

# ANNUAL REPORT 2022

## Cyprus Energy Regulatory Authority

19th Annual Report and Financial Statements  
of the CYPRUS ENERGY REGULATORY AUTHORITY,  
for the year ended 31 December 2022



# ANNUAL REPORT 2022

Cyprus Energy Regulatory Authority



**Προς την Αυτού Εξοχότητα  
Κύριο Νίκο Χριστοδουλίδη  
Πρόεδρο Κυπριακής Δημοκρατίας  
Λευκωσία**

**30 Ιουνίου 2023**

Εξοχότατε,

Έχουμε την τιμή να σας υποβάλουμε την 19η Ετήσια Έκθεση και τους Λογαριασμούς της ΡΥΘΜΙΣΤΙΚΗΣ ΑΡΧΗΣ ΕΝΕΡΓΕΙΑΣ ΚΥΠΡΟΥ, για τον χρόνο που τελείωσε στις 31 Δεκεμβρίου 2022 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 (Ν.129(I)/2021).

Με τιμή,



**Δρ. Ανδρέας Πουλλικκάς**  
Πρόεδρος



**Φίλιππος (Άλκης) Φιλίππου**  
Αντιπρόεδρος



**Νεόφυτος Χατζηγεωργίου**  
Μέλος



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## Abbreviations

<b>ACER</b>	Agency for the Cooperation of Energy Regulators
<b>CEER</b>	Council of European Energy Regulators
<b>CERA</b>	Cyprus Energy Regulatory Authority
<b>COSMOS</b>	Cyprus Organization for Storage and Management of Oil Stocks
<b>CRA</b>	Core Regulated Activity
<b>DEFA</b>	Natural Gas Public Company
<b>DR</b>	Distribution Rules
<b>DSO</b>	Distribution System Operator
<b>EAC</b>	Electricity Authority of Cyprus
<b>ECG</b>	Electricity Coordination Group
<b>ENTSO</b>	European Network of Transmission System Operators
<b>EGP</b>	Electricity Generation Plant
<b>ETS</b>	Emissions Trading Scheme
<b>ETYFA</b>	Natural Gas Infrastructure Company
<b>EU</b>	European Union
<b>HECHP</b>	High Efficiency Cogeneration of Heat and Power
<b>HHI</b>	Measure of Market Concentration - Herfindahl-Hirschman Index
<b>KDP</b>	Regulatory Administrative Act
<b>LNG</b>	Liquefied Natural Gas
<b>LNG Facility Operator</b>	Liquefied Natural Gas Facility Operator
<b>LNG System Operator</b>	Liquefied Natural Gas System Operator
<b>LNG System Owner</b>	Liquefied Natural Gas System Owner
<b>MCM</b>	Market Correction Mechanism
<b>MECI</b>	Ministry of Energy, Commerce and Industry
<b>MEDREG</b>	Mediterranean Energy Regulators
<b>ODS</b>	Owner of Distribution System
<b>OTS</b>	Owner of Transmission System
<b>PCI</b>	Project of Common Interest
<b>PMI</b>	Project of Mutual Interest
<b>PSO</b>	Public Service Obligations
<b>RAB</b>	Regulated Asset Base
<b>RES</b>	Renewable Energy Sources
<b>RES-E</b>	RES Electricity Generation Systems
<b>RIF</b>	Research and Innovation Foundation
<b>SPV</b>	Special Purpose Vehicle
<b>SS Owner</b>	Storage System Owner
<b>SSO</b>	Storage System Operator
<b>TDR</b>	Transmission and Distribution Rules
<b>TR</b>	Transmission Rules
<b>TSOC</b>	Transmission System Operator - Cyprus
<b>TSR</b>	Trading and Settlement Rules
<b>TTF</b>	Title Transfer Facility (TTF) - Gas trading market
<b>TYNDP-Distribution</b>	Ten-Year Distribution Network Development Plan
<b>TYNDP-Transmission</b>	Ten-Year Transmission System Development Plan
<b>VAT</b>	Value Added Tax
<b>WACF</b>	Weighted Average Cost of Fuel

# Introductory note of the chairman, vice chairman and member of CERA

The "energy trilemma" is characterized by security of supply, high energy costs, as well as ambitious and stricter climate goals. All three of these elements support the univocal solution of Green Transition.

The developments of 2022 caused 'dark clouds' to the vision of green transformation, bringing about significant instability in the European energy market which gradually transformed into what is now known as the "energy crisis". This crisis is the result of a chain of factors as well as their extremely critical and dangerous juncture. The spike in greenhouse gas emission allowance prices together the rise in fuel prices due to the global financial recovery which was boosted as a result of the easing of the pandemic measures in the second half of the year, were only two of the factors that contributed to higher electricity prices. The challenges and uncertainties faced by the global energy system in 2022, peaked almost 50 years after the 1970s energy crisis. At national level and from an energy stand point, the high electricity prices highlighted the weaknesses of the "electrically isolated" systems and the lack of "energy flexibility".

In 2022, Cyprus' electricity market was given a taste of the future, with greater penetration of electricity from renewable energy sources (RES-E). Nowadays, Cyprus boasts approximately 407 megawatts of photovoltaic systems, 157 megawatts of wind systems, and 13 megawatts of biomass systems in operation, namely a total installed RES-E capacity of 577 megawatts and a total installed capacity of conventional electricity generation plants of 1483 megawatts. In other words, 28% of the installed capacity concerns RES-E systems. Regarding the contribution of RES-E, it represented 15% of the final annual energy consumption in 2022 and is expected to increase further in 2023 and in the coming years.

At the same time, Cyprus is going through a period of significant changes and challenges that stem from the introduction of the competitive electricity market, but also the continuous 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 acted quickly and will continue to do so driven by the creation of new regulations that will always focus on the consumer, the environment, but also the economy.

This is the reason that CERA has included actions and activities concerning energy transition regulatory issues in its strategic goals, including:

- The supervision and continuous regulation of the transitory regulation and the competitive electricity market.
- The surveillance and implementation of plans and the supervision of the emerging natural gas market.
- The development of a regulatory framework based on the "Green Deal" and the "Fit for 55" package.
- The fulfilment of RES targets by 2030.
- The integration of energy storage systems into the electrical system.
- The implementation of regulatory decisions to transform the Cyprus electrical system into a smart grid.
- To ensure the containment of the energy cost for the national economy and consumers.
- The continuous update of consumers and investors regarding electricity and natural gas market regulatory issues.
- The creation of a regulatory framework for Cyprus' transition to hydrogen economy.

At the same time in the European Union (EU), after bouncing back from the pandemic and returning to normalcy, the natural gas price had skyrocketed in 2022. The EU is currently in the midst of an energy crisis and specifically in a natural gas crisis. The EU is currently paying a high price for its dependence on Russian natural gas. The European Commission has already presented the RePowerEU plan to rapidly reduce the EU's dependence on Russian natural gas and fast forward RES investments together with energy efficiency action plans and to develop the hydrogen market in the EU. In reality, this is an EU endeavour to fast forward the green transition which will be achieved in a socially fair, cost effective and competitive way. The EU RePowerEU plan to speed up the use of renewable energy sources, including storage technologies as well as hydrogen, energy efficiency and the integration of the internal electricity market to increase the capacity of electricity interconnections between Member States is a step in the right direction.

In Cyprus, the situation is not much better because the spike in liquid fuel costs and greenhouse gas emissions allowance costs, has increased the cost of electricity to unprecedented levels. In order to address the challenges associated with the energy transition of the isolated island electricity systems, and Cyprus in particular, the immediate upgrade of the electricity grid is needed in the short term, so that the flexibility of the electricity system can allow for the integration of natural gas and energy storage technologies, to enable the additional penetration of renewable energy sources into Cyprus' energy balance. In addition, the promotion of electric mobility, with the application of "vehicle to grid" (V2G) technology, i.e., the bidirectional flow of electricity between the electric car and the electric grid, constitutes an important component of Cyprus' future energy system.

Cyprus is the only non-interconnected EU Member State. With proper planning and the creation of appropriate electricity grid interconnections this will be a thing of the past and Cyprus will be able to take advantage of its energy potential to the maximum extent and be upgraded to an energy hub for the transmission of electrical energy to and from the European Union and to and from Israel and Egypt, while increasing our energy security.

CERA's actions are always focused on the transition to a green economy, as well as the achievement of environmental sustainability and climate neutrality that will ensure the long-term development and strengthening of our country's economy. In this context, consumer protection is a fixed goal of utmost importance for CERA.

In this regard, in 2022 CERA published a series of key decisions, and undertook and implemented related initiatives and actions within the framework of the competencies specified by national and community law. Some of these key decisions and actions of CERA regarding the energy sector concern:

- the determination of general principles and guidelines for connection charges to the transmission and distribution systems,
- the provision of guidance for the preparation of the connection process to the transmission system and distribution system,
- the establishment of the basic principles for the formulation of the Ten-Year Transmission System Development Plan,
- the establishment of the basic principles for the formulation of the Ten-Year Distribution System Development Plan,
- the amendment to the statement of regulatory practice and electricity tariffs methodology,
- the provisional regulation of the RES-E market price for the plan of the Republic of Cyprus "RES generated electricity with the ultimate integration of the projects into the competitive electricity market plan of October 2017" and
- the statement of regulatory practice for the supply of natural gas through virtual pipelines.

Special thanks go to the staff of the CERA Office, who skilfully and tirelessly worked to provide meaningful and timely advise for decision-making on all the difficult challenges that arose during 2022, contributing towards a safer and more sustainable future.

# Introduction

The Cyprus Energy Regulatory Authority (CERA) was established by Law in 2003 in accordance with European Union (EU) 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 of Energy, Commerce and Industry on all issues related to the energy market.

Based on the Law on the Establishment and Operation of the Cyprus Energy Regulatory Authority of 2021 (L.129(I)/2021), CERA is accountable for the performance of its duties, responsibilities and powers to the President of the Republic and, for this purpose, submits an annual activity report to the President of the Republic within six (6) months of the end of each calendar year. CERA submits a copy of every annual activity report to the Council of Ministers and to the House of Representative and ensures that the public has easy access to this report.

This annual report of CERA's activities covers the year 2022 and is the nineteenth (19th) to be issued.

## **During the year under review, CERA issued seven (7) regulatory decisions:**

- Regulatory Decision 01/2022 (KDP 105/2022) on the determination of general principles and guidelines for connection charges to the transmission and distribution systems.
- Regulatory Decision 02/2022 (KDP 106/2022) on the provision of guidance for the preparation of the connection process to the transmission system and distribution system.
- Regulatory Decision 03/2022 (KDP 107/2022) on the establishment of basic principles for the formulation of the Ten-Year Transmission Development Plan.
- Regulatory Decision 04/2022 (KDP 108/2022) on the establishment of basic principles for the formulation of the Ten-Year Distribution National Development Plan.
- Regulatory Decision 05/2022 (KDP 183/2022) on the amendment of the statement of regulatory practice and electricity tariffs methodology.
- Regulatory Decision 06/2022 (KDP 257/2022), on the provisional regulation of the RES-E market price for the plan of the Republic of Cyprus "RES generated electricity with the ultimate integration of the projects into the competitive electricity market plan of October 2017".
- Regulatory Decision 07/2022 (KDP 282/2022) on the statement of regulatory practice for the supply of natural gas through virtual pipelines.

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

- Decision 1/2022 - Regulated electricity tariffs for 2022
- Decision 3/2022 - Regulation 2019/941 - Establishment of a Risk-Preparedness Plan in the electricity sector
- Decision 4/2022 - Approval of proposed amendments to the Trading and Settlement Rules (TSR) by the Transmission System Operator - Cyprus (TSOC) - Version 2.2.0

- Decision 18/2022 - Electricity Tariff Schemes for 2022
- Decision 28/2022 - TSOC certification based on the provisions of Article 80 of the Laws Regulating the Electricity Market of 2021 and 2022 (L. 130(I)/2021)
- Decision 55/2022 - Draft Regulatory Decision on the “Statement of Regulatory Practice and Electricity Tariffs Methodology”
- Decision 59/2022 - Recognition of Guarantees of Origin of Electricity from RES and High Efficiency Combined Heat and Power Cogeneration (HECHP) from other Member States and third countries
- Decision 72/2022 - Publication and entry into force of the Transmission and Distribution Rules (TDRs) - Version 5.3.0 and TSRs - Version 2.2.0
- Decision 82/2022 - Separate EAC Accounts for the year 2020
- Decision 101/2022 - Changes to the Transitory Regulations of the Electricity Market - Version 1.8
- Decision 103/2022 - Transfer of assets from EAC to TSOC
- Decision 113/2022 - Long-Term Annual Forecast of Maximum Total Electricity Capacity and Total Generated Electricity for the period 2022 - 2030
- Decision 114/2022 - Tariff for the recovery of the Public Service Obligations (PSO) expenditure
- Decision 115/2022 - Approval of Ten-Year Transmission System Development Plan 2022 - 2031
- Decision 129/2022 - Amendment of the standard licence terms of Annexes 2 to 6 of the natural gas market regulations (Issuing Licences) of 2006
- Decision 134/2022 - Adjustment Methodology of Allowed Revenue and Tariffs of Regulated Activities
- Decision 140/2022 - Notification of amendment of the LNG Operator’s Operating Licence no. ΦΑ 2 for Liquefied Natural Gas (LNG) Facility
- Decision 161/2022 - Fuel Clause Coefficient for the Adjustment of the Wholesale Tariff (T-W), Fuel Clause Coefficient for the purchase of RES-generated energy and Basic Energy Market Prices for the period July - December 2022
- Decision 214/2022 - Examination of the possible violation of the terms of the TSOC licence under no. N.419(A)/TSOC-2004, regarding the operation and reliability of a ring of high voltage underground cables in the urban area of Nicosia, pursuant to the provisions of Article 12 of the Laws Regulating the Electricity Market of 2021 and 2022 (L.130(I)/2021)
- Decision 215-218/2022 and 244/2022 - Allowed Revenues and Regulated Electricity Tariffs for 2022
- Decision 221/2022 - Notification of amendment to the LNG Operator’s Operating Licence for LNG Facility under no. ΦΑ 2
- Decision 225/2022 - Electricity Tariff Schemes for 2022
- Decision 234/2022 - Examination of violation of term 9(2) of the LNG Operator’s Operating Licence for LNG facility under no. ΦΑ 2 by the Natural Gas Public Company (DEFA) Ltd, pursuant to the provisions of Article 13 of the Laws Regulating the Natural Gas Market of 2004 to 2021
- Decision 235/2022 - Examination of violation of term 8(2) of the OTS/TSO Construction, Ownership, Exploitation and Operation of the Natural Gas Transmission System Licence under no. ΦΑ 1 by the Natural Gas Public Company (DEFA) Ltd, pursuant to the provisions of Article 13 of the Laws Regulating the Natural Gas Market of 2004 to 2021 and examination of violation of CERA Decision no. 73/2021
- Decision 245/2022 - Adjustment Methodology of Allowed Revenue and Tariffs of Regulated Activities
- Decision 246/2022 - Capacity level approval for connection to the transmission system pursuant to the provisions of Regulatory Decision 01/2022 (KDP 105/2022) “Determination of general principles and guidelines for connection charges to the transmission and distribution systems
- Decision 272/2022 - Preliminary compliance report with the Regulatory Accounting Guidelines for the preparation of separate accounts of natural gas undertakings
- Decision 384/2022 - Approval of amending version of the Ten-Year Transmission System Development Plan 2022-2031



- Decision 279/2022 - Determination of the licensing framework for conducting activities which are provided in Article 26 of the Laws Regulating the Electricity Market of 2021 and 2022
- Decision 284/2022 - Examination of the possible violation of the terms of the EAC Supply Licence under no. Π1-N.419(A)/ΠΘ1- 2006 regarding the calculation of overpriced electricity consumption bills, in accordance with the provisions of Article 12 of the Laws Regulating the Electricity Market of 2021 and 2022
- Decision 333/2022 - Approval of amendments to Electricity Supply Rules to Final Customers – Version 1.1.1
- Decision 342/2022 - Pilot Compliance Check of the Functional Unbundling of the EAC's Core Regulated Transmission Activity
- Decision 361/2022 - Separate EAC Accounts for 2021
- Decision 382/2022 - Documents and information that must accompany applications for the granting of a licence/exemption from the obligation to hold a licence for an electricity generation station for own use
- Decision 398/2022 - Submission of LNG Facility Owner – Operator agreement – violation of term 9(2) of LNG facility Operating Licence
- Decision 430/2022 - Approval of Transitory Regulation parameters for the security covers of the Electricity Market - Version 1.9 for the 2023 calendar year
- Decision 431/2022 - Approval of Transitory Regulation parameters of the Electricity Market proposed by the Distribution System Operator (DSO) Version 1.9 for the 2023 calendar year
- Decision 432/2022 - Approval of Transitory Regulation parameters of the Electricity Market proposed by TSOC - Version 1.9 for the 2023 calendar year
- Decision 436/2022 - Assessment of the proposal of connection projects of the first open procedure that was submitted for approval to CERA by the Natural Gas Transmission System Operator
- Decision 441/2022 - Examination of CERA Decision 288/2021, as amended by Decision 153/2022, and follows term 9(6) of the LNG Facility Operating Licence

## 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 licences or grants exemptions from licences.
- 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 licence 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 licences.
- 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 the development of appropriate cross-border transmission capacities to meet demand and to enhance 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.
- As the competent authority, it ensures the implementation of the measures safeguarding security of gas supply. 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.
- Ensures and prepares the Technical Rules determining the minimum standards of technical design and operation for the connection to the network of Liquefied Natural Gas (LNG) facilities, storage facilities, 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 EU 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.
- 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.

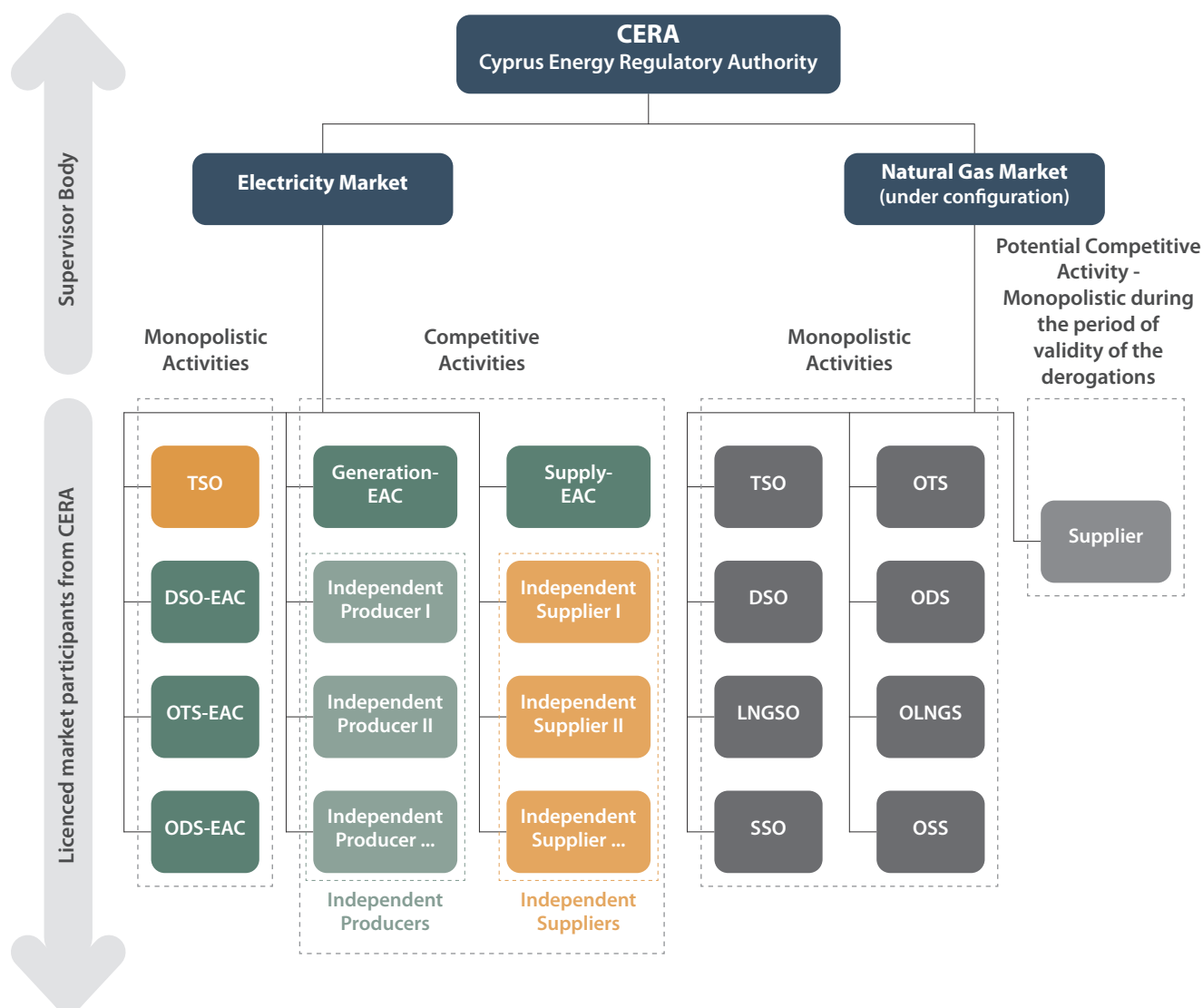
- Carries out investigations either following the submission of a complaint or initiated by CERA ex officio.
- Imposes administrative fines in the event of violation of laws or regulations.
- Sets the rules for the operation and distribution of the interconnection capacity, in consultation with the appropriate 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 the above specific responsibilities and powers, during the execution of its duties and the exercise of its responsibilities and powers, CERA shall:**

- 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.

