to limit or even suspend normal business operations. Governments have implemented restrictions on travelling as well as strict quarantine measures throughout the year.

Industries such as tourism, hospitality and entertainment have been directly disrupted significantly

by these measures. Other industries such as manufacturing and financial services have also been indirectly affected.

In Cyprus, on 15 March 2020, the Council of Ministers in an extraordinary meeting, announced that it considers that Cyprus is entering a state of emergency considering the uncertain situation as it unfolds daily, the growing spread of COVID-19 outbreak and the World Health Organization's data on the situation.

To this end, certain measures have been taken by the Republic of Cyprus since then with a view to safe-guarding public health and ensuring the economic survival of working people, businesses, vulnerable groups and the economy at large.

New entry regulations have been applied with regards to protecting the population from a further spread of the disease which tightened the entry of individuals to the Republic of Cyprus within the year. Additionally, a considerable number of private businesses operating in various sectors of the economy had closed for a period of time while a number of lockdown measures, such as the prohibition of unnecessary movements and the suspension of operations of retail companies (subject to certain exemptions), were applied throughout the year. The measures had been continuously revised (lifted or tightened) by the Republic of Cyprus during the year taking into consideration the epidemic status in the country.

The objective of these public policy measures was to contain the spread of COVID-19 outbreak and have resulted in significant operational disruption for the Authority.

In parallel, governments, including the Republic of Cyprus, introduced various financial support schemes in response to the economic impacts of the COVID-19 coronavirus pandemic. The Authority has not applied for such government assistance. The details of all the arrangements that might be available to the Authority and the period throughout which they will remain available are continuing to evolve and remain subject to uncertainty.

The financial effect of the current crisis on the global economy and overall business activities cannot be estimated with reasonable certainty though, due to the pace at which the outbreak expands and the high level of uncertainties arising from the inability to reliably predict the outcome. Management's current expectations and estimates could differ from actual results.

Management has considered the unique circumstances and the risk exposures of the Authority and has concluded that there is no significant impact in the Authority's profitability position. The event did not have an immediate material impact on the Authority's business operations.

The Authority's management believes that it is taking all the necessary measures to maintain the viability of the Authority and the development of its business in the current business and economic environment.

Management will continue to monitor the situation closely and assess/seek additional measures/ committed facilities as a fall back plan in case the period of disruption becomes prolonged.

31. Related party transactions

Cyprus Energy Regulatory Authority is a public body entity that has been established in Cyprus according to Law N.122(I) of 2003, which has been replaced by the Law N.129 (I)/2021.

The following transactions were carried out with related parties:

31.1 Top Management's remuneration

The remuneration of Top Management was as follows:

	2021	2020
	€	€
Top Management's remuneration in their executive capacity	**255.577**	261.690
	255.577	261.690

32. Contingent liabilities

As at 31 December 2021 there were pending claims against the Authority in relation to its activities. Based on legal advice, the Top Management believes that adequate defences exist against any claim sought and do not expect the Authority to suffer any loss. Accordingly no provision has been made in these financial statements in respect of this matter.

Windpower Ltd against Cyprus Energy Regulatory Authority (Lawsuit number 1493/2019):

The case is scheduled for May 16, 2022 and the Plaintiff through the lawsuit claims the amount of € 22,015,373 as compensations of article 146.6 of the Constitution and the amount of € 1,300,651 as special compensations for expenses and losses for the purposes of submitting applications, licensing and preparation of the operation of the wind farm for electricity production. The possible outcome of this case can not be predicted with certainty.

The possible outcome of the appeals against the decision of the Authority to reject the applications of the Applicant Companies for the granting of a license for the supply of natural gas to wholesale customers and for the granting of a property license, is not expected that the Authority will suffer any damage.

33. Commitments

Operating lease commitments

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

	2021	2020
	€	€
Within one year	**297.274**	352.731
Between one and five years	**115.334**	123.918
	412.608	476.649

34. Events after the reporting period

Lawsuit between the Cyprus Energy Regulatory Authority and FREIJ Entertainment (Cyprus) Limited:

The Authority as Plaintiff is expected to file a lawsuit concerning amounts owed by the Defendant Company to the Authority corresponding to unpaid annual fees for the years 2012-2021. The Authority through the lawsuit claims the amount of € 7,393 to which is added 3% interest from January 1, 2022 until the end of the repayment. As for the possible outcome of this case, it is likely to be successful.

Depending on the duration of the Coronavirus disease (COVID-19) pandemic, and continued negative impact on economic activity, the Authority might experience further negative results, and liquidity restraints and incur additional impairments on its assets in 2022. The exact impact on the Authority's activities in 2022 and thereafter cannot be predicted.