## Regulation of the electricity & natural gas markets

### LICENSING OF ACTIVITIES



<b>TSO</b>	Transmission System Operator
<b>DSO</b>	Distribution System Operator
<b>LNGSO</b>	System Operator Liquefied Natural Gas System Operator
<b>SSO</b>	Storage System Operator
<b>OTS</b>	Owner of Transmission System
<b>ODS</b>	Owner of Distribution System
<b>OLNGS</b>	System Owner Liquefied Natural Gas System Owner
<b>SS</b>	Owner Storage System Owner

**Figure 1** – Licensing of electricity and natural gas market activities

# Administrative organization

## CERA MEMBERS

### CHAIRMAN

Dr. Andreas Poullikkas  
Mechanical Engineer

### VICE-CHAIRMAN

Philippos (Alkis) Philippou  
Business Management

### MEMBER

Neophytos (Akis) Hadjigeorgiou  
Electrical Engineer

## CONSULTANTS

### LEGAL CONSULTANT

Orphanides, Christofides & Co LLC  
Stelios Americanos & Co LLC

### ACCOUNTANTS

Alliot Partellas Kiliaris Limited

## CONTACT INFORMATION

### CYPRUS ENERGY REGULATORY AUTHORITY

20 Agias Paraskevis Street  
2002 Strovolos, Lefkosia  
P.O. Box. 24936  
1305 Lefkosia

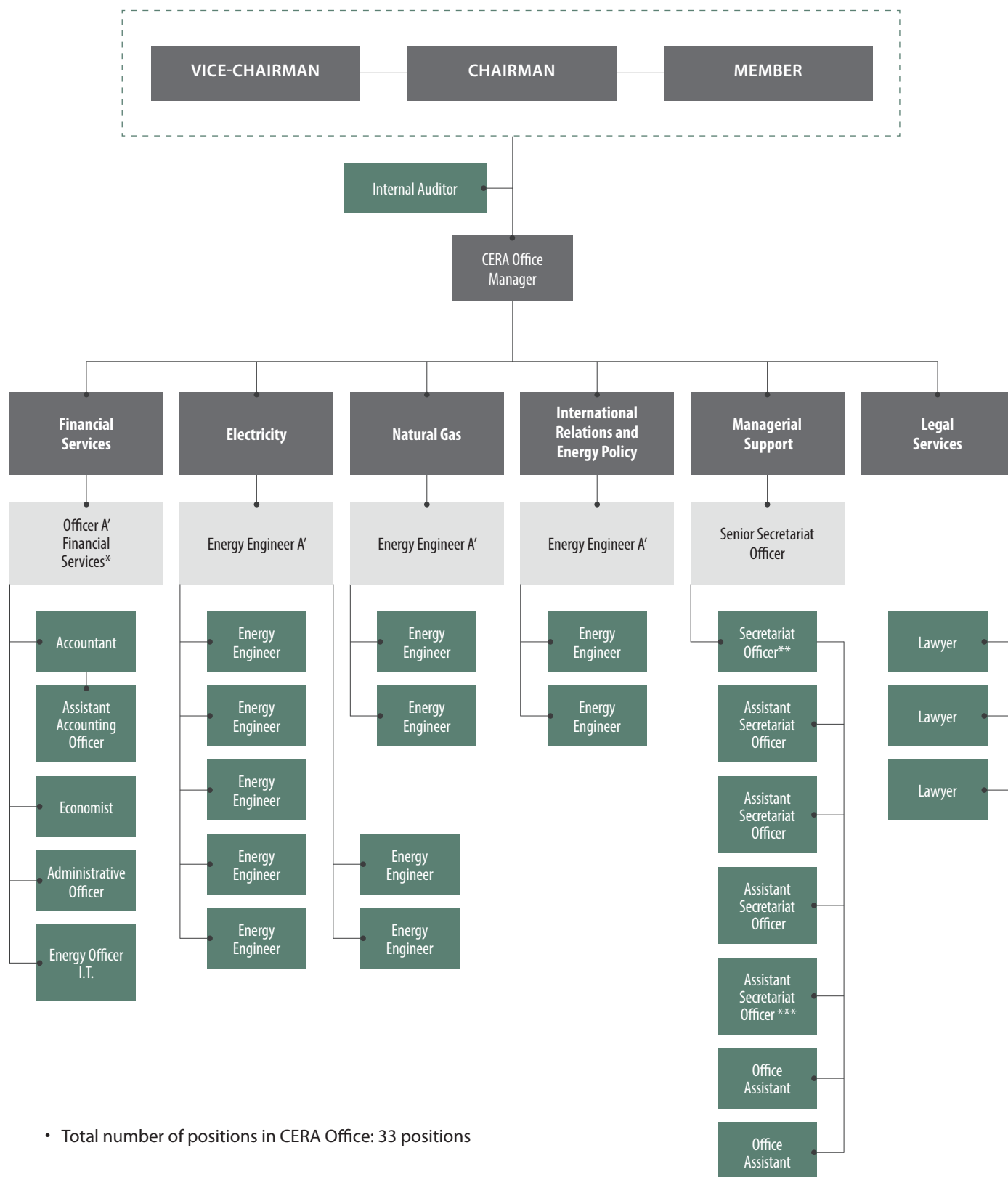
Telephone: + 357 22 66 63 63

Fax: + 357 22 66 77 63

E-mail: [regulator.cy@cera.org.cy](mailto:regulator.cy@cera.org.cy)

Website: [www.cera.org.cy](http://www.cera.org.cy)

## ORGANIZATION STRUCTURE OF CERA



• Total number of positions in CERA Office: 33 positions

\* This position is vacant since 01/11/2022

\*\* This position is vacant

\*\*\* This position is vacant since 20/08/2022

## CERA Office

At the beginning of 2022, the CERA Office had 31 staff members and 29 by the end of the year. Two individuals departed for personal reasons. In the CERA Budget for 2022 there is one (1) position of Economist approved. The individual who will be employed will be responsible for the tariffs.

In addition, the Internal Control Unit was recently created, aimed at strengthening and protecting the value of CERA. The purpose of the Internal Control Unit is to provide CERA Members with an independent, objective assessment of internal management and control systems, risk management and governance procedures, thus essentially and effectively contributing towards achieving the goals set out by CERA. The Internal Control Unit will carry out audits based on the approved Annual Audit Plan, it will monitor the degree of compliance of the audited information, regarding the resolution of audit findings and will submit comments and suggestions regarding new procedures, policies, operating regulations and instructions. In addition, it will review and assess the adequacy and effectiveness of the Corporate Governance, Risk Management and Internal Control systems.

In order to fulfil 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 new positions and the upgrading of positions in its respective budgets.

Until the approval, opening and filling of the above new positions in the relevant budgets, CERA will move forward, where necessary, with the purchase of advisory services for the purpose of executing its duties, in accordance with the relevant legislation.

## Training

Figure 2 shows the training of the CERA Office staff by field of activity during 2022.

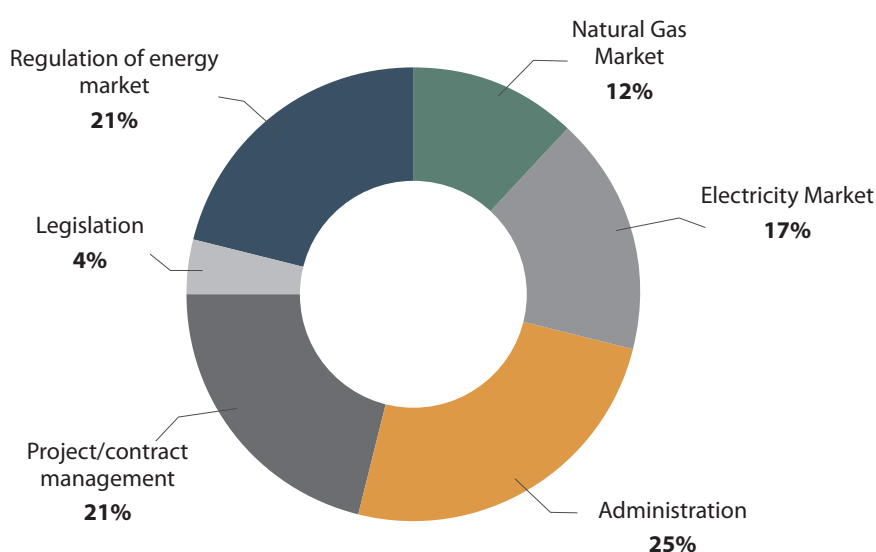


Figure 2 - Staff training 2022

# Legislative regulations and CERA decisions

## National legislative regulations

The following section presents the Laws and Regulations that were amended, CERA's most important Regulatory Decisions and Decisions and the developments in the Trading and Settlement Rules and the Transmission Rules and Distribution Rules.

## Laws and Regulations

### **Law Regulating the Electricity Market (Amending) of 2022 (L.224(I)/2022)**

On 22 December 2022, the House of Representatives passed the Law Regulating the Electricity Market (Amending) of 2022, which should be read in conjunction with the Law Regulating the Electricity Market of 2021 (basic law) and are jointly referred to as the Laws Regulating the Electricity Market of 2021 and 2022.

According to the amending Law, Article 102 of the basic Law, which refers to the allocation of electricity generation load to electricity generation and demand response facilities, was amended with the replacement of subsection (2) as follows:

*"When allocating the load to the facilities of subparagraph (1), TSOC and DSO give priority to electricity generation facilities to the extent permissible for the secure operation of the national electricity system, provided that:*

- *electricity generation facilities use renewable energy sources or high efficiency combined heat and power cogeneration, or*
- *electricity generation facilities use renewable energy sources or high efficiency combined heat and power cogeneration and are demonstration projects for innovative technologies that have been approved by CERA.*

*It is understood that the CERA approval states the priority validity period and the extent required to achieve the purposes of the demonstration".*

### **Law Regulating the Natural Gas Market (Amending) of 2022 (L.190(I)/2022)**

On 9 December 2022, the House of Representatives passed the Law Regulating the Natural Gas Market (Amending) of 2022, which is read in conjunction with the Laws Regulating the Natural Gas Market of 2004 to 2021 (basic law) and are jointly referred to as the Laws Regulating the Natural Gas Market of 2004 to 2022.

According to the amending Law, Article 23 of the basic Law, which refers to the duties and obligations of natural gas undertakings which carry out the activity of supply, was amended with the replacement of the end of paragraph (b) of subsection (2) of the point following the semi colon and the addition of the phrase *“for the purchase of which it may enter into a contract with more than one supplier, making use of the available infrastructures”*.

### **Law on the Promotion and Encouragement of the Use of Renewable Energy Sources of 2022 (L.107(I)/2022)**

On 9 December 2022, the House of Representatives, for the purposes of partial harmonisation of the EU law entitled “Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources”, passed the Law on the Promotion and Encouragement of the Use of Renewable Energy Sources of 2022.

The purpose of the Law on the Promotion and Encouragement of the Use of Renewable Energy Sources of 2022 is to promote and encourage the use of renewable energy sources. In addition, a common framework for the promotion of energy from renewable sources is established which sets:

- a binding Union target for the overall share of energy from renewable sources in the Union's gross final consumption of energy in 2030, and
- rules on financial support for electricity from renewable sources, on self-consumption of such electricity, on the use of energy from renewable sources in the heating and cooling sector and in the transport sector, on regional cooperation between the Republic and Member States and between the Republic and third countries, on guarantees of origin, on administrative procedures and on information and training.

## **Regulatory Decisions and important CERA Decisions in 2022**

During 2022, CERA took Regulatory Decisions and other Decisions of which the most important are listed below:

### **REGULATORY DECISIONS**

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#### **Regulatory Decision 01/2022 (KDP 105/2022) on the determination of general principles and guidelines for connection charges to the transmission and distribution systems**

By Regulatory Decision 01/2022 (KDP 105/2022), CERA determined the general principles and guidelines for connection charges to the transmission and distribution systems to the responsible Operators (TSOC and DSO), in order to set out the charging policy for connection to the transmission system and the distribution system.

The general principles and guidelines for the preparation of the charge policy which are determined in the Regulatory Decision take into account that the charge policy for connection to the transmission and distribution systems depends on various parameters and is 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.

Regulatory Decision 01/2022 was published in the Official Government Gazette on 11 March 2022.



### **Regulatory Decision 02/2022 (KDP 106/2022) on the provision of guidance for the preparation of the connection process to the transmission system and distribution system**

By Regulatory Decision 02/2022 (KDP 106/2022), CERA provided guidance for the preparation of the connection process to the transmission system and distribution system by the competent Operators.

Pursuant to the 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 set 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 of the System Contract, and such contract templates for every user type.

Regulatory Decision 02/2022 was published in the Official Government Gazette on 11 March 2022.

### **Regulatory Decision 03/2022 (KDP 107/2022) on the establishment of basic principles for the formulation of the Ten-Year Transmission System Development Plan**

By Regulatory Decision 03/2022 (KDP 107/2022), CERA decided to set the basic principles for the formulation of the Ten-Year Transmission System Development Plan (TYNDP-Transmission) and to repeal Regulatory Decision 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, licence 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 Regulatory Decision 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 TYNDP-Transmission into reinforcement and expansion projects aimed at separating the projects that are deemed necessary for improving the operation of the transmission system (reinforcement 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 TYNDP-Transmission.
- 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.

Regulatory Decision 03/2022 was published in the Official Government Gazette on 11 March 2022.

### **Regulatory Decision 04/2022 (KDP 108/2022) on the establishment of basic principles for the formulation of the Ten-Year Distribution Development Plan**

By Regulatory Decision 04/2022 (KDP 108/2022) CERA decided to set basic principles for the formulation of the Ten-Year Distribution System Development Plan (TYNDP-Distribution).

For the continuous updating of all licensees, licence 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 Regulatory Decision 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 TYNDP-Distribution into reinforcement and expansion projects aimed at separating the projects that are deemed necessary for improving the operation of the

distribution system (reinforcement 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 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 TYNDP-Distribution for the decade starting in January of the following year to CERA for approval. The validity of the TYNDP-Distribution shall enter into force from the CERA approval date.

Regulatory Decision 04/2022 was published in the Official Government Gazette on 11 March 2022.

### **Regulatory Decision 05/2022 (KDP 183/2022) on the amendment of the statement of regulatory practice and electricity tariffs methodology**

By Regulatory Decision 05/2022 (KDP 183/2022), CERA proceeds with the amendment of the Regulatory Decision 01/2021 on the "Statement of Regulatory Practice and Electricity Tariffs Methodology" (KDP 359/2021) and was taken for purpose of harmonization with the Law Regulating the Electricity Market (L. 130(I)/2021) which was passed in 2021. It is noted that Regulatory Decision 05/2022 is read in conjunction with Regulatory Decision 01/2021 and they are jointly referred to as the "Statement of Regulatory Practice and electricity tariffs methodology Regulatory Decisions 01/2021 and 05/2022".

### **Regulatory Decision 06/2022 (KDP 257/2022), on the provisional regulation of the RES-E market price for the plan of the Republic of Cyprus "RES generated electricity with the ultimate integration of the projects into the competitive electricity market plan of October 2017"**

By Regulatory Decision 06/2022 (KDP 257/2022), CERA decided to set the cap on RES-E market prices only for the RES-E projects included in the Scheme of the Republic of Cyprus "RES generated electricity with the ultimate integration of the projects into the competitive electricity market plan of October 2017", at the average RES-E market price of the ten-year period 2013-2022, i.e., Low Voltage at 11€/kWh, Medium Voltage at 10.5€/kWh and High Voltage at 10€/kWh.

The RES-E market cap will be provisional and will cease:

- With a relevant CERA Decision following the end of the emergency situation in the electricity market that prevails on the basis of the Conclusion Document of the European Council "European Council meeting (24 and 25 March 2022) - Conclusions", EUCO 1/22, CO EUR 1, CONCL 1, dated 25 March 2022, or
- For those contracting parties who terminate the contract with EAC Supply and join the Transitory Regulation of the Electricity Market as provided for in the above Scheme of the Republic of Cyprus, or
- For those contracting parties who terminate the contract with EAC Supply and join the competitive electricity market for entry into force of the Trading and Settlement Rules (TSRs), as provided for in the above Scheme of the Republic of Cyprus.

Regulatory Decision 06/2022 was published in the Official Government Gazette on 24 June 2022

## **Regulatory Decision 07/2022 (KDP 282/2022) on the statement of regulatory practice for the supply of natural gas through virtual pipelines**

By Regulatory Decision 07/2022 (KDP 282/2022), in exercising the powers conferred by Article 7A(1) of the Laws Regulating the Natural Gas Market of 2004 to 2022, in assessing the need to promote the penetration of natural gas into the energy mix of the Republic of Cyprus and the need to define the regulatory framework that will govern the supply of natural gas through virtual pipelines, and taking into account that there are no developed natural gas transmission and distribution systems at this time within the Republic of Cyprus, the development of which is time-consuming, CERA issued Regulatory Decision No. 07/2022 which sets:

- the roles and responsibilities of engaged Operators, the supply undertaking and the final customers, as well as
- matters pertaining to the relevant infrastructures that are required for the transportation of compressed natural gas and LNG via virtual pipelines.

Regulatory Decision 07/2022 was published in the Official Government Gazette on 15 July 2022.

## **DECISIONS**

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### **Decision 01/2022 - Regulated electricity tariffs for 2022**

By Decision 01/2022, dated 5 January 2022, CERA, after taking into account the Decision 15/2021, dated 8 January 2021, entitled "Allowed Revenues and Regulated Electricity Tariffs for 2021", and the fact that the audited Separate Accounts had not been submitted by EAC, resulting in the allowed revenue and the regulated tariffs for 2022 not being approved for EAC, decided that:

- For 2022, the regulated tariffs for T-NH, T-AS, T-NM, T-NL, T-MET, T-W, and T-BM of 2021 will remain in effect.
- The approval of the Allowed Revenues for the TSOC cost recovery tariff for 2022, at €7,009,800.
- The approval of the tariff for the recovery of the expenses of the TSOC (T-TSO) for 2022, at 0.11€/kWh which, taking into account the allowed revenues for 2022, the surplus of 2018 is expected to be refunded to consumers.

### **Decision 3/2022 - Regulation 2019/941 - Establishment of a Risk-Preparedness Plan in the electricity sector**

Regulation (EU) 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.

By Decision 3/2022, dated 5 January 2022, having regard to Regulation (EU) 2019/941 of the European Parliament and of the Council of 5 June 2019 on risk-preparedness in the electricity sector and repealing Directive 2005/89/EC, and the fact that for the case of Cyprus, the Electricity Coordination Group (ECG) did not issue any specific recommendations on the draft submitted by CERA and no comments were submitted by other members of the Electricity Coordination Group, CERA decided to approve the Risk-Preparedness Plan in the electricity sector, its communication to the European Commission and its publication on the CERA website.

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 National Energy Control Centre of Cyprus (NECC).
- Physical security and cybersecurity measures.

#### **Decision 4/2022 - Approval of proposed amendments to the Trading and Settlement Rules (TSR) by the Transmission System Operator - Cyprus (TSOC) - Version 2.2.0**

By Decision 4/2022, dated 5 January 2022, CERA approved the proposed TSOC Trading and Settlement Rules (TSRs) - Version 2.2.0, which were submitted as the result of Regulatory Decision 03/2019 (KDP 224/2019) "on the Establishment of Basic Principles of Regulatory Framework for the Operation of Electricity Storage Facilities in Front of the Meter in the Wholesale Electricity Market" which includes, among others, instructions to TSOC to proceed where necessary to all the necessary amendments to TSR, so that participation without discriminations of electricity storage facilities in front of the meter in the operation of electricity market is possible.

#### **Decision 18/2022 - Electricity Tariff Plans for 2022**

By Decision 18/2022, dated 21 January 2022, CERA approved the electricity tariff plans for 2022, 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 27/2022 - Provision of Risk Assessment preparation services and implementation of the Information Security Policy pursuant to the provisions of Regulation (EU) 1227/2011 on wholesale energy market integrity and transparency (REMIT)**

By Decision no. 27/2022, dated 8 February 2022, CERA decided to award Tender 15/2021 "Provision of Risk Assessment preparation services and implementation Information Security Policy pursuant to the provisions of Regulation (EU) 1227/2011 on wholesale energy market integrity and transparency (REMIT)" to the bidder KPMG LIMITED.

The Agency for the Cooperation of Energy Regulators (ACER), in the context of market surveillance and establishment of information exchange mechanisms, has implemented the REMIT Information System (ARIS) to fulfil the obligations of the REMIT Regulation regarding the collection of data on wholesale energy markets, market surveillance and trading of data. In this regard, ACER develops and manages the REMIT Information Security Management System (ISMS).

In order for CERA to be able to monitor the transaction of participants registered in the wholesale market, with respect to the REMIT Regulation, it needs to pass an assessment (peer review), which essentially constitutes CERA's compliance with the ACER's Information Security Policy for the implementation of the provisions of the REMIT Regulation which is based on the ISO 27000 standard.

#### **Decision 28/2022 - TSOC certification based on the provisions of Article 80 of the Laws Regulating the Electricity Market of 2021 and 2022 (L. 130(I)/2021)**

By Decision 28/2022, dated 8 February 2022, CERA invited TSOC to immediately obtain the services of an independent and specialised legal or natural person for the purposes of TSOC's certification from CERA for

compliance with the provisions of Article 80(1)(a) of the Laws Regulating the Electricity Market of 2021 and 2022 (L.130(I)/2021), which will result from transparent and impartial criteria.

#### **Decision 44/2022 - TSR Parameters – Version 2.0.0 which are submitted by TSOC to CERA for approval**

By Decision 44/2022, dated 25 February 2022, CERA approved the parameters which, pursuant to the TSR – Version 2.0.0, were submitted by TSOC for approval.

#### **Decision 54/2022 - Decommissioning of high and medium voltage equipment of the “Moni 66 & 132 kV” substation which was shut down with the installation of the new “Moni GIS 132 kV” transmission substation**

By Decision 54/2022, dated 4 March 2022, CERA approved the request of the Owner of the Transmission System for the decommissioning of high and medium voltage equipment of the “Moni 66 & 132 kV” substation which was shut down with the installation of the new “Moni GIS 132 kV” transmission substation.

#### **Decision 59/2022 - Recognition of Guarantees of Origin of Electricity from RES and High Efficiency Combined Heat and Power cogeneration (HECHP) from other Member States and third countries**

By Decision 59/2022, dated 11 March 2022, CERA determined the procedure for the recognition of guarantees of origin of electricity from RES and High Efficiency Combined Heat and Power Cogeneration (HECHP) from other Member States and third countries for which the EU has concluded an agreement.

#### **Decision 72/2022 - Publication and entry into force of the TDRs - Version 5.3.0 and TSRs - Version 2.2.0**

By Decision 72/2022, dated 18 March 2022, CERA decided to publish the relevant announcement of the TDRs in the Official Gazette of the Republic - Version 5.3.0 as approved with CERA Decision 386/2021, dated 29 December 2021 and the TSRs - Version 2.2.0 as approved with CERA Decision 04/2022, dated 5 January 2022, which marks their entry into force. However, in said publication it is stated that the TDRs - Version 5.3.0 and the TSRs - Version 2.2.0, shall enter into force on 30 September 2024.

#### **Decision 82/2022 - Separate EAC Accounts for the year 2020**

By Decision 82/2022, dated 30 March 2022, CERA instructed EAC to publish the Separate Accounts for the year ended on 31 December 2020, which were audited and approved by its Board of Directors, on the EAC website, with explanations on how to calculate the return on average Regulated Asset Base (RAB) for the Core Regulated Activity (CRA) of Generation, Transmission and Distribution and the Cost Margin on the commercial and accounting management for the CRA of Supply.

#### **Decision 101/2022 - Changes to the Transitory Regulations of the Electricity Market - Version 1.8**

By Decision 214/2022, dated 19 April 2022, CERA decided to make the changes to the Transitory Regulations of the Electricity Market Version 1.7 and the issue of the Transitory Regulations of the Electricity Market - Version 1.8.

#### **Decision 103/2022 - Transfer of assets from EAC to TSOC**

By Decision 103/2022, dated 24 April 2022, CERA approved the transfer of assets from EAC to TSOC, as these had been submitted by EAC.

### **Decision 113/2022 - Long-Term Annual Forecast of Maximum Total Electricity Capacity and Total Generated Electricity for the period 2022 – 2030**

By Decision 113/2022, dated 3 May 2022, CERA approved the long-term forecast of annual maximum total capacity of electricity and total generated electricity for the decade 2022 – 2030 which was submitted by the TSOC.

### **Decision 114/2022 - Tariff for the recovery of the Public Service Obligations (PSO) expenditure**

By Decision 114/2022, dated 3 May 2022, CERA approved the proposal of the EAC Supply for the approval of the tariff for the recovery of expenses of the PSO (T-PSO) at €0.00035/kWh and its application for the monthly consumers, based on the electricity bills where the corresponding consumption will be measured at the end of June 2022, and for the bi-monthly consumers, based on the electricity bills where the corresponding consumption will be measured from 1st June 2022.

### **Decision 115/2022 - Approval of Ten-Year Transmission System Development Plan (TYNDP-Transmission) 2022 – 2031**

By Decision 115/2022, dated 3 May 2022, CERA approved the TYNDP-Transmission 2022 – 2031 which was submitted by TSOC.

### **Decision 129/2022 - Amendment of the standard licence terms of Annexes 2 to 6 of the Natural Gas Market Regulations (Issuing Licences) of 2006**

By Decision 129/2022, dated 13 May 2022, in exercising the powers conferred by Article 7(1)(xxxiv) of the Laws Regulating the Natural Gas Market of 2004 to 2021 and regulation 12 of the Natural Gas Market Regulations (Issuing Licences) of 2006, CERA amended standard licence terms of Annexes 2 to 6 of the Natural Gas Market Regulations (Issuing Licences) of 2006, to include standard licence terms for the activities pertaining to the construction, ownership, exploitation and management of the natural gas storage system, to ensure that:

- all interested licence holders for these activities are aware of the standard licence terms in advance, for transparency,
- the standard licence terms fall in line with Directive 2009/73/EC concerning common rules for the internal natural gas market and the Laws Regulating the Natural Gas Market of 2004 to 2021.

### **Decision 134/2022 - Adjustment Methodology of Allowed Revenues and Tariffs of Regulated Activities**

By Decision 134/2022, dated 17 May 2022, CERA approved and published the new Adjustment Methodology of Allowed Revenues and Tariffs of Regulated Activities of the EAC and the TSOC for the next regulatory control period to fall in line with the Laws Regulating the Electricity Market of 2021 and 2022, L.130(I)/2021 and Regulatory Decisions 01/2021 and 05/2022.

### **Decision 140/2022 - Notification of amendment of the LNG Operator's Operating Licence no. ΦA 2 for LNG facilities**

By Decision 140/2022, dated 20 May 2022, CERA issued a notification regarding an ex-officio amendment to the LNG Operator's Operating Licence no. ΦA2 for LNG facilities by virtue of Regulation 10(2) of KDP 298/2006. The notification referred to the amendment of terms 5(i) and 9(5) of the Licence, on the conditions for maintaining the natural gas within pipelines, aimed at providing flexibility to the Licensee, and establishing a schedule within

which the Licensee must submit a quarterly update on the progress of the LNG facility implementation and the estimated commencement date of its commercial operation.

**Decision 161/2022 - Fuel Clause Coefficient for the Adjustment of the Wholesale Tariff (T-W), Fuel Clause Coefficient for the purchase of RES-generated energy and Basic Energy Market Prices for the period July - December 2022**

By Decision 161/2022, dated 31 May 2022, CERA approved the fuel clause coefficient 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 2022, as presented in Table 1.

Fuel Clause Coefficient for the adjustment of the T-W tariff	
	€/kWh/1€c
Low voltage	0.00024311
Medium voltage	0.00024098
High voltage	0.00023889
Fuel Clause Coefficient for the purchase of RES-generated electricity	
	€/kWh/1€c
Low voltage	0.00024098
Medium voltage	0.00023889
High voltage	0.00023551
Basic prices for the purchase of RES-generated electricity	
	€/kWh
Low voltage	7.502
Medium voltage	7.439
High voltage	7.338

**Table 1 - Fuel Clause Coefficient and Basic Purchase Prices of RES-generated energy**

**Decision 214/2022 - Examination of the possible violation of the terms of the TSOC licence no. N.419(A)/TSOC-2004, regarding the operation and reliability of high voltage underground cable ring in the urban area of Lefkosia, pursuant to the provisions of Article 12 of the Laws Regulating the Electricity Market of 2021 and 2022 (L.130(I)/2021)**

By Decision 214/2022, dated 8 July 2022, CERA decided to proceed with the ex-officio investigation into the examination of the possible violation by TSOC of the terms of the licence no. N.419(A)/TSOC-2004 and/or provisions of L.130(I)/2021, regarding the operation and reliability of high voltage underground cable ring in the urban area of Lefkosia.

## Decisions 215-218/2022 and 244/2022 - Allowed Revenues and Regulated Electricity Tariffs for 2022

By Decisions 215-218/2022, dated 8 July 2022 and 244/2022, dated 21 July 2022, CERA approved the allowed revenue and regulated basic electricity tariffs for 2022, as presented in Table 2. Allowed revenue for 2022, include accounting adjustment for 2020 based on the adjustment methodology of allowed revenue that was issued by CERA.

Recovery from tariff	CERA-approved allowed revenue for 2022
Wholesale electricity tariff <b>(T-W)</b> at basic price	430.936.757
Transmission system use tariff <b>(T-NH)</b>	33.012.048
Distribution system use tariffs (medium and low voltage), which includes a charge component related to the Distribution System Operator <b>(T-NM, T-NL)</b>	89.633.816
Tariff for Business Management Services provided to customers <b>(T-BM)</b>	21.892.357
Tariff for the provision of ancillary services and long-term reserve <b>(T-AS)</b>	31.716.476
Tariff for the recovery of expenses of the Transmission System Operator <b>(T-TSO)</b>	5.049.529
Tariff for the recovery of expenses of measurements incurred by the Distribution System Operator <b>(T-MET)</b>	3.718.994
Purchase of RES-generated energy at basic price	36.179.185
Supply tariffs and electricity market charges to the end consumer <b>(T-RET)</b>	640.879.249

**Table 2** - Allowed revenue and regulated electricity tariffs for 2022



### **Decision 221/2022 - Amendment to the LNG Operator's LNG facility operating licence no. ΦA 2**

By Decision 221/2022, dated 12 July 2022, and in the absence of objections or representations on the proposed amendment to the LNG Operator's LNG facility operating licence under no. ΦA 2 which was issued by CERA Decision 140/2022, CERA amended the terms 5(i) and 9(5) of the Licence.

### **Decision 225/2022 - Electricity Tariff Schemes for 2022**

By Decision 225/2022, dated 12 July 2022, CERA approved the electricity tariff schemes for 2022, as submitted by EAC Supply and instructed EAC Supply to publish the approved electricity tariff schemes to properly inform electricity consumers and other participants in the electricity market.

### **Decision 234/2022 - Examination of violation of term 9(2) of the LNG Operator's Liquefied Natural Gas (LNG) facility Operating Licence no. ΦA 2 by the Natural Gas Public Company (DEFA) Ltd, pursuant to the provisions of Article 13 of the Laws Regulating the Natural Gas Market of 2004 to 2021**

By Decision 234/2022, dated 19 July 2022, CERA decided that DEFA Ltd violated term 9(2) of LNG Operator's Operating Licence for LNG facility no. ΦA 2, which concerned the obligation of submitting a draft contract with the owner of the LNG facility, which sets out the terms and conditions of the facility's operation by the licence holder, within six months of the licence being issued and imposed an administrative fine of five thousand (€5,000) euro. In addition, CERA decided that if the violation continues from the imposition date of said Decision and thereafter, an administrative fine of one hundred (€100) euro for every day that the violation continues will be imposed.

### **Decision 235/2022 - Examination of violation of term 8(2) of the OTS/TSO Construction, Ownership, Exploitation and Operation of the Natural Gas Transmission System Licence no. ΦA 1 by the Natural Gas Public Company (DEFA) Ltd, pursuant to the provisions of Article 13 of the Laws Regulating the Natural Gas Market of 2004 to 2021 and examination of violation of CERA Decision no. 73/2021**

By Decision 235/2022, dated 19 July 2022, CERA decided that DEFA Ltd:

- violated term 8(2) of the OTS/TSO Construction, Ownership, Exploitation and Operation of the Natural Gas Transmission System Licence no. ΦA 1, which concerns the obligation to provide CERA with a detailed time schedule for the determination of technical safety requirements and technical requirements for minimum technical specifications for the planning, construction, and operation of the Natural Gas Transmission System at the latest within nine months of the licence being issued, and imposed an administrative fine of ten thousand (€10,000) euro. In addition, CERA decided that if the violation continues from the imposition date of the Decision and thereafter, an administrative fine of one hundred (€100) euro for every day that the violation continues will be imposed.
- did not comply with CERA Decision No. 73/2021, dated 26 February 2021, regarding the guidelines on conducting the natural gas demand assessment process in the transmission system by the Natural Gas Transmission System Operator and the conclusion of connection agreements and imposed an administrative fine of fifteen thousand (€15,000) euros, given that the First Open Procedure had not been initiated sixteen (16) months after the Licence had been issued, resulting in serious delays in the preparation of the Ten-Year Transmission System Development Program which is necessary for the implementation of the transmission system which is a prerequisite for the functioning of the market and the supply of electricity generation with the arrival of natural gas.

### **Decision 240/2022 - Purchase of Greenhouse Gas Emission Allowances by the Regulated Generation Activity**

By Decision 240/2022, dated 21 July 2022, CERA proceeded with the termination of the validity and thus the termination of the application of Decision 112/2018, dated 25 May 2018, on the "Procedure for the Purchase of Greenhouse Gases and the Recovery of the Related Cost through the Monthly Adjustment of Fuel Prices", with which CERA approved the Unified Process for the Purchase of Greenhouse Gases and Recovery of the Related Cost through the Fuel Price Adjustment, from the calculation of the Weighted Average Fuel Cost of EAC-Generation.

### **Decision 241/2022 - Decommissioning of high and medium voltage equipment of the "NEO MONI 66 & 132 kV" substation which was shut down with the installation of the temporary settlement equipment**

By Decision 241/2022, dated 21 July 2022, CERA approved the request of the Owner of the Transmission System for the decommissioning of high and medium voltage equipment of the "Neo Moni 66 & 132 kV" substation which has been shut down with the installation of temporary settlement equipment.

### **Decision 245/2022 - Adjustment Methodology of Allowed Revenue and Tariffs of Regulated Activities**

By Decision 245/2022, dated 21 July 2022, CERA permitted the deviation from Decision 134/2022, dated 17 May 2022, on the "Adjustment Methodology of Allowed Revenue and Tariffs of Regulated Activities", for the regulated generation and supply activities by a dominant generator and dominant supplier for 2023, for EAC-Generation and EAC-Supply and only for 2023 to submit all of their requests for one year rather than the entire 2023 – 2027 regulatory control period. This Decision will be reviewed for 2024 depending on the experiences that will have been obtained during the operation of the Competitive Electricity Market in 2023.

### **Decision 246/2022 - Capacity level approval for connection to the transmission system pursuant to the provisions of Regulatory Decision 01/2022 (KDP 105/2022) "Determination of general principles and guidelines for connection charges to the transmission and distribution systems"**

By Decision 246/2022, dated 26 July 2022, CERA approved the joint recommendation of the TSOC and DSO regarding the capacity level approval for connection to the transmission system pursuant to provision 7.1.1 of Regulatory Decision 01/2022 (KDP 105/2022), namely the "capacity level approval for connection to the transmission system" is determined at 15 MW for users/generators and 15 MVA for users/consumers.

### **Decision 272/2022 - Preliminary report on the Regulatory Accounting Instructions for the preparation of separate accounts of natural gas undertakings**

By Decision 272/2022, dated 23 August 2022, CERA approved the Preliminary Compliance Report on the Regulatory Accounting Instructions as submitted by DEFA Ltd on 1 July 2022 which, as an integrated natural gas undertaking, is the Liable Organization, as defined in Regulatory Decision no. 05/2020 (KDP 345/2020), and thus is obligated to keep Separate Accounts for each of the generation, supply, transmission, distribution, LNG and natural gas storage activities just as they would be required to do if those activities were carried out by separate undertakings, to avoid discrimination, cross-subsidies and distortion of competition.

### **Decision 279/2022 - Determination of the licencing framework for conducting activities which are provided in Article 26 of the Laws Regulating the Electricity Market of 2021 and 2022**

By Decision 279/2022, CERA determined the licencing framework for conducting activities which are provided in Article 26 of the Laws Regulating the Electricity Market of 2021 and 2022 (L.130(I)/2021), which shall be valid until the issuance of the New Licence Issuance and Licence Fee Regulations.

In particular, the determination was made regarding the forms, required documents and information, standard terms and fees for the issuance of the following licences:

- Electricity Supply to wholesale customers Licence
- Market Operator Licence
- Responsible Balancing Entity Licence
- Aggregator Licence
- Interconnection Line Owner Licence
- Interconnection Line Operator Licence
- Electricity Storage Facility Licence
- Electricity Storage Facility Operation Licence

### **Decision 283/2022 - Exemptions from provisions of TDRs and the generation units of EAC-Generation**

By Decision 283/2022, dated 2 September 2022, CERA decided to grant EAC-Generation with the exemptions to the current and applicable TDR requirements - Version 4.0.0 and the current and applicable amendments 4.0.1, 4.0.2 and 4.0.3, based on the TSOC recommendation.

### **Decision 284/2022 - Examination of the possible violation of the terms of the EAC-Supply Licence no. П1-N.419(A)/ΠΘ1-2006 regarding the calculation of overpriced electricity consumption bills, in accordance with the provisions of Article 12 of the Laws Regulating the Electricity Market of 2021 and 2022**

By Decision 284/2022, dated 2 September 2022, CERA decided to proceed with the ex-officio investigation into the examination of the possible violation of the terms of the EAC-Supply Licence no. П1-N.419(A)/ΠΘ1-2006 and in particular term 4(a) and/or the provisions of the Laws Regulating the Electricity Market of 2021 and 2022 (L.130(I)/2021).

### **Decision 333/2022 - Approval of amendments to Electricity Supply Rules to final customers – Version 1.1.1**

By Decision 333/2022, dated 20 December 2022, CERA decided to amend the Electricity Supply Rules to final customers - Version 1.1, by virtues of Article 117 of the Laws Regulating the Electricity Market of 2021 and 2022 (L.130(I)/2021).

### **Decision 342/2022 - Pilot Compliance Check of the Functional Unbundling of the EAC's Core Regulated Transmission Activity**

By Decision 342/2022, dated 25 October 2022, CERA decided to proceed with the Pilot Compliance Check of the Functional Unbundling of the EAC's Core Regulated Transmission Activity which, if deemed necessary, can be extended to every other organizational unit of the Vertically Integrated Undertaking (VIU) - EAC, which affects the functioning of the said CRA.

### **Decision 361/2022 - Separate EAC Accounts for 2021**

By Decision 361/2022, dated 4 November 2022, CERA instructed EAC to publish the Separate Accounts for the year ended on 31 December 2021, which were audited and approved by its Board of Directors, on the EAC website, with explanations on how to calculate the return on average Regulated Asset Base (RAB) for the CRA of Generation, Transmission and Distribution and the Margin Cost on the commercial and accounting management for the CRA of Supply.

### **Decision 382/2022 - Documents and information that must accompany applications for the granting of a licence/exemption from the obligation to hold a licence for an electricity generation station for own use**

By Decision 382/2022, dated 22 November 2022, CERA simplified the supporting documents that are required for the granting of an exemption from the obligation to hold a licence for an electricity generation station for own use.

### **Decision 384/2022 - Approval of amending version of the Ten-Year Transmission System Development Plan 2022-2031**

By Decision 384/2022, dated 22 November 2022, CERA approved the amending version of the Ten-Year Transmission System Development Plan 2022-2031, as submitted by the TSOC.

### **Decision 398/2022 - Submission of LNG Facility Owner – Operator agreement – violation of term 9(2) of LNG facility Operating Licence**

By Decision 398/2022, dated 2 December 2022, CERA decided that from 6 October 2022, the date on which the draft agreement between the owner of the LNG Facility (ETYFA Ltd) and the Operator of the LNG Facility (DEFA Ltd) was submitted for approval, the violation of term 9(2) of the ΦA2 licence ceased, and by extension, the requirement to pay a daily administrative fine imposed on the licence holder by CERA Decision 234/2022, dated 19 July 2022, is terminated from 6 October 2022. With respect to this violation, the total amount of twelve thousand eight hundred euros (€12,800) was paid.

### **Decision 430/2022 - Approval of Transitory Regulation parameters for the security covers of the Electricity Market, Version 1.9 for the 2023 calendar year**

By Decision 430/2022, dated 20 December 2022, CERA approved the Transitory Regulation parameters for the security covers of the Electricity Market - Version 1.9 for the 2023 calendar year.

### **Decision 431/2022 - Approval of DSO-proposed Transitory Regulation parameters of the Electricity Market - Version 1.9 for the 2023 calendar year**

By Decision 431/2022, dated 20 December 2022, CERA approved the distribution losses factor of the distribution system (medium and low voltage) for 2023.

### **Decision 432/2022 - Approval of Transitory Regulation parameters of the Electricity Market proposed by TSOC - Version 1.9 for the 2023 calendar year**

By Decision 432/2022, dated 20 December 2022, CERA approved the monthly transmission loss factors, which were calculated based on the approved transmission system loss factor methodology (Decision 107/2019) and

decided that the factors concerning the non-compliance deviation tolerance threshold charges from the absolute price of the net delivery position of participants and the related non-compliance unit charges, continue to apply as per CERA Decision 375/2021, dated October 18, 2022, until announced otherwise by CERA which will have been provided with all the necessary information in order to be duly assessed, taking into account elements of the Cypriot electricity system and the operation of the electricity market which is in transition.

#### **Decision 436/2022 - Assessment of the proposal of connection projects of the first open procedure that was submitted for approval to CERA by the Natural Gas Transmission System Operator**

By Decision 436/2022, dated 23 December 2022, CERA decided to approve the Proposal of Connection Projects as submitted by the Natural Gas Transmission System Operator on 26 October 2022 and invited the Licensee to:

- make the necessary amendments to the documents for compliance with Annex I of the Decision,
- publish the Greek version of the Connection Agreement Template for public consultation as soon as possible, but no later than 20 January 2023, together with any other document which the Licensee deems, at its discretion and based on the feedback it received during the public consultation, that changes must be subject to feedback by the interested candidate Transmission System interconnection parties,
- submit an updated Proposal of Connection Projects to CERA for approval within fifteen (15) calendar days following the public consultation.

#### **Decision 441/2022 - Examination of violation of CERA Decision 288/2021, as amended by Decision 153/2022, and subsequent term 9(6) of the LNG Facility Operating Licence**

By Decision 441/2022, dated 23 December 2022, CERA decided that by failing to submit the EPCOM agreement between the owner of the LNG Facility (ETYFA Ltd) and the Contract of the project “CyprusGas2EU” in a timely fashion, DEFA Ltd violated CERA’s Decision 288/2021 and in particular point 2(a)(i) of the Decision, as amended by Decision 153/2022, and subsequent term 9(6) of the LNG Facility Operating Licence no ΦΑ2, and imposed an administrative fine of one thousand seven hundred (€1,700) to DEFA Ltd.

## **Actions taken in relation to previous Regulatory Decisions**

#### **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”, 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 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.

### **TSOC and DSO compliance check pursuant to the regulatory framework for the preparation of a thorough techno-economic feasibility study concerning 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 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 this respect, TSOC and DSO jointly announced, that a more worthwhile and reliable supplementary study will be submitted to include very high RES penetration scenarios, marking December 2024 as the deadline for this submission.

At the same time, CERA evaluates the implementation of the actions and activities resulting from the submitted Redesign Study through progress reports which are prepared by the Permanent System Operators Cooperation Group and are submitted on a six-monthly basis.