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

Independent auditor's report on pages 111 to 113

DETAILED INCOME STATEMENT

For the year ended 31 December 2021

	Page	**2021** **€**	2020 €
Revenue			
Annual fees		**2.099.410**	2.040.582
Rendering of services		**125.240**	160.876
Other operating income			
Sundry operating income		**105.674**	69.644
Fair value gains on financial assets at fair value through profit or loss		**34.578**	-
Reversal of impairment-cash and cash equivalents		**40.449**	-
Reversal of impairment - trade receivables		**1.071**	-
		2.406.422	2.271.102
Operating expenses			
Administration expenses	154	**(2.294.016)**	(2.197.280)
Selling and distribution expenses	154	**(140)**	-
		112.266	73.822
Other operating expenses			
Impairment charge of property, plant and equipment		**-**	(699)
Impairment charge on cash and cash equivalents		**(15.931)**	(40.449)
Impairment charge - trade receivables		**(166)**	(1.071)
Fair value losses on financial assets at fair value through profit or loss		**-**	(47.267)
Operating surplus/(deficit)		**96.169**	(15.664)
Finance income	155	**49.288**	40.930
Finance costs	155	**(36.377)**	(37.588)
Net surplus/(deficit) for the year before tax		**109.080**	(12.322)

OPERATING EXPENSES

For the year ended 31 December 2021

	2021	2020
	€	€
Administration expenses		
Top Management remuneration	**255.577**	261.690
Staff salaries	**857.475**	647.334
Benefits in kind	**1.505**	-
Social security costs	**141.037**	111.966
Medical fund	**32.870**	23.323
Expenses related to defined benefits plan	**158.957**	360.991
Municipality taxes	**1.000**	1.000
Electricity	**18.626**	14.207
Water supply and cleaning	**27.971**	33.124
Insurance	**1.821**	1.841
Repairs and maintenance	**1.209**	4.082
Sundry expenses	**200**	547
Telephone and postage	**2.241**	2.553
Stationery and printing	**7.676**	5.436
Subscriptions and contributions	**30.148**	16.730
Equipment maintenance	**4.528**	4.778
Staff training	**42.625**	48.767
Computer software	**23.858**	10.675
Auditors' remuneration	**3.083**	3.083
Accounting fees	**4.100**	-
Legal fees	**7.231**	17.445
Other professional fees	**3.683**	38.460
Fines	**-**	101
Overseas travelling	**4.936**	5.085
Inland travelling and accommodation	**170**	-
Irrecoverable VAT	**98.653**	83.446
Entertaining	**3.216**	3.327
Motor vehicle running costs	**1.528**	8.440
Carriage and clearing	**1.970**	4.016
Consulting fees	**300.428**	220.609
Announcements and publications	**3.661**	7.148
Sundry allownces and representation	**22.140**	20.910
Staff medical expenses	**-**	15.270
Events costs	**1.240**	840
Parking rent	**125**	-
Amortisation of computer software	**836**	836
Depreciation	**227.692**	219.220
	2.294.016	2.197.280
Selling and distribution expenses		
Bad debts written off	**140**	-
	140	-

FINANCE INCOME/COSTS

For the year ended 31 December 2021

	2021	2020
	€	€
Finance income		
Bank interest	**2.855**	8.998
Interest from government bonds	**46.351**	31.932
Interest on trade balances	**82**	-
	49.288	40.930
Finance costs		
Interest expense		
Interest expense on lease liabilities	**15.695**	22.361
Bank interest	**5.430**	3.544
Interest on taxes	**168**	-
Sundry finance expenses		
Bank charges	**14.994**	11.559
Other finance expenses	**90**	124
	36.377	37.588

COMPUTATION OF DEFENCE CONTRIBUTION

For the year ended 31 December 2021

	Income	Rate	Defence
	€		€ c
INTEREST			
Interest from government bonds with deduction at source	46.351	3%	1.390,53
Bank interest that was subject to deduction at source	2.855	30%	856,50
	49.206		2.247,03
Less: deductions at source			(2.247,03)
DEFENCE CONTRIBUTION DUE TO IRD			-

COMPUTATION OF CORPORATION TAX

For the year ended 31 December 2021

	Page	€	€
Net profit per income statement	153		109.080
Add:			
Depreciation		228.528	
Impairment charge on cash and cash equivalents		15.931	
Impairment charge - trade receivables		166	
Impairment charge - other receivables		23	
Interest on taxes		168	
			244.816
			353.896
Less:			
Fair value gains on financial assets at fair value through profit or loss		34.578	
Reversal of impairment-cash and cash equivalents		40.449	
Reversal of impairment - trade receivables		1.071	
Interest income		49.206	
Lease payments for right of use assets		198.000	
Other non-taxable income		30.592	
			(353.896)
Net loss for the year			-

PIO 91/2023-electronic edition ISSN 2421-8480
Published by the Press and Information Office