### **Compliance check of the TSOC and DSO pursuant to regulatory framework on the determination of general principles and guidelines for connection charges to the transmission and distribution systems**

With respect to the provisions of Regulatory Decision No. 01/2022 (KDP 105/2022) “Determination of general principles and guidelines for connection charges to the transmission and distribution systems” CERA reviewed the study concerning the determination of the “Transmission System connection capacity limit” which was submitted to CERA for approval, as provided by the Regulatory Decision, within three (3) months of its publication in the Official Gazette. Following the review of this study, the recording of specific questions and the receipt of satisfactory responses by the two Operators, CERA approved the “Transmission System connection capacity limit” with Decision 246/2022.

### **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. 03/2022 (KDP 107/2022 “on the establishment of basic principles for the formulation of the Ten-Year Transmission System Development Plan” CERA performed a TSOC compliance check, the findings were recorded and specific deviations were highlighted regarding the TSOC’s compliance with the regulatory framework.

### **DSO compliance check pursuant to the regulatory framework for the formulation of the Ten-Year Distribution System Development Plan**

With respect to the provisions of Regulatory Decision No. 04/2022 (KDP 108/2022 “on the establishment of basic principles for the formulation of the Ten-Year Distribution System Development Plan” CERA performed a DSO compliance check, the findings were recorded and specific deviations were highlighted regarding the DSO’s compliance with the regulatory framework.

### **EAC Functional Unbundling**

In previous years, based on the provisions of Regulatory Decision 04/2014 “Functional unbundling of EAC activities” (KDP 372/2014) as well as the functional unbundling regulatory framework, CERA moved forward, with the contribution of external consultants, to the review of the implementation of the functional unbundling of EAC’s activities, by carrying out specialised audits at three different time periods.

In every case, the maintenance and deepening of the functional unbundling of the Vertically Integrated Undertaking - EAC requires, inter alia, compliance with continuous assessment of its proper implementation. Thus, by way of a series of Decisions, in 2022, CERA moved forward with targeted compliance checks of the EAC' with the principles of functional unbundling, the results of which are currently being processed by CERA.

## Trading and Settlement Rules

According to the Laws Regulating the Electricity Market of 2021 and 2022, Trading and Settlement Rules (TSR):

- 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 the sale of electricity, under these arrangements, will not be subject to discrimination.
- Promote efficiency and economy and facilitate competition in the purchase and sale of electricity under these arrangements.
- 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 TSRs.
- Are fully harmonized with the provisions of Regulation (EU) 2019/943, where applicable.

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

During the reference year, CERA approved the TSOC-proposed amendments to the TSRs - Version 2.2.0 (Decision No. 4/2022, dated 5 January 2022). The amendments refer to changes to the definition and the power and capacity limits of electricity storage facilities, corrections to the definition of electricity storage representatives and changes to facilitate the participation of electricity storage units in the integrated scheduling process. These changes were made in the context of implementing the provisions of Regulatory Decision No. 03/2019 (KDP 224/2019) "regarding the Establishment of Basic Principles of the Regulatory Framework for In-Front-Of-The-Meter Electricity Storage Facilities in the Wholesale Electricity Market".

The approval of TSRs 2.2.0, which allows the participation of electricity storage units in the Competitive Electricity Market, was also a prerequisite for the disbursement of the first instalment of the Recovery and Resilience Facility (RRF) and in order to fulfil this prerequisite, additional provisions regarding the submission of block orders in the day-ahead market and the combination of storage plants in RES units at the request of TSOC that had been requested by CERA were not included. The preparation of the additional provisions will continue and TSOC proposes that these are included in the TSR version that will satisfy the intra-day market and will be prepared at a later stage.

Moreover, by Decision 72/2022, dated 18 March 2022, CERA decided to publish TSR 2.2.0 with the relevant announcement in the Official Gazette of the Republic, as these were approved by CERA Decision 04/2022, dated 5 January 2022, which marks their entry into force. However, in the publication it is stated that the Trading and Settlement Rules - Version 2.2.0 shall be put into effect on 30 September 2024.



## Transmission Rules

According to the Laws Regulating the Electricity Market of 2021 and 2022, Transmission Rules (TR):

- Govern the technical requirements and restrictions applied by licence holders whenever they want to connect to the transmission system or use the transmission system or for the transmission of electricity.
- Ensure that the technical terms applicable to licence holders who wish to connect or use the transmission system do not discriminate against licence holders.
- Promote efficiency, reliability and economy in the use and development of the transmission system.
- They are fully harmonized with the provisions of Regulation (EU) 2019/943, where applicable.

The provisions of the TRs shall be adhered to by final customers to the extent required by the terms of their connection with the transmission network and by all licence holders or by persons to whom exemptions have been granted, to the extent required by their licences or exemptions, respectively.

In the reference year, a draft TR - Version 1.0.0 was submitted to CERA, which CERA reviewed and the results were forwarded to the TSOC with correction guidelines.

## Distribution Rules

According to the Laws Regulating the Electricity Market of 2021 and 2022, Distribution Rules (DR):

- Govern the technical requirements and restrictions applied by licence holders whenever they want to connect to the distribution system or use the distribution system or for the distribution of electricity.
- Ensure that the technical terms applicable to licence holders who wish to connect or use the distribution system do not discriminate against licence holders.
- Promote efficiency, reliability and economy in the use and development of the distribution system.
- They are fully harmonized with the provisions of Regulation (EU) 2019/943, where applicable.

The provisions of the DRs shall be adhered to by final customers to the extent required by the terms of their connection with the distribution network and by all licence holders or by persons to whom exemptions have been granted, to the extent required by their licences or exemptions, respectively.

In the reference year, a draft DR - Version 1.0.0 was submitted to CERA, which CERA reviewed and the results were forwarded to DSO with correction guidelines.



# ENERGY POLICY, INTERNATIONAL AND LOCAL ACTIVITIES

## European Legislative Regulations

**Regulation (EU) 2022/869 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No. 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No. 347/2013**

Regulation (EU) 2022/869 lays down guidelines for the timely development and interoperability of the priority corridors and areas of trans-European energy infrastructure (energy infrastructure priority corridors and areas) set out in its Annex, that contribute to ensuring climate change mitigation, in particular achieving the Union's 2030 targets for energy and climate and its climate neutrality objective by 2050 at the latest, and to ensure interconnection, energy security, market and system integration and competition that benefits all Member States, as well as affordability of energy prices. In particular, this Regulation:

- provides for the identification of projects on the Union list of projects of common interest and of projects of mutual interest,
- facilitates the timely implementation of projects on the Union list by streamlining, coordinating more closely and accelerating permit granting processes, and by enhancing transparency and public participation,
- provides rules for the cross-border allocation of costs and risk-related incentives for projects on the Union list,
- determines the conditions for eligibility of projects on the Union list for EU financial assistance.

**Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions REPowerEU Plan (COM(2022) 230 final)**

The REPowerEU plan, which was published on 18 May 2022, is about rapidly reducing our dependence on Russian fossil fuels by fast forwarding the clean transition and joining forces to achieve a more resilient energy system and a true Energy Union. Based on the set of proposals for the "adjustment to the 55% goal" (hereinafter: Fit for 55) and the completion of actions on energy security of supply and storage, this REPowerEU plan puts forward an additional set of actions aimed at:

- Energy savings,
- Diversifying energy imports,
- Substituting fossil fuels and accelerating Europe's clean energy transition, and
- Smart investments and reforms.

These actions will structurally transform EU's energy system. They require effective coordination between European regulatory and infrastructure measures, as well as national investment and reforms and joined-up energy diplomacy. They also require coordination between action on the demand side, to reduce energy consumption and transform industrial processes to replace gas, oil and coal with renewable electricity and

fossil-free hydrogen, with action on the supply side to create the capacity and framework to roll out and produce renewable.

**Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design – a course for action (COM(2022) 236 final)**

The aim of this Communication, which was published on 18 May 2022, is to:

- Propose further short-term measures going beyond the toolbox<sup>1</sup> that the Commission presented in October 2021, which the EU and Member States can take in the gas and electricity sectors to tackle effectively the impact of sustained high energy prices on consumers and companies;
- Identify possible measures for the eventuality of a disruption to the supply of Russian gas;
- Set out a way forward to optimise the functioning of the European electricity market so that it is better suited to withstand future price volatility and fit for the future decarbonised energy system, with an increasing share of renewables in electricity generation.

**Council Regulation (EU) 2022/1369 of 5 August 2022 on coordinated demand-reduction measures for gas**

Regulation (EU) 2022/1369 establishes rules to address a situation of severe difficulties in the supply of gas, with a view to safeguarding Union security of gas supply, in a spirit of solidarity. Those rules include improved coordination, monitoring of and reporting on national gas demand-reduction measures and the possibility for the Council to declare, on a proposal from the Commission, a Union alert as a Union-specific crisis level, triggering a mandatory EU-wide demand-reduction obligation.

Member States shall use their best efforts to reduce their gas consumption in the period from 1 August 2022 to 31 March 2023 at least by 15 % compared to their average gas consumption for the period from 1 August to 31 March in the five years preceding that this regulation enters into force ('voluntary demand reduction'). Where the EU declares a Union alert, gas consumption in each Member State over the period from 1 August 2022 to 31 March 2023 shall be 15 % lower compared to its reference gas consumption ('mandatory demand reduction').

Member States shall be free to choose the appropriate measures to reduce demand. The measures shall be clearly defined, transparent, proportionate, non-discriminatory and verifiable. When selecting the measures, Member States shall take into account the principles set out in Regulation (EU) 2017/1938. The measures shall, in particular:

- not unduly distort competition or the proper functioning of the internal market in gas;
- not endanger the security of gas supply of other Member States or of the Union; and
- comply with the provisions of Regulation (EU) 2017/1938 as regards protected customers.

**Council Regulation (EU) 2022/1854 of 6 October 2022 on an emergency intervention to address high energy prices**

Regulation (EU) 2022/1854 establishes an emergency intervention to mitigate the effects of high energy prices through exceptional, targeted and time-limited measures. Those measures aim to reduce electricity consumption, to introduce a cap on market revenues that certain producers receive from the generation of electricity and redistribute to final electricity customers in a targeted manner, to enable Member States to apply measures of public intervention in the price setting for the supply of electricity for household customers and companies.

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<sup>1</sup> Tackling rising energy prices: a toolbox for action and support (COM(2021) 660 final)

In addition, they establish rules for a mandatory temporary solidarity contribution from Union companies and permanent establishments with activities in the crude petroleum, natural gas, coal and refinery sectors to contribute to the affordability of energy for households and companies.

Pursuant to the Regulation, Member States shall endeavour to implement measures to reduce their total monthly gross electricity consumption by 10 % compared to the average of gross electricity consumption in the corresponding months of the period from 1 November to 31 March in the five consecutive years preceding the effective date of this Regulation starting on 1 November 2017 until 31 March 2018. Moreover, the Member State shall reduce its gross electricity consumption during the identified peak hours corresponding in total to 10 % of all hours of the period between 1 December 2022 and 31 March 2023. Member States shall be free to choose the appropriate measures to reduce gross electricity consumption and to extend national measures already in place.

### **Regulation (EU) 2022/1032 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage**

Pursuant to Regulation (EU) 2022/1032, national regulatory authorities or another competent authority designated by the Member States concerned should refuse certification where they conclude that a person who directly or indirectly controls or exercises any right over the storage system operator could endanger the security of energy supply or any other essential security interest at national, regional or Union level. In making that assessment, the certifying authority should take into account commercial relationships that could negatively affect the incentives and ability of the storage system operator to fill the underground gas storage facility, as well as the international obligations of the Union and any other specific facts and circumstances of the case.

Where a certifying authority refuses certification, it should have the power to require any person to dispose of the shareholding or rights they have over the storage system owner or storage system operator and to set a time limit for such disposal, to order any other appropriate measure to ensure that person is not able to exercise any control or right over that storage system owner or storage system operator, and to decide on appropriate compensatory measures. Any measure taken in the certification decision to address security of gas supply risks or other essential security interests should be necessary, clearly defined, transparent, proportionate and non-discriminatory. National regulatory authorities and competition authorities are also encouraged to use their powers to effectively exclude undue increases of storage tariffs.

### **Council Regulation (EU) 2022/2576 of 19 December 2022 enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders**

Regulation (EU) 2022/2576, aims to mitigate the impact on the price of gas by addressing demand and supply, ensuring the security of supply across the EU and strengthening solidarity. This Regulation establishes temporary rules on:

- the expedited setting up of a service allowing for demand aggregation and joint gas purchasing by undertakings established in the Union;
- secondary capacity booking and transparency platforms for LNG facilities and for gas storage facilities; and
- congestion management in gas transmission networks.

Moreover, temporary mechanisms are established to protect citizens and the economy against excessively high prices, by way of a temporary intra-day volatility management mechanism for excessive price movements and an ad hoc LNG benchmark, to be developed by the European Union Agency for the Cooperation of Energy Regulators (ACER).

Lastly, temporary measures are established for the case of a gas emergency, to distribute gas fairly across borders, to safeguard gas supplies for the most critical customers and to ensure the provision of cross-border solidarity measures.

### **Council Regulation (EU) 2022/2578 of 22 December 2022 establishing a market correction mechanism to protect Union citizens and the economy against excessively high prices**

Regulation (EU) 2022/2578 establishes a temporary market correction mechanism ('MCM') for orders placed for trading Title Transfer Facility (TTF) derivatives and derivatives linked to other virtual trading points, to limit episodes of excessively high gas prices in the European Union which do not reflect world market prices.

The MCM for the front-year TTF derivative settlement price shall be activated when a market correction event occurs. A market correction event shall be considered to occur when the front-month TTF derivative settlement price, as published by ICE Endex B.V.:

- exceeds EUR 180/MWh for three working days; and
- is EUR 35 higher than the reference price during the period referred to in point (a).

If ACER observes that a market correction event has occurred, it shall publish a notice stating that a market correction event has occurred ('market correction notice') in a clear and visible manner on its website and shall inform the Council, the Commission, ECB and ESMA of the market correction event. As from the day after the publication of a market correction notice, market operators shall not accept and TTF derivatives market participants shall not submit orders for TTF derivatives that are due to expire in the period from the expiry date of the front-month TTF derivative to the expiry date of the front-year TTF derivative with prices of EUR 35 above the reference price published by ACER on the previous day ('dynamic bidding limit'). If the reference price is below EUR 145/MWh, the dynamic bidding limit shall remain at the sum of EUR 145 and EUR 35. The dynamic bidding limit shall be deactivated, 20 working days from the occurrence of the market correction event or afterwards, if the reference price is below EUR 145/MWh for three consecutive working days.

### **Council Regulation (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy**

Regulation (EU) 2022/2577 establishes temporary rules of an emergency nature to accelerate the permit-granting process applicable to the generation of energy from RES, with a particular focus on specific renewable energy technologies or types of projects which are capable of achieving a short term acceleration of the pace of deployment of RES in the Union.

This Regulation applies to all permit-granting processes that have a starting date within the period of its application and is without prejudice to national provisions establishing shorter deadlines. Member States may also apply this Regulation to ongoing permit-granting processes which have not resulted in a final decision before 30 December 2022, provided that this shortens the permit granting process and that pre-existing third party legal rights are preserved.

## Projects of Common Interest and Projects of Mutual Interest

On 19 November 2021, the European Commission approved the 5th Projects of Common Interest (PCI) list, which is still in effect, 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 CO<sub>2</sub> network projects and 5 smart grid projects.

On 17 October 2022, during the first cross-regional meeting, the European Commission started the process of drawing up the first EU list under the revised Regulation 2022/869 on guidelines for trans-European energy infrastructures (TEN-E) for PCIs and the Projects of Mutual Interest (PMI), which were approved under the new rules. The same day, the submission window opened for eligible projects of all infrastructure categories. The call for candidates' applications was open until 15 December 2022.

The second cross-regional meeting was held in Brussels on 8-9 December 2022. A number of cross-regional meetings will be held in 2023. The first PCI and PMI list is expected in the fall of 2023.

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

PCIs benefit from faster licencing procedures and more favourable arrangements and are eligible for financial support from the "Connecting Europe Facility" mechanism, the EU fund for boosting energy, transport, and digital infrastructure. The new "Connecting Europe Facility" programme for 2021-2027 allocates a total budget of €5.8 billion to the energy sector. In addition to PCIs, it includes a new section to support cross-border projects for renewable energy.

The second call for PCI proposals, making €800 million available to finance clean energy infrastructure projects, was open for submission from 18 May to 1 September 2022.

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 reference to the Euroasia Interconnector project and in particular the electrical interconnection between Israel and Cyprus, it is worth mentioning that in 2022, meetings were held with the Israeli Regulatory Authority to promote the project further and to find a common ground for regulatory treatment of the project.

In addition to the PCIs, which are included in the 5th Union list, 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 2022 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.

In addition, it advises the European Commission to take binding decisions for the Member States. It 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 trading and settlement 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. In 2022, CERA participated in the 105th, 106th, 107th, 108th, 109th, 110th, 111th and 112th ACER Board of Regulators' meetings, which were either held online or in person.

Besides the Board of Regulator's meetings, CERA participated in various institutionalized working groups related to electricity and gas infrastructures, 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 on the application of REMIT policies and monitors the progress of regulatory authorities.
- 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 2022, CERA participated in the 6th, 7th, and 9th ARC meeting, the 20th RP TF meeting, the 30th RISIG meeting and the 354th, 35th, and 37th MM 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 electricity working group 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 2022, Cera participated in the 107th AEWG meeting and the 88th INF TF meeting.



## **ACER gas working group (AGWG)**

The working group works 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. The main objectives of the working group include aligning national market and network operation rules for gas as well as making cross-border investment in energy infrastructure easier.

The natural gas working group 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 natural gas working group for consultation.

To better support the market integration process, the natural gas working group is divided into the following task forces:

- Natural 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.
- Natural gas infrastructure task force (GI TF): ensures the efficient, safe and secure operation of the natural 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.
- Natural gas tariffs task force (Tariffs - TAR TF)
- Natural gas target model task force (GTM TF)

In 2022, CERA participated in the 105th, 108th, and 110th AGWG 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 task forces and 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 2022, CERA participated in the 168th, 169th, 170th, 171st, 172nd, 173rd, 174th and 175th General Meeting of CEER, which were either held online or in person.

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 working group 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 electricity working group 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, analysing the European regulatory frameworks and DSO cost-efficiency benchmarking, and
- Infrastructure (INF): responsible for infrastructure and network planning issues.

In 2022, CERA participated in the 168th, 169th and 170th CEWG meeting.

### **CEER gas working group (CGWG WG)**

The natural gas working group is responsible for addressing issues related to the European gas transmission systems and the EU natural gas market. The working group 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 2022, CERA participated in the 178th, 179th, 182nd, and 184th CGWG meeting.

### **Distribution systems working group (DS WG)**

The working group focuses on the distribution level of the electricity and natural 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 2022, CERA participated in the 75th, 76th, 78th, 80th and 81st online DS WG meeting.

### **Customers and retail markets working group (CRM WG)**

Consumer protection and monitoring competitive retail markets will continue to be a major focus of the 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)

In 2022, CERA participated in the 152th, 154th, 155th, and 156th CRM WG meeting.

### **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)

In 2022, CERA participated in the 93rd, 94th and 96th CMIT WG meeting.

### **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.

In 2022, CERA participated in the 10th and 11th online COVID-19 Ad hoc WG meeting.

### **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 2022, CERA participated in the 36th online RBM WS meeting.

## **Association of Mediterranean Energy Regulators (MEDREG)**

The 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 from 22 countries, (Albania (ERE), Algeria (CREG and ARH), Bosnia-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 2022, CERA participated in the 33rd and 34th MEDREG General Assemblies.

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 2022:

- Study on the interlink between good regulatory principles and the energy transformation challenge

In 2022, CERA participated in the 30th and 31st INS WG meeting.

### **Electricity working group (ELE WG)**

The electricity working group 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 2022:

- Security of supply

In 2022, CERA assumed the representation of the working group for the 2023-2024 period and participated in the 32nd and 33rd online ELE WG meeting.

### **Consumer working group (CUS WG)**

The working group 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 2022:

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

In 2022, CERA participated in the 20th, 21st, and 22nd 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 2022:

- Energy efficiency programmes

In 2022, CERA participated in the 31st RES WG meeting.

### **Natural gas working group (GAS WG)**

The natural gas working group assesses the current status of natural gas, the LNG markets in Mediterranean countries, their relevant regulatory frameworks and possible outcomes. The working 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 2022:

- Analysis of gas infrastructure to improve flexibility and interoperability of energy systems. In 2022, CERA participated in the 32nd online GAS WG meeting.

### **Regulatory Authority Advisory Committee (RAAC) East Mediterranean Gas Forum (EMGF)**



In 2018, Egypt introduced an initiative to establish the East Mediterranean Gas Forum as a platform for structured policy dialogue on natural gas, leading to the development of a sustainable regional gas market that could unlock the full gas resource potential in the East Mediterranean region.

During the tripartite summit held in October 2018 in Crete, leaders of Egypt, Cyprus and Greece declared their intentions to establish the Forum, accordingly, further coordination with regional parties and international organizations took place.

The Egyptian initiative was welcomed and sincerely adopted by the rest of the founding members. Cyprus, Greece, Israel, Italy, Jordan and Palestine (together with Egypt) as an initiative that sets the base for a structured policy dialogue leading to the development of a regional gas market to unlock the full gas resource potential and to set the stage for multilateral and full hub trade.

Just three months later, in January 2019, the Energy Ministers of Cyprus, Egypt, Greece, Israel, Italy, Palestine and Jordan met in Cairo for the first time to discuss the structure of the EMGF and agree on its main objectives.

Throughout 2019, remarkable joint efforts from all EMGF member countries were witnessed. With a unified vision and significant founding principles, the Ministers of the EMGF Founding Member Countries and the EMGF Executive Board held several successful meetings working on the official establishment of the forum. This has led to the agreement on a final document for the EMGF Statute in a worldwide 12-month record. This expeditious evolution of the EMGF and its strategic importance to the stability and economic development of the region has drawn worldwide attention with many countries offering their support and expressing an interest to join the forum as members or observers.

The EMGF has progressively evolved into the most renowned Energy Forum in the Mediterranean region. In a very short period, it has become a diplomatic discovery and a transformational project in the region. The significance of the EMGF goes beyond energy. It is a pivotal player of regional peace, and a vital force for economic growth and prosperity.

The EMGF recognises the crucial role of the Energy Regulatory Authorities in achieving its objectives; thus it promoted the formation of the Regulatory Authority Advisory Committee ("RAAC"), which enables the participation of the respective Energy Regulatory Authorities of each EMGF member to share their experience by contributing to the harmonisation of regulations and policies of gas trade and supply on the regional level.

That said, in 2021, the Regulatory Authority Advisory Committee ("RAAC") was incorporated aimed at ensuring that the rules and procedures of each EMGF member country are aligned and implemented by discussing the best practices in the mechanisms of issuing, amending and monitoring the licences, the structure of the balancing market as well as the current security of supply issues and the trend of production and imports. CERA is an active RAAC member since its incorporation and it has been agreed that it will undertake the RAAC Vice-Presidency in 2023.

### **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.

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 representatives of regulating authorities, 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 ACER representative). 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 convoked 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.

## Other international activities

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

- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Optimum Strategies for Hydrogen Economy”, on 29 August 2022, as part of the 9th International Conference on Energy, Sustainability and Climate Crisis.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Towards climate neutral (H2) cities”, on 12 September 2022, as part of RAE’s energy events at the 86th Thessaloniki International Fair” in Thessaloniki.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “The future of global energy systems”, on 22 September 2022, as part of the “17th European Energy Conference” in Athens.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on 6 October 2022, as part of the “3rd Regulatory Authority Advisory Committee Meeting” in Rome.

Additionally, CERA further strengthened its relations with other Regulatory Authorities. In particular, during the year under review, the following actions were taken:

- On 14 and 15 June 2022, CERA and RAE renewed and reconfirmed their cooperation based on their Memorandum of Cooperation and the Annual Meeting of the Regulatory Authorities of Cyprus, Greece, Egypt and Israel was held on issues of mutual interest in the energy sector.
- The dialogue began with the signing of the Memorandum of Cooperation between CERA and the Regulatory Authorities of Egypt and Israel.

## Local activities

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

- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “The regulation of energy markets and the integration of sustainable technologies in the regulatory framework”, on 14 January 2022, addressed to the House of Representatives, as part of the conference titled “Energy Transition – Storage and Hydrogen Technologies”.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Energy transition for island systems” on 18 March 2022, as part of the Cyprus Employers & Industrialists Federation (OEB) conference entitled “Energy transition – Are we ready to face the challenges?”.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Future sustainable power systems towards decarbonization”, on 19 April 2022, as part of the Stelios Amerikanos & Co. LLC conference “Renewable energies holistic solutions” at the Hilton Park.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Competitive electricity market in Cyprus”, on 7 June 2022, addressed to the House of Representatives.
- Opening Speech by Dr. Andreas Poullikkas, CERA Chairman, on 29 June 2022, as part of the CERA conference entitled “1st joint workshop CERA-RAE on energy regulatory affairs”, at the Radisson Blue Hotel.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “The Regulator View - The Cyprus Future Energy Landscape” on 29 June 2022, as part of the CERA conference entitled “1st joint workshop CERA-RAE on energy regulatory affairs”, at the Radisson Blue Hotel.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “The Regulator views towards hydrogen economy”, on 26 July 2022, as part of the online conference of the Cyprus Hydrogen Association.

- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Towards sustainable energy future”, on 28 July 2022, as part of the EDS Summer University Conference “Repowering Europe, How to achieve EU energy independence through new emerging markets and green transition”.
- Speech by Dr. Andreas Poullikkas, CERA Chairman, on the topic “Cyprus: Eastern Mediterranean energy hub”, on 17 November 2022, as part of the “10th Energy Symposium” in Nicosia.
- Speech by CERA’s Senior Energy Officer on the topic “Development on the Regulatory framework for Energy Communities in Cyprus”, on 24 May 2022, as part of the Energy Academy of the Clean Energy for EU Islands Secretariat meeting.
- Speech by CERA’s Senior Energy Officer on the topic “Status of the project ‘EuroAsia Interconnector’ & Regulatory Framework”, on 26 October 2022, as part of the working meeting between Cypriot and Israeli authorities.
- Speech by CERA’s Energy Officer on the topic “Smart-PV: The Regulator’s point of view” on 8 June 2022, as part of the “Energy Globe Award Ceremony”, in Nicosia.
- Speech by CERA’s Energy Officer on the topic “Empowering Energy Citizens and Communities towards the Decarbonisation of “Energy Island”, on 8 June 2022, as part of the “Workshop: Empowering Energy Citizens and Communities towards the Decarbonisation of “Energy Island”», in Paphos.
- Speech by CERA’s Energy Officer on the topic “Regulatory framework for energy storage in Cyprus”, on 6 October 2022, as part of the meeting “Energy storage in Cyprus: New technologies and challenges (EMPOWER programme)”, at the University of Cyprus in Nicosia.



## Research and development

### Co-financed and other projects in which CERA participates

#### **Integrated platform for increased FLEXibility in smart TRANSmision grids with STORAge Entities and large penetration of renewable energy sources (FLEXITRANSTORE)**

The FLEXITRANSTORE research project, funded by the EU Horizon 2020 programme (Grant agreement ID: 774407), commenced on 1st November 2017 and concluded successfully in May 2022, by developing and demonstrating groundbreaking solutions related to control and storage of energy, as well as new wholesale electricity market approaches.

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

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

In 2022, all the project's activities were finalised and the final review of the project by the European Union was carried out on 13 July 2022. The project received a positive feedback by the reviewers. A significant impact towards the goals of the European Union was achieved having offered solutions and insight into the unleashing of flexibility of transmission and distribution grids and the establishment of innovative business models and market designs for flexibility.

In particular, the project successfully developed and installed two battery energy storage systems (BESS) in substations in two European power systems. The first was installed at a wind park in Greece, while the second one at a substation in Cyprus (interface between the Transmission and the Distribution System Operators). In addition, capacity flow controllers were installed and tested in Greece and Bulgaria, proving their compatibility for different voltage levels, and their ability to efficiently address congestions by redirecting capacity flows. Moreover, the demonstration of the Dynamic Line Rating scheme for transmission line de-icing has been successfully carried out in Slovenia and Bulgaria, indicating that all icing events can be successfully identified and mitigated during winter. Finally, a new wholesale electricity market scheme was run in a virtual intraday market in Cyprus and Bulgaria, demonstrating that the proposed electricity market scheme can considerably increase market liquidity.

In Cyprus, the storage system was installed at the Athienou substation. It is an active distribution node (ADN) with a storage system capacity of 1MW and energy up to 2MWh, 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).

#### **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. The project was successfully completed in December 2022 and is now under review by the RIF.

EMPOWER brought 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 aimed to improve the efficiency of research, technological development and innovation in Cyprus, focusing on the energy priority sector.

The general objectives of EMPOWER were:

- 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 centres, tertiary education institutions, companies, policy makers and other stakeholders).

In 2022, CERA actively participated in all the EMPOWER joint consortium meetings and at all the T6.3 working meetings in which CERA is the task leader. The work of the T6.3. aimed 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.

As part of the programme, a workshop was held on the topic “Energy storage in Cyprus: New technologies and challenges”, which was organised by the Cyprus Employers & Industrialists Federation (OEB) in collaboration with KIOS Research and Innovation Centre of Excellence of the University of Cyprus. CERA participated in the workshop by presenting the regulatory framework for energy storage in Cyprus.

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

The BUSFUELSAVINGS project is part of the Research and Innovation Foundation RESTART 2016-2020 programmes for research, technological development and innovation. The project was successfully completed in August 2022 and is now under review by the RIF.

Cyprus’ public transport consists of 2600 buses, which consume approximately 60,000,000 litres 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 BUSFUELSAVINGS project aimed at reducing this problem by reducing bus fuel consumption by 5-30% and reducing exhaust emissions (particles, unburnt hydrocarbons, CO<sub>2</sub>, CO, NO<sub>x</sub>) 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.

The primary results that were achieved include:

- Design and delivery of the innovative HHO generators, examination of the parameters for efficient and safe operation.
- Successful integration of HHO generators into the internal combustion engines of existing public bus transportation.
- Achievement of projected fuel savings of 5 to 30% and >20% reductions in exhaust emissions.
- The results are very competitive compared to the results reported for similar projects or commercially available technology.

The BUSFUELSAVINGS project constituted a large-scale and multidisciplinary collaboration, which aimed at enhancing the effectiveness of the research, technological development and innovation system and the interconnection with the productive base in transport.

In 2022, CERA actively participated in all consortium meetings, the BUSFUELSAVINGS technical meetings and in the completion of all the required deliverables for the successful completion of the project.

### **Intelligent light sensing for next generation smart grids (LightSense)**

The LightSense project is part of the Research and Innovation Foundation RESTART 2016-2020 programmes 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 fibres 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 2022, CERA was an active participant in all the consortium meetings of the LightSense project.

### **Modernising 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 Research and Innovation Foundation RESTART 2016-2020 programmes for research, technological development and innovation.

This project concerns 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 2022, 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.

In 2022, CERA participated in this CEER initiative with an active presence in all the project's meetings. The meetings were aimed at the National Regulatory Authorities and Transmission System Operators' contribution towards the optimal configuration and development of an efficient cost benchmarking model. The project is expected to be completed in the second half of 2023.

### **DG REFORM/SC2021/123 “Revision of the Cyprus Energy and Climate Plan”**

With respect to the revision of the national Energy and Climate Plan which was submitted in 2020, Cyprus requested technical support from the DG REFORM, based on Regulation (EU) 2021/240 on establishing a Technical Support Instrument (“TSI Regulation”). The request was analysed by the European Commission which agreed to provide Cyprus with technical support in the energy sector and related networks. The contracting teams consists of Trinomics, EMERCON, Cyprus Institute and other independent experts.

The objective of this services contract is to contribute in institutional, administrative and structural reforms that support development in Cyprus by providing guidelines to the two competent authorities, namely CERA and the Ministry of Energy, Commerce and Industry (MECI). These reforms focus on the modernisation and digitalisation of existing network infrastructures and the promotion of RES.

In particular, Cyprus aims to upgrade its infrastructures and support systems (IT systems, digital systems, automation) in order to address shortcomings resulting from the absence of electrical interconnection with the European electricity transmission systems and the European single market. These shortcomings not only affect the energy sector but the economy as a whole, thereby affecting consumers and small medium enterprises.

With respect to promoting RES, CERA aims to assess of the effectiveness of their support schemes for electricity from renewable sources and their major distributive effects on different consumer groups, and on investments, as provided for in Article 6 of the Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (RED II). This assessment shall take into account the effect of possible changes to the support schemes and the effects from regulatory decisions related to grid fees and other charges related to self-consumption of electricity from renewable sources.

The provision of the Technical Support began in March 2022 and since then CERA has actively participated in all the meetings by providing support on technical and regulatory issues for completion of the Deliverables. The project is expected to be completed in the second half of 2023.

# 4 / ELECTRICITY MARKET

## Introduction

CERA is the competent authority for issuing licences to persons that are active 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 licences, 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 licences from CERA as Owner of the Transmission System (OTS) and Owner of the Distribution System (ODS), respectively.

The transmission system operation belongs to TSOC, following the granting of the relevant licence by CERA, which is a legal entity governed by public law. The distribution system operation belongs to DSO, following the granting of the relevant licence 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 between participant to the benefit of consumers. In the electricity market, transitory regulation refers to “Bilateral contracts between producers and suppliers” which only concerns the electricity market with a clearance of one calendar month. In 2022, in addition to the regulated supplier “EAC-Supply”, a total of five (5) suppliers were involved on the electricity supply sector.

As a measure of supplier concentration in the wholesale and retail electricity market, the Herfindahl-Hirschman Index (HHI) was used, which is calculated by taking the sum of the squared market shares of all the generation and supply undertakings, respectively. 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.

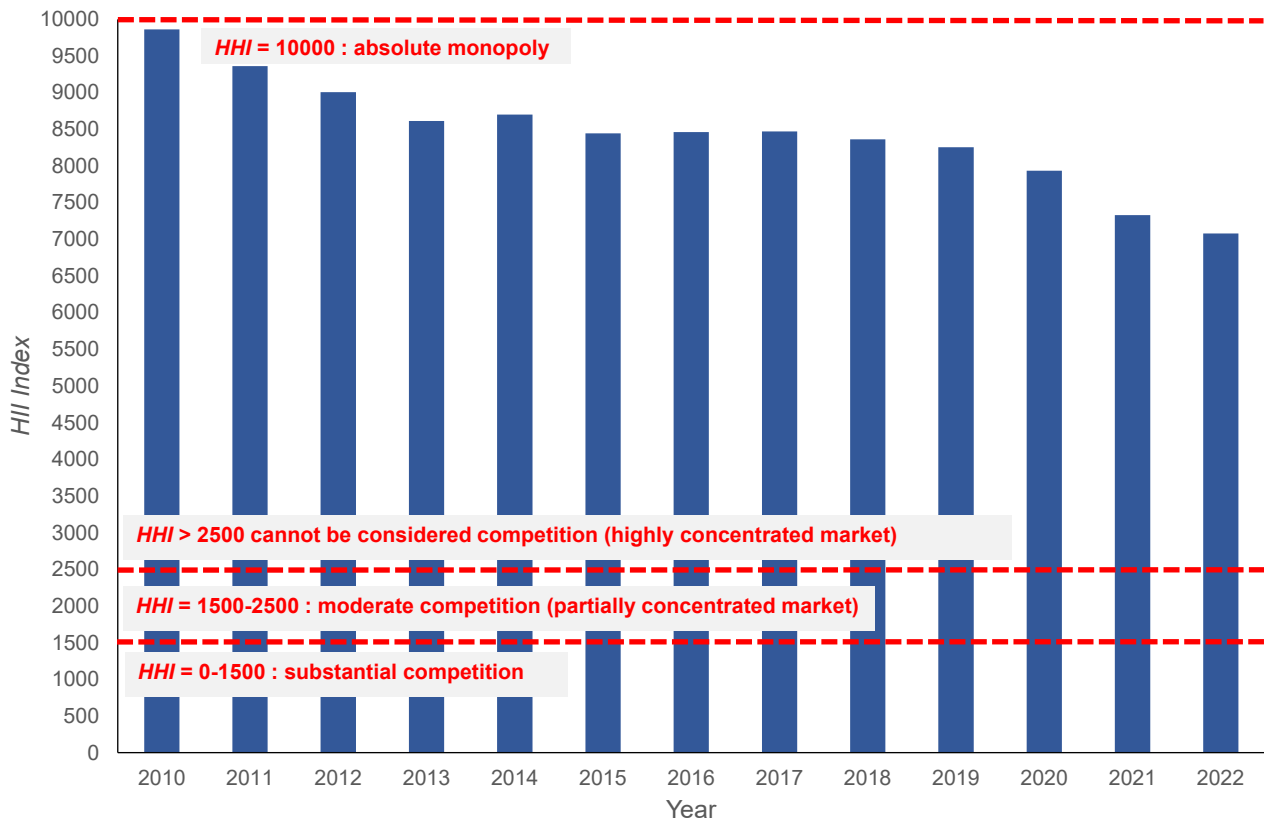


Figure 3 - Concentration of electricity market (wholesale market)

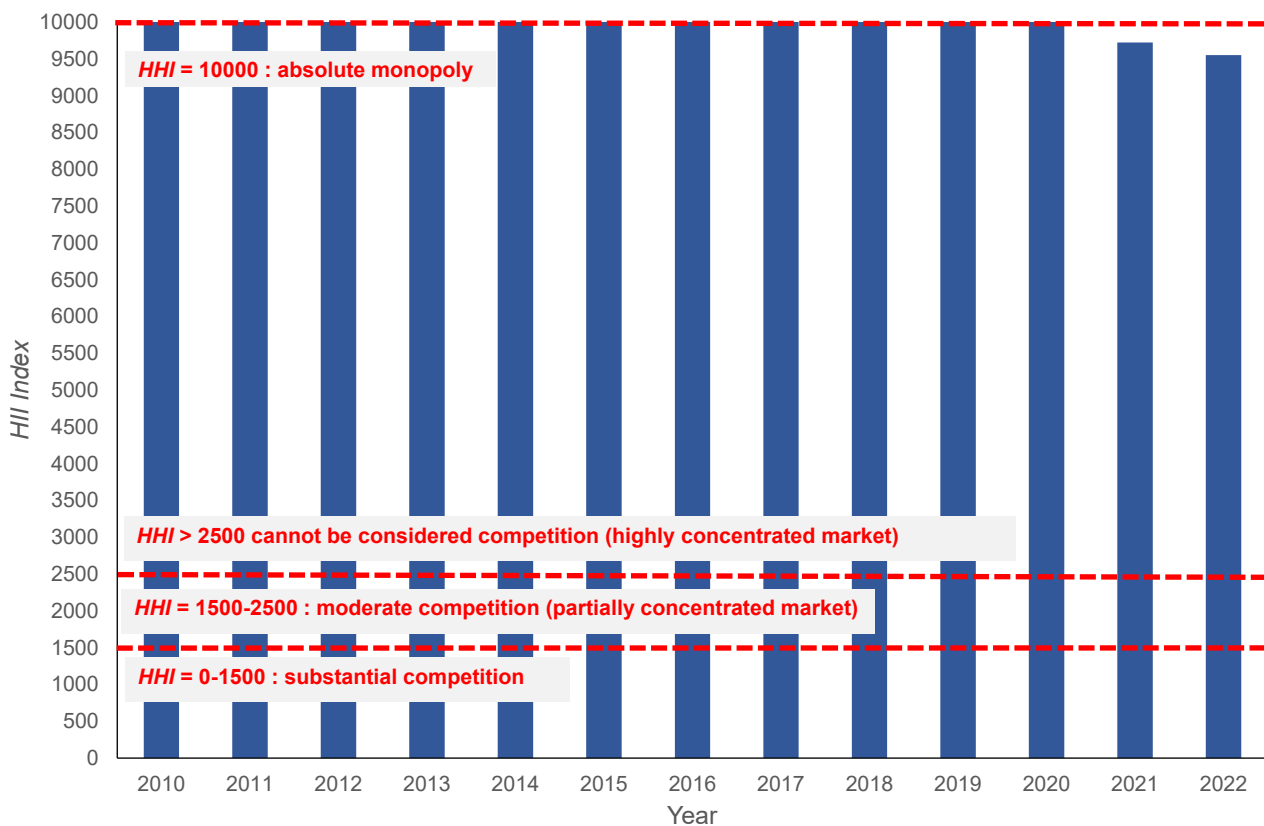
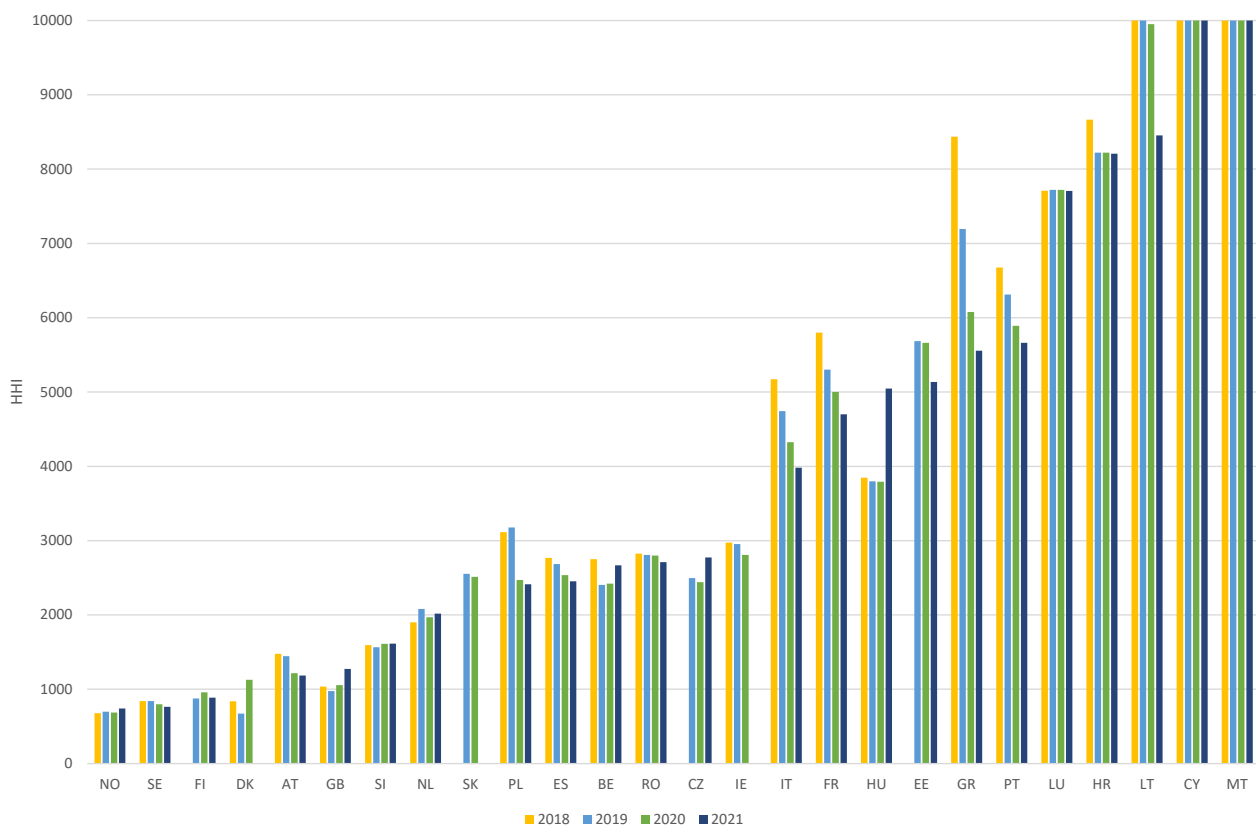


Figure 4 - Concentration of electricity market (retail market)

Figures 5 and 6 below present the HHI values in other Member States. As observed in the Figure 5, in the case of the household electricity consumer market, six (6) out of eighteen (18) Member States, which sent data for 2021, recorded low concentration levels ( $HHI < 2000$ ) in 2021, with the majority presenting high concentration levels ( $HHI > 2000$ ). With respect to electricity market, Member States recorded a drop in HHI levels in 2021 compared to previous years. Lithuania recorded a significant reduction from  $HHI = 9,950$  in 2020 to  $8,452$  in 2021. In addition, Estonia (-525), Greece (-520), Italy (-343), France (-300), and Portugal (-230) also recorded significantly reduced concentration levels in 2021. Norway, Sweden and Finland recorded the best performance in 2021.

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, eleven (11) out of the nineteen (19) Member States that sent data for 2021, recorded low concentration levels ( $HHI < 2000$ ) in 2021. This falls in line with the figures of previous years. In the last five years, Greece and France recorded a remarkable reduction of -4,911 and -1,400 respectively. Romania, Norway, Finland, Great Britain and Italy were the countries that recorded the best performance in 2021.

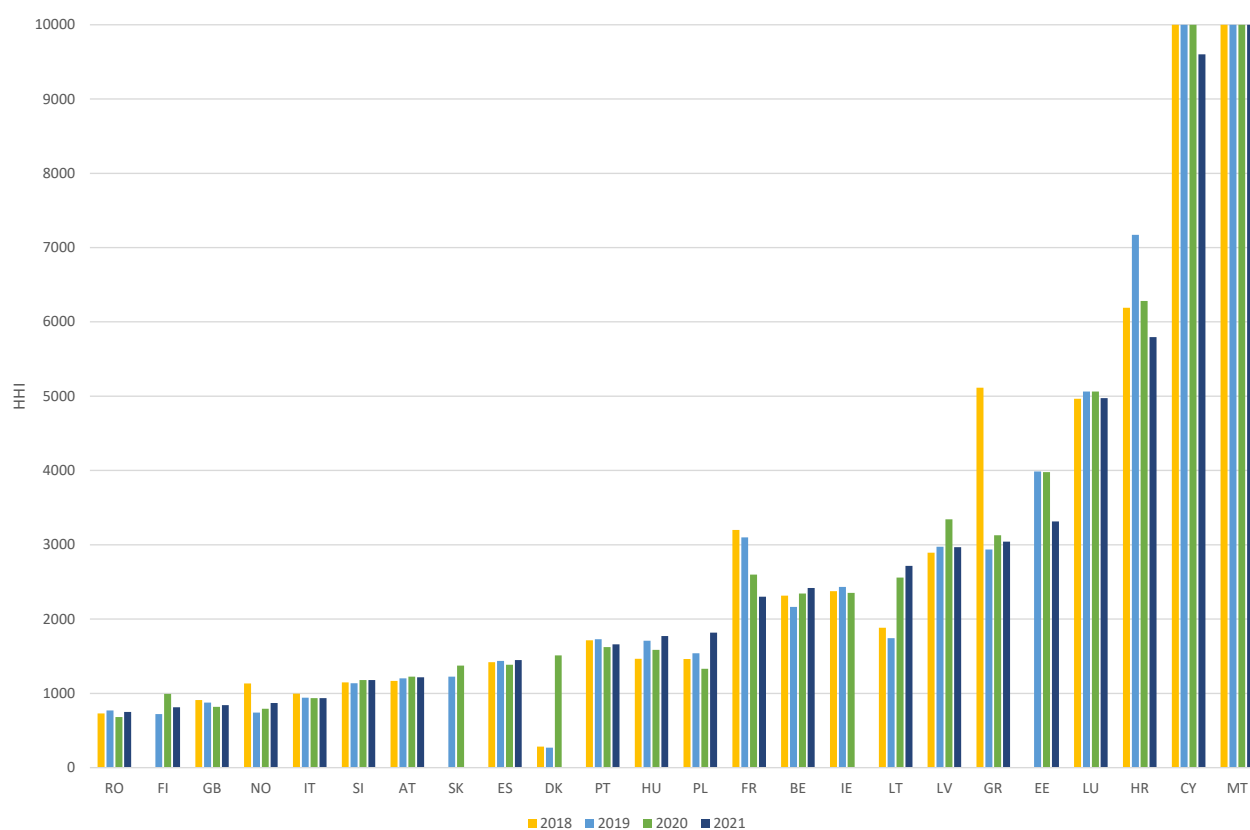
It is noted that pursuant to Article 66 (Derogations) of Directive 2019/944/EC, Article 4 “Free choice of supplier” shall not apply to Malta until 5 July 2027 and the period may be extended for an additional period, not exceeding eight years.



**Figure 5** - Herfindahl-Hirschman Index (HHI) of the household electricity consumer market in Member States for the period 2018 - 2021<sup>2</sup>

<sup>2</sup> ACER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2021 - Energy Retail Markets and Consumer Protection Volume





**Figure 6** - Herfindahl-Hirschman Index (HHI) of the non-household electricity consumer market in Member States for the period 2018 - 2021<sup>3</sup>

<sup>3</sup> ACER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2021 - Energy Retail Markets and Consumer Protection Volume

## Granting of a Licence, General Licence, and Exemption

The licensing of activities related to electricity is regulated by the Laws Regulating the Electricity Market of 2021 and 2022, the Rules Electricity Market Regulations (Licensing) and Regulatory Decision 02/2021 entitled “Regulatory Framework for the Granting of the General Licence (KDP 523/2021).

The licences issued by CERA, in accordance with Article 26 of Laws Regulating the Electricity Market of 2021 and 2022, 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.
- 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 Line.
- Execution of duties of the Operator of Interconnector Line.
- Construction of direct line.

Exemptions from the holding of licences that are issued by CERA, in accordance with subparagraph (4) of Article 27 of Laws Regulating the Electricity Market of 2021 and 2022 concern the following activities:

- Construction and operation of a power plant using RES with a generating capacity of more than 50kW up 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 Licences issued by CERA, in accordance with subparagraph (1) of Article 27 of Laws Regulating the Electricity Market of 2021 and 2022, 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 RES 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.

## Market Operator's Licence

In 2022, an Electricity Market Operator Licence was issued to TSOC.

## Electricity Supply Licence to final customers

In 2022, five (5) applications were submitted for the issuance of Electricity Supply Licence to final customers for the Electricity Market Transitory Regulation validity period and six (6) Electricity Supply Licences have been granted to final customers for the Electricity Market Transitory Regulation validity period.

With respect to the Electricity Market Transitory Regulation validity period, CERA has granted a total of twenty five (25) licences for the supply of electricity to final customers.

## Licence for the Construction and Operation of electricity generation plants for commercial use

### Conventional units

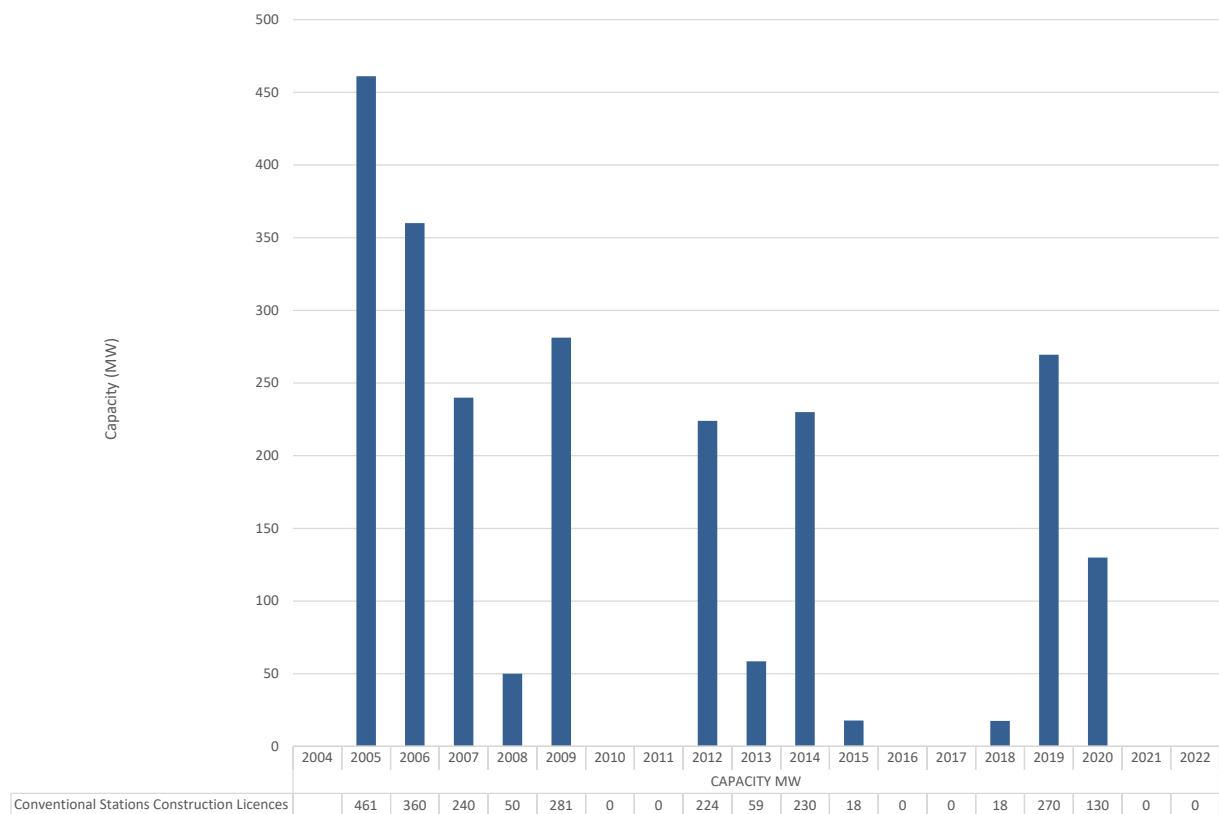
In 2022, no applications were submitted for the granting of a Construction Licence for an electricity generation plant with conventional fuel for commercial purposes.

### Renewable energy sources (RES)

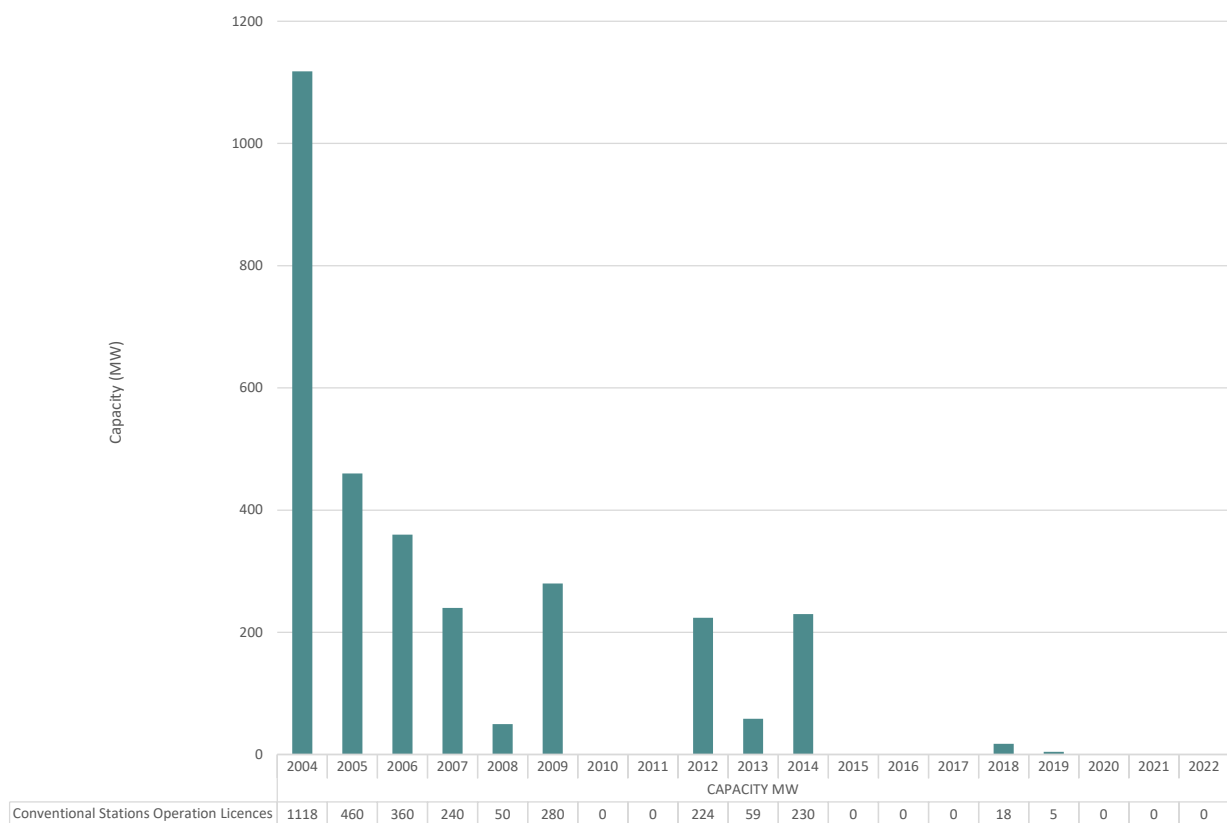
#### Photovoltaic Systems

In 2022, ten (10) applications were submitted for the granting of Construction Licences, for photovoltaic power plants, for commercial purposes, with a total capacity of 503.54MWe and ten (10) Construction Licences were granted for photovoltaic power plants for commercial purposes with a total capacity of 200.6MWe.

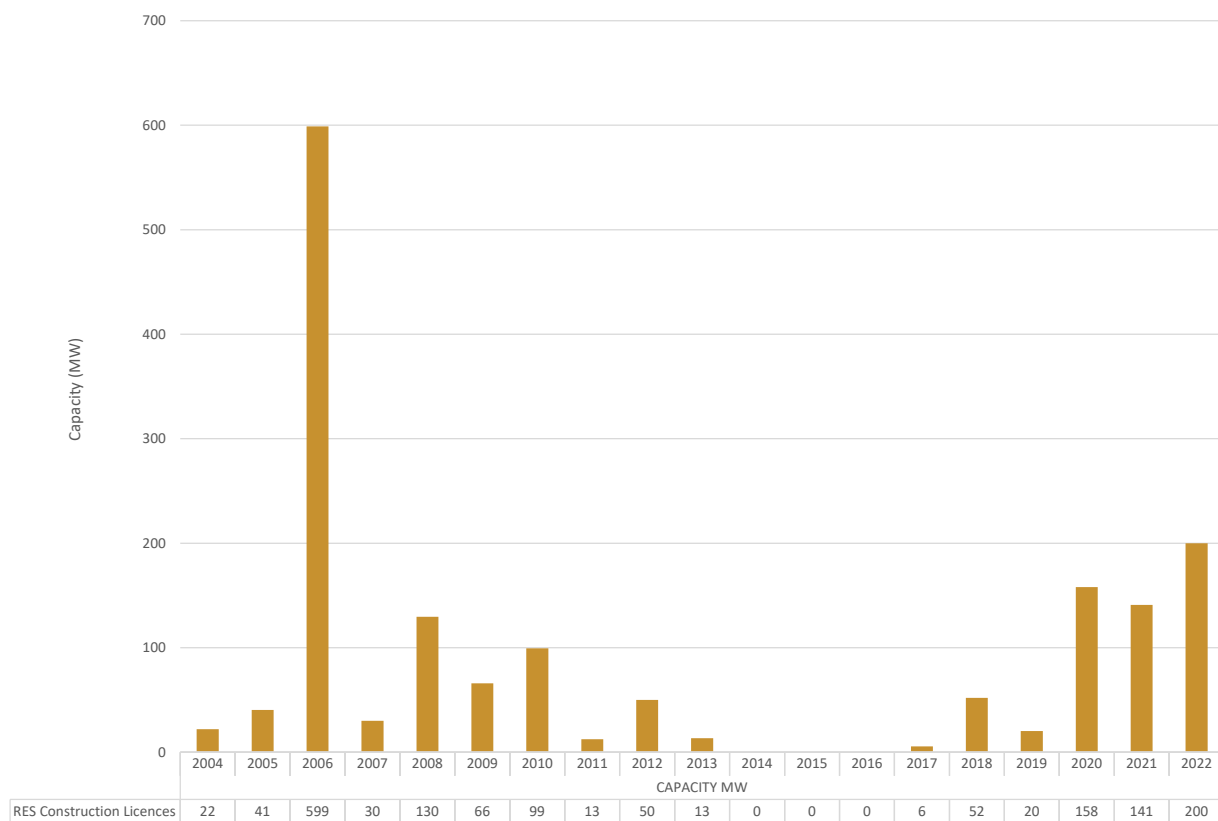
The following Figures 7, 8, 9 and 10 show statistical data on licences for the construction and operation of electricity generation plants for commercial purposes that were granted by CERA from conventional units and RES units for the period 2004 to 2022.



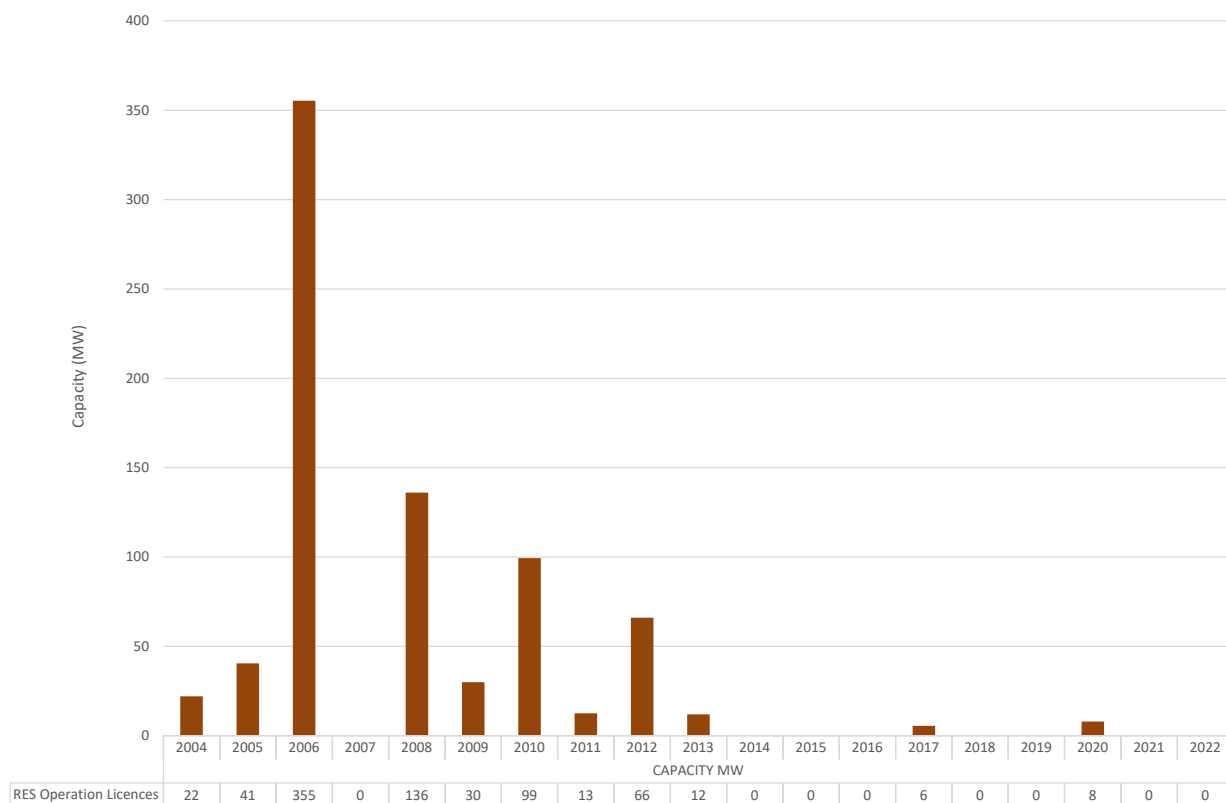
**Figure 7 - Construction Licences of conventional plants for the generation of electricity, granted from 2004 to 2022**



**Figure 8 - Operation Licences of conventional plants for the generation of electricity, granted from 2004 to 2022**



**Figure 9 - Construction Licences of RES units granted from 2004 to 2022**



**Figure 10 - Operation Licences of RES units granted from 2004 to 2022**

## Licence for the Construction and Operation of electricity plants for self-consumption

### Conventional units for self-consumption

In 2022, one (1) licence was granted for the Construction and Operation of an electricity generation plant using conventional fuels, for self-consumption, with a total installed capacity of 1.12MWe.

## Energy Storage System Installation Licence

In 2022, one (1) application was submitted for the issuance of an Energy Storage System Installation Licence with a maximum output capacity of 10.15MW and a storage capacity of 24MWh.

## General Licence

In 2022, the following General Licences for electricity generation were issued:

- Electricity generation stations from RES, photovoltaic systems for commercial purposes with an installed capacity of up to 0.05MWe, total installed capacity of 0.046MWe,
- Electricity generation stations from RES, after connection notification to the DSO with an installed capacity of up to 0.05MWe with a total installed capacity of 45.998MWe,
- Autonomous electricity generation stations from RES, photovoltaic systems with a total installed capacity of 2MWe, and
- Electricity generation stations with conventional fuels for own use and reserve purposes and autonomous self-generation systems with a total installed capacity of 6.78MWe.

## Exemption from Construction and Operation Licence of electricity generation plants for commercial use

### Renewable energy sources

#### Photovoltaic Systems

In 2022, two hundred twenty-four (224) Exemptions from Construction Licence of electricity generation stations for commercial purposes were issued, photovoltaic systems with an installed capacity of 601.99MWe and forty (40) Exemptions from Operation Licence of electricity generation stations for commercial purposes were issued, photovoltaic systems with an installed capacity of 90.33MWe.

### **Biomass/biogas systems**

In 2022, one (1) Exemption from Construction Licence of biogas energy generation plant was granted with an installed capacity of 0.7MWe.

### **Solar thermal plants**

In 2022, one (1) Exemption from Construction Licence of solar thermal type energy generation plant was granted with an installed capacity of 0.7MWe.

## **Exemption from Construction and Operation Licence of electricity generation plants for self-consumption**

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

In 2022, eighty-eight (88) Exemptions from Construction and Operation Licences of power plants using conventional fuels for reserve purposes and autonomous systems of self-generation, with a total installed capacity of 21.79MWe were granted.

### **Renewable energy sources**

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

In 2022, ninety-nine (99) Exemptions from Construction Licence of electricity generation stations were issued for own use, photovoltaic systems with an installed capacity of 25.96MWe and twenty-five (25) Exemptions from Operation Licence of electricity generation stations were issued for own use, photovoltaic systems with an installed capacity of 4.91MWe.

Figures 11 and 12 show the installed capacity of Exemptions from a Construction Licence that were granted for the construction of RES-generation plants and from an Operation Licence of RES-generation plants, respectively, for the period 2006 to 2022.

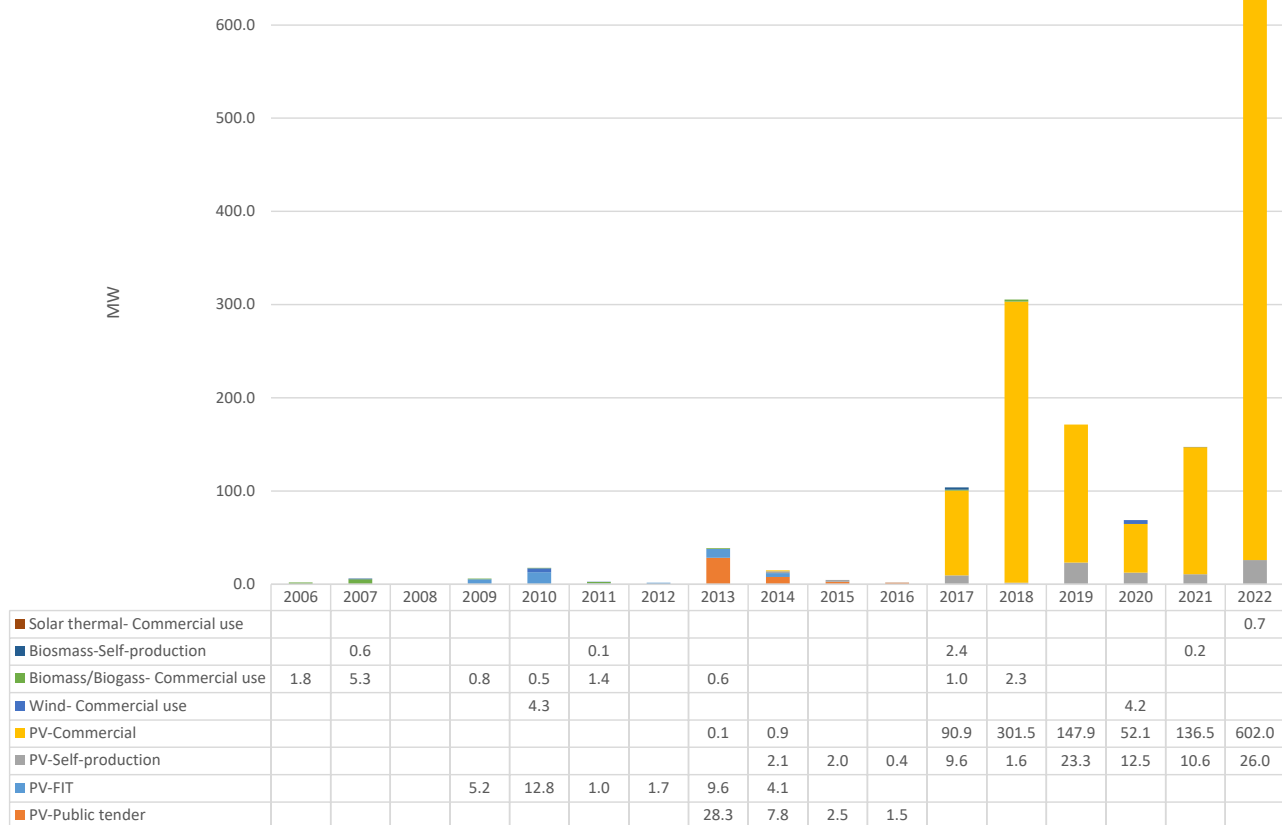


Figure 11 - Capacity (MW) of exemptions from a RES construction licence for the period 2006 – 2022

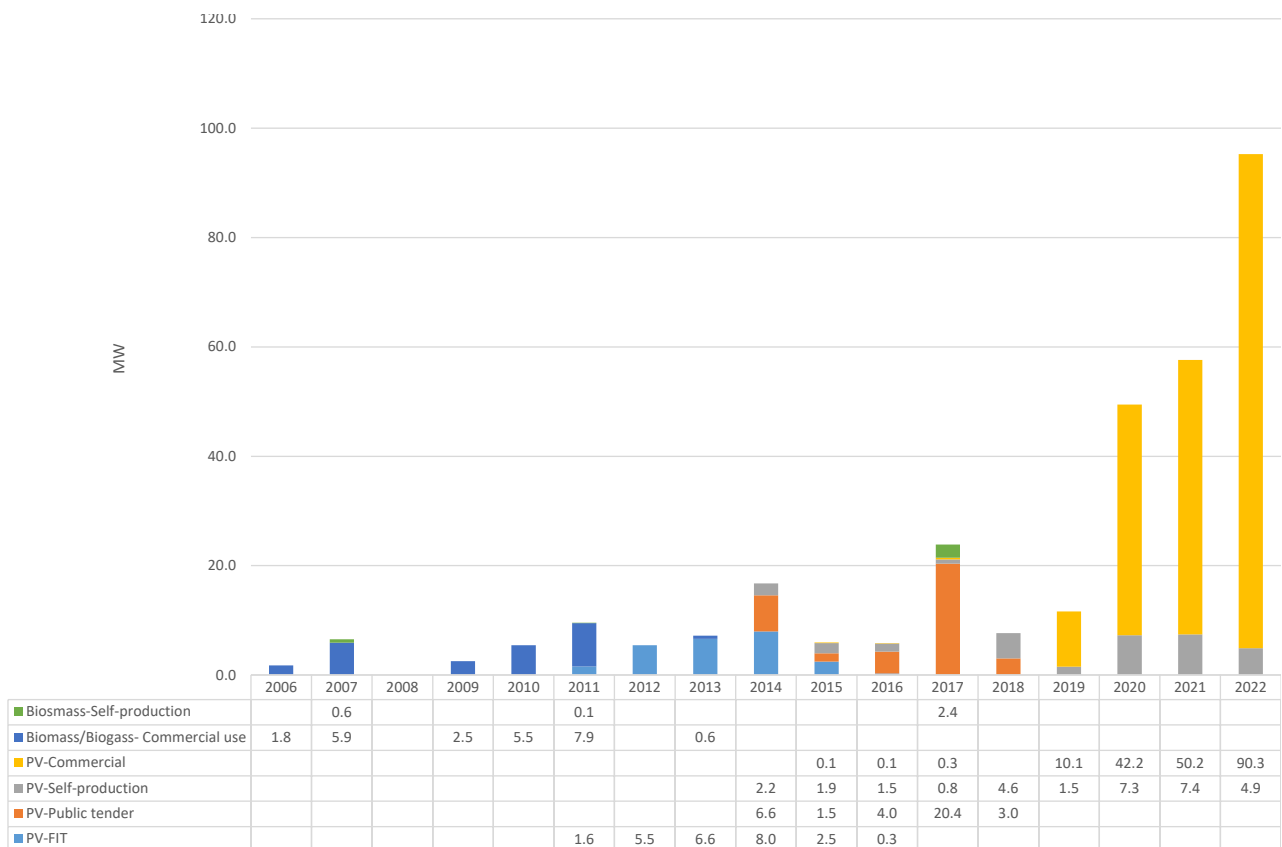


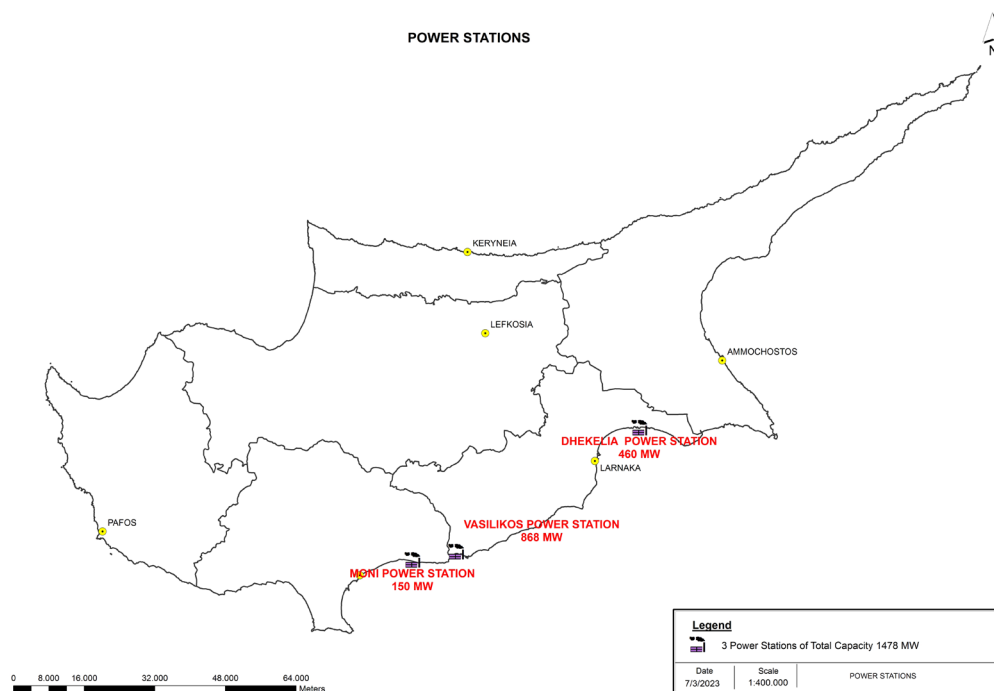
Figure 12 - Capacity (MW) of exemptions from RES operation licences that were granted for the period 2006 – 2022



## Installed capacity of electricity generation plants

### Conventional Units

The total installed capacity of conventional power plants for commercial purposes did not change in the year 2022, it remains at 1478MWe, as in 2021. The geographical distribution of the power plants for commercial use is presented in Figure 13.



**Figure 13** - Descriptive presentation and geographical distribution of installed conventional plants for commercial use until 2022

The total installed capacity of conventional plants for own use and reserve purposes and autonomous self-generation systems have increased in 2022 to 285.54MWe.

### Renewable Energy Sources

The total installed capacity of wind farms for commercial purposes did not change in the year 2022, it remains at 157.5MWe, as in 2021.

The total installed capacity of photovoltaic systems for commercial purposes has increased in 2022 to 279.35MWe.

The total installed capacity of photovoltaic systems for own use and reserve purposes and autonomous self-generation systems have increased in 2022 to 28.52MWe.

The total installed capacity of biomass/biogas plants for commercial purposes did not change in the year 2022 and still stands at 9.7MWe.

The total installed capacity of biomass/biogas plants for own use did not change in 2022 and still stands at 3.1MWe.

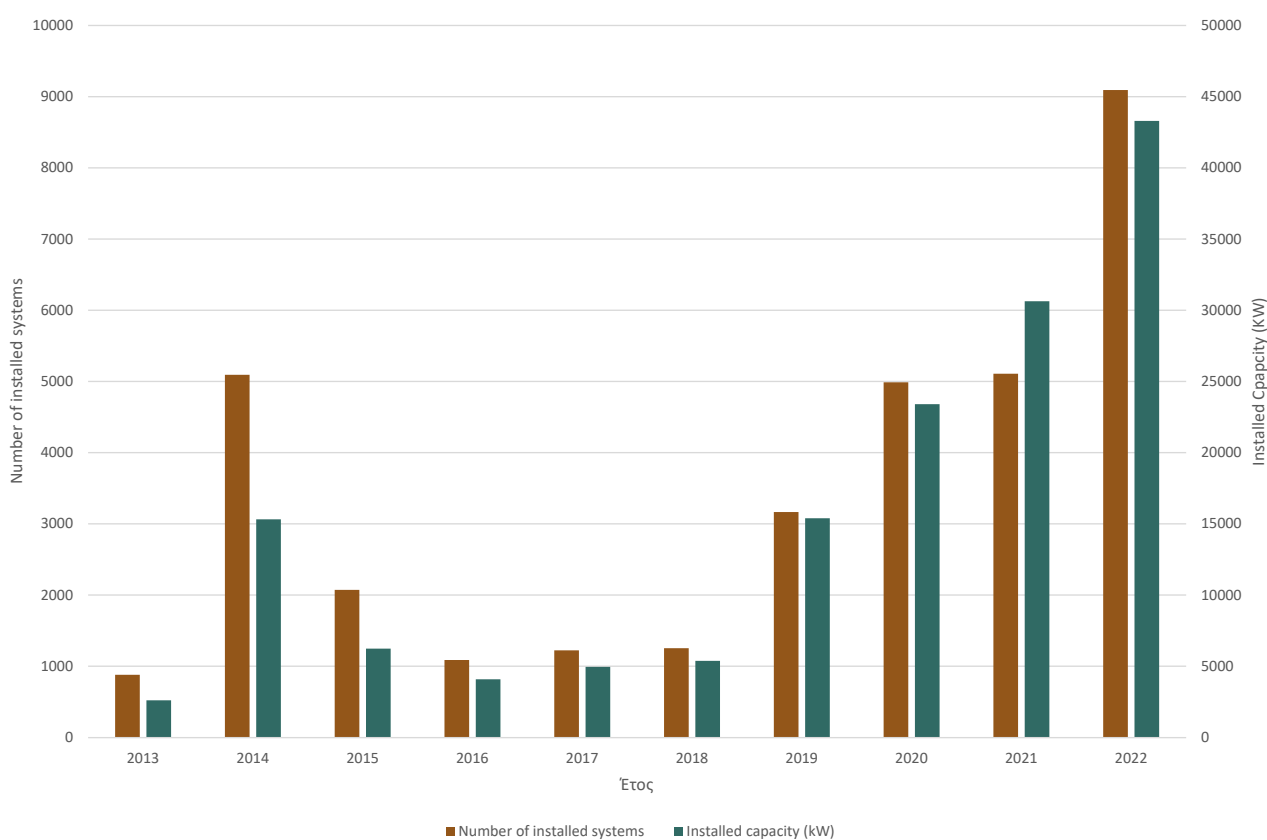
### Photovoltaic systems with the method of net-metering

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.

In 2022, 9,093 photovoltaic systems with a total installed capacity of 43.3MWe were installed.

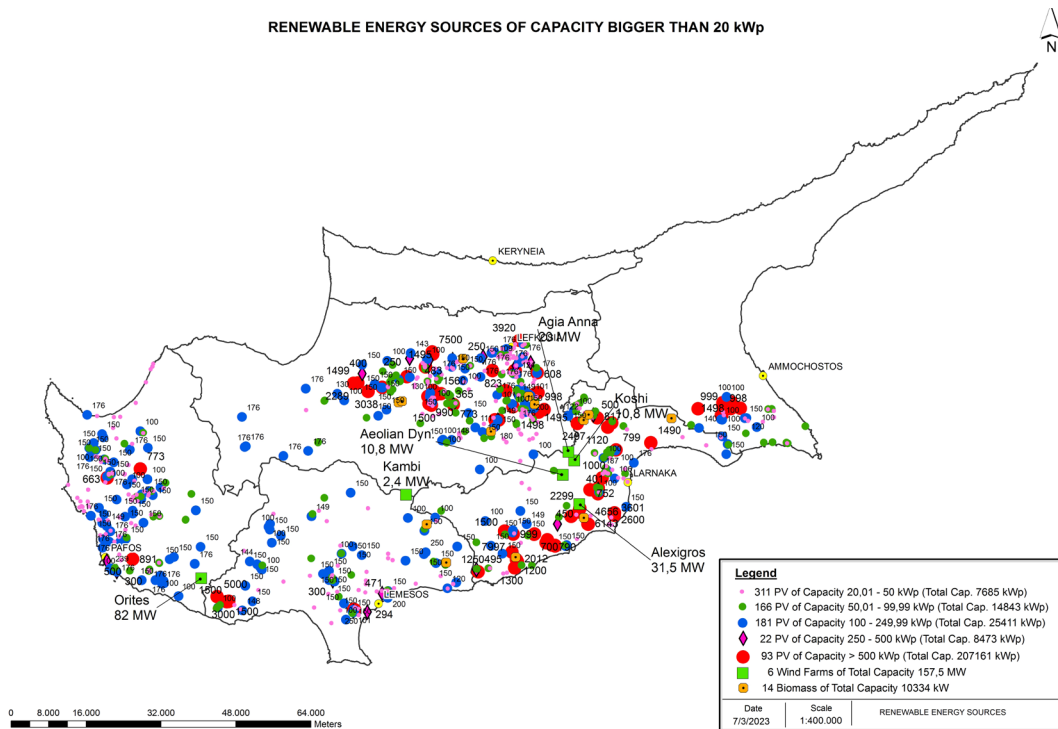
In 2022, the total installed capacity of the photovoltaic systems under the net-metering category is 151.33MWe.

Figure 14 presents the number and capacity of installed photovoltaic systems with the method of net-metering for the period 2013 to 2022.



**Figure 14 - Number of installed systems and installed capacity (kW) of net-metering systems for from 2013 – 2022**

Figure 15 depicts the geographical distribution of installed RES units with a capacity higher than 20kWp, until 2022, as well as the uniform distribution of RES units in the territory of the Republic of Cyprus.



**Figure 15 -** Descriptive presentation and geographical distribution of installed RES units with capacity of more than 20kWp, until 2022

## Registry of applications for licence and issued licences

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

## Electricity generation data during 2022

### Total maximum capacity and electricity generation

The peak demand for electricity in 2022 was noted on Monday, 1 August 2022. The maximum total generation capacity amounted to 1089 MW.

### Total generation of energy (GWh)

Regarding the recorded total generation of electricity during 2022, the following important data have been registered:

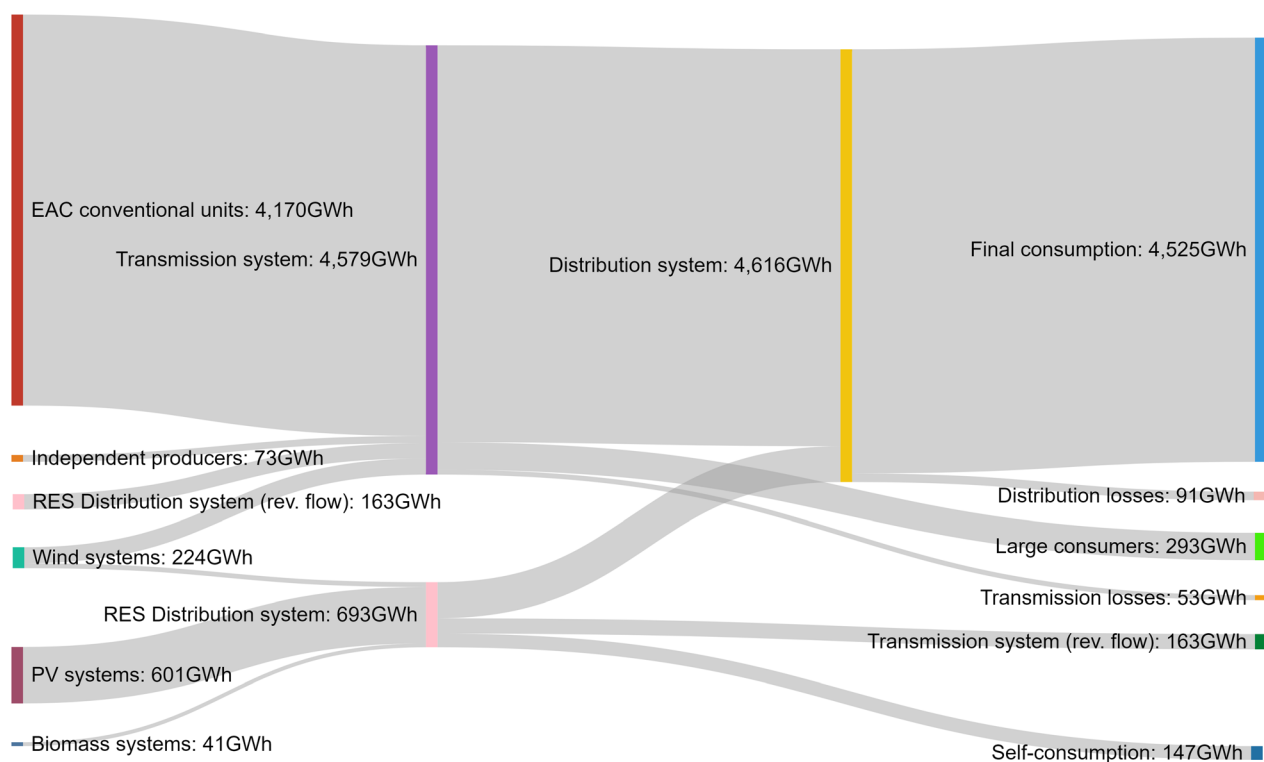
- Total gross electricity generated reached 5,036,062 MWh.
- Total electricity generation from conventional plants amounted to 4,170,264 MWh.
- Total electricity generation from RES amounted to 865,798 MWh.
- Energy injected into the transmission system from the conventional plants reached 4,243,286 MWh.

- Energy injected into the transmission system from the RES units reached 173,205 MWh.
- Energy injected into the distribution system from the RES units reached 692,593 MWh.
- Energy from the transmission system which was injected from the distribution system reached 4,233,158 MWh.
- Reported transmission system losses amounted to 53 GWh, or 1.2%, of the energy injected into the transmission system.
- Reported distribution losses amounted to 91 GWh, or 2.2% of the energy injected into the distribution system.

## Load factor

The annual load factor for 2022 stood at 52.80% compared to the load factor for 2021 which stood at 46.95%. The load factor is calculated as the ratio of the annual final gross electricity consumption to the annual electrical energy that can be generated with the maximum capacity production recorded in the year, which includes conventional and RES generation.

Figure 16 shows the total generation of electricity for 2022.



**Figure 16** - Sankey diagram for the total generation of electricity (GWh) in 2022

Figures 17 and 18 depict historical data of the installed capacity of RES and conventional plants , which are connected to the grid. It is observed from the figures that the total installed capacity of RES units has increased significantly in recent years. In 2022, installed capacity of RES units has reached 27% of the total installed capacity of all electricity generation plants in Cyprus.

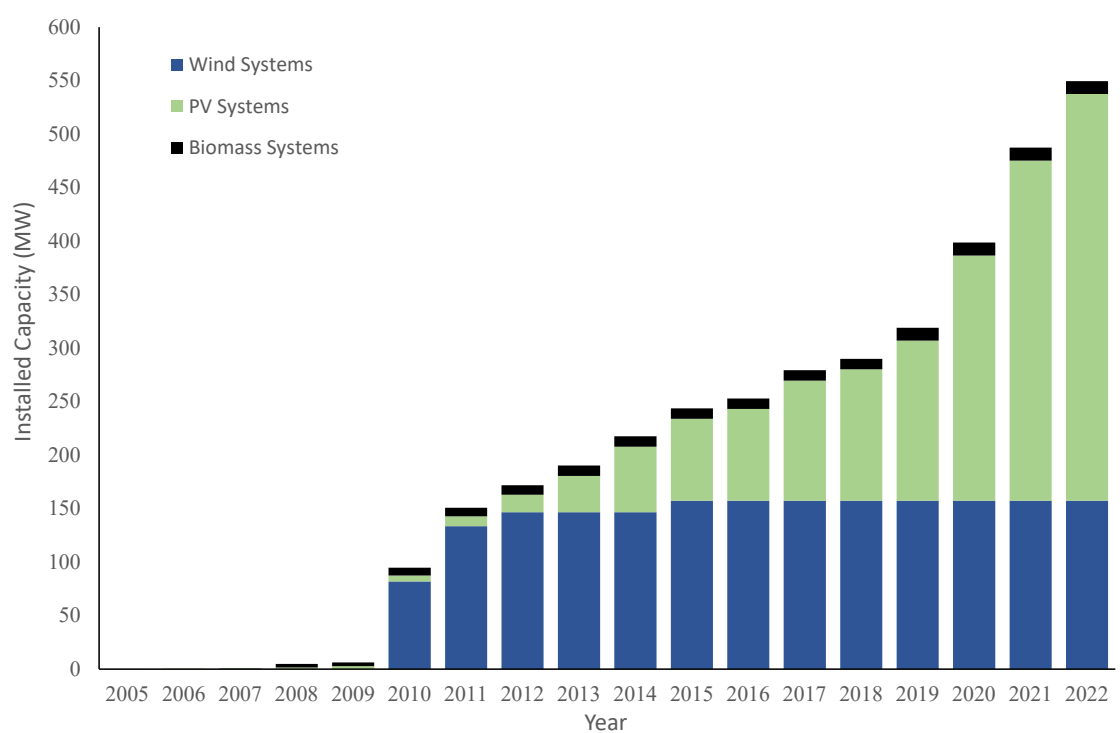


Figure 17 - Annually installed capacity (MW) of RES

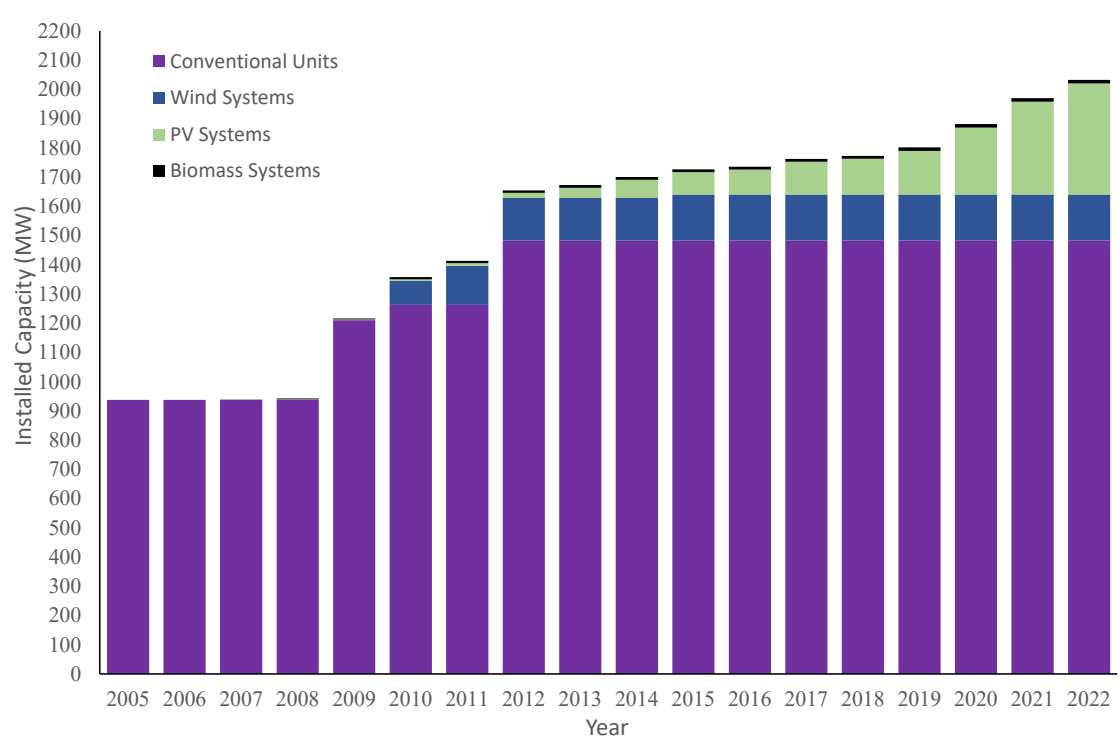
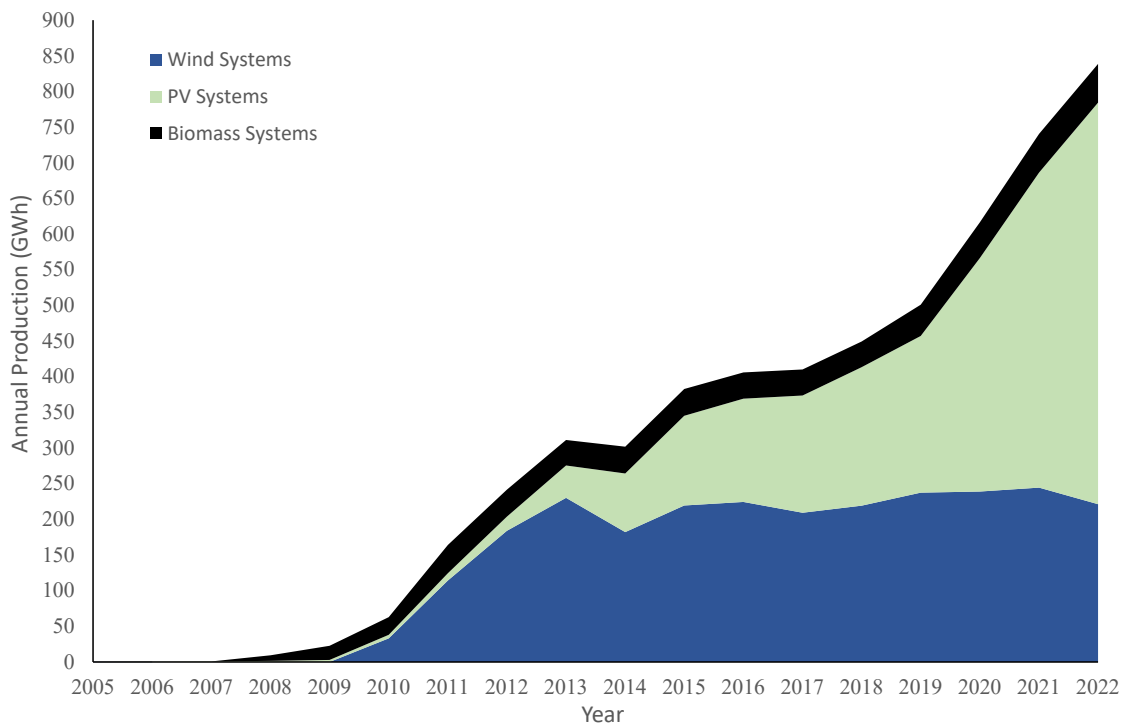
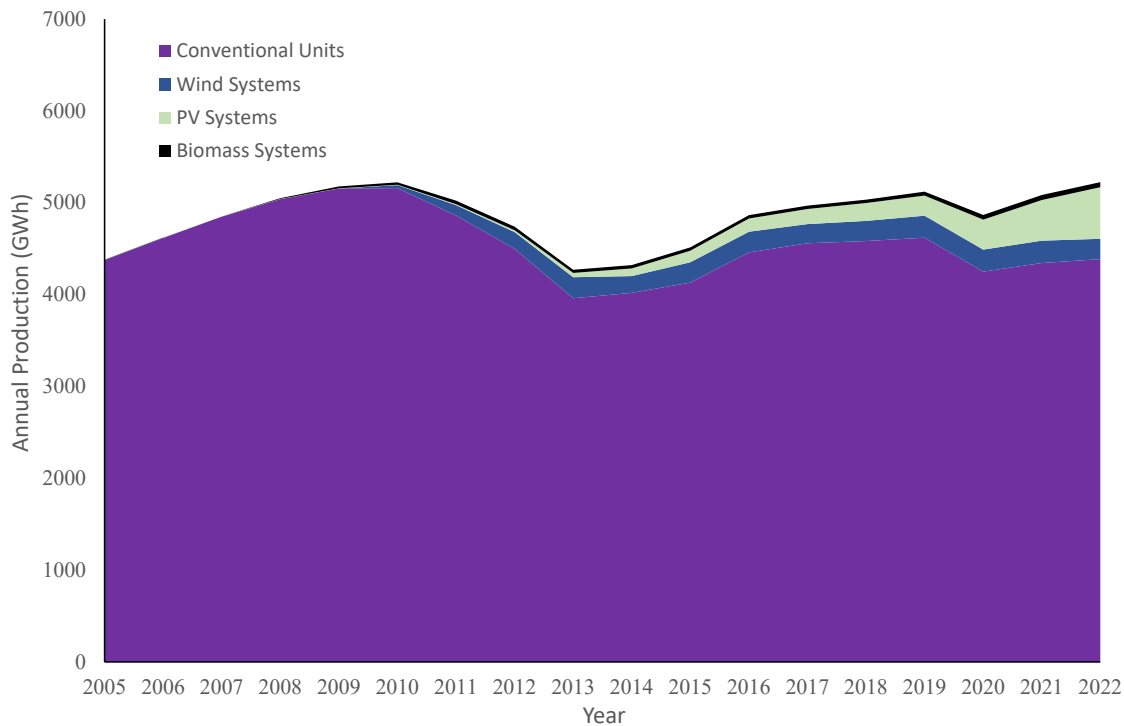


Figure 18 - Annually installed capacity (MW) of RES and conventional plants

Figures 19 and 20 depict historical data of the generation from RES and conventional units, which are connected to the grid. It is observed from the figures that the total generation of electricity from RES units has increased significantly in recent years. In 2022, the annual generation of electricity from RES units has reached 17% of the total generation from all the electricity generation plants in Cyprus.



**Figure 19 - Annual generation (GWh) of RES**



**Figure 20 - Annual generation (GWh) of RES and conventional plants**

Figure 21 presents the RES penetration percentage duration curves in the electricity generation system for the last five years.

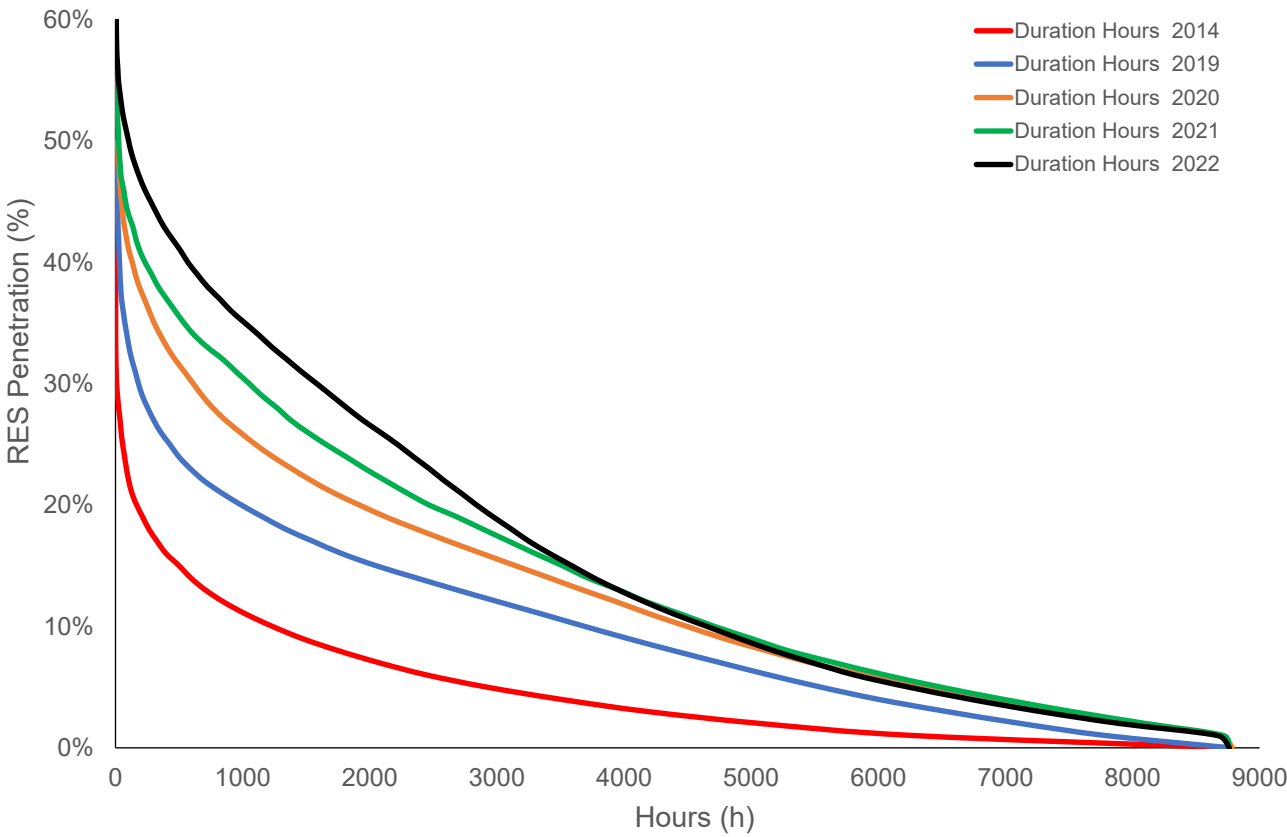
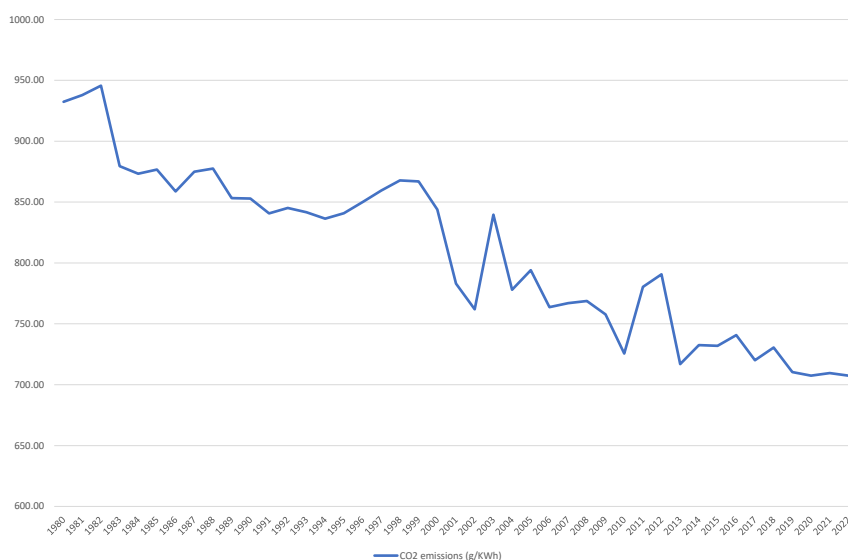


Figure 21 - RES penetration percentage duration curves for 2014 – 2022

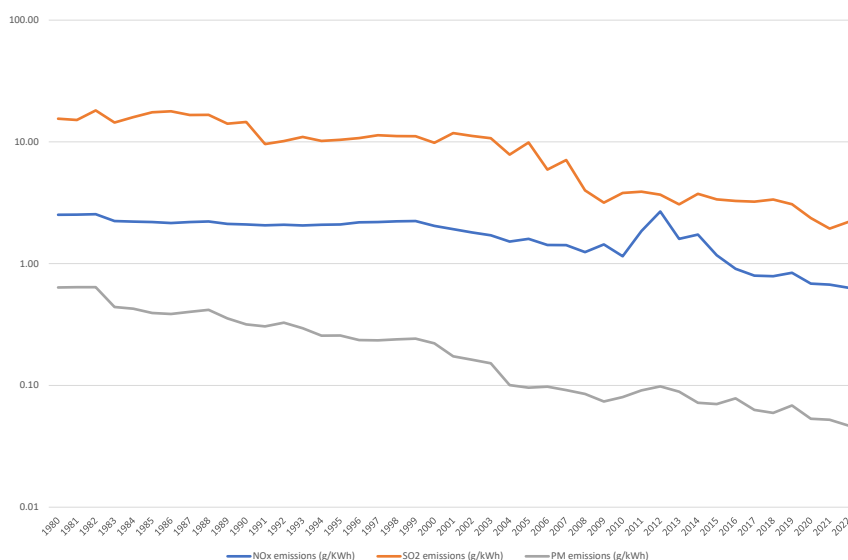
## Environmental indicators in relation to total annual conventional electricity generation

Given Cyprus' high dependence on electricity generation by conventional plants, the air quality is significantly impacted. To quantify these impacts, the environmental indicator that is associated with the annual emission of carbon dioxide (CO<sub>2</sub>) and atmospheric emissions, and in particular carbon monoxide (CO), sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM), from the large-scale conventional electricity generation sector in the Republic of Cyprus. The annual variation of the CO<sub>2</sub> emission index during the reporting period is presented in Figure 22.



**Figure 22** - Annual variation of carbon dioxide (CO<sub>2</sub>) emission index in grams in grams per kilowatt-hour, from large-scale conventional electricity generation plants

For easier comparison, Figure 23 shows the annual variation of SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions during the reporting period using common logarithmic scales.



**Figure 23** - Annual variation of PM, SO<sub>2</sub>, NO<sub>x</sub> emissions in grams per kilowatt-hour, from large-scale conventional electricity generation plants (logarithmic scale)



## Approved maximum total capacity (MW) and total generated electricity (GWh) forecast for the decade 2022-2030

Figures 24 and 25 show the total energy generation (GWh) and maximum total capacity (MW) forecast for the period 2022-2030. These forecasts were submitted to CERA by TSOC on 15 May 2022. CERA approved this recommendation with Decision 113/2022.

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.

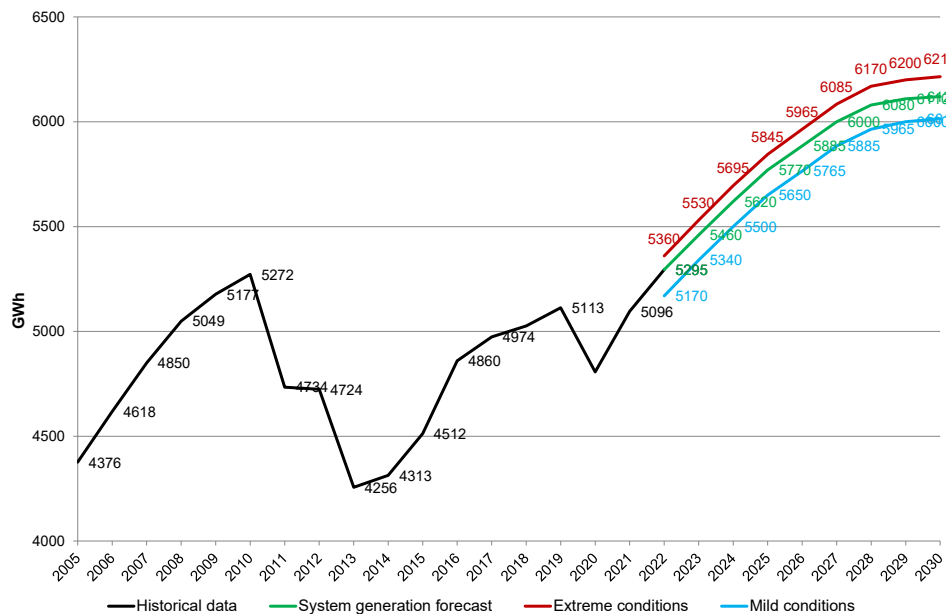


Figure 24 - Approved forecast of total generated energy (GWh) 2022 – 2030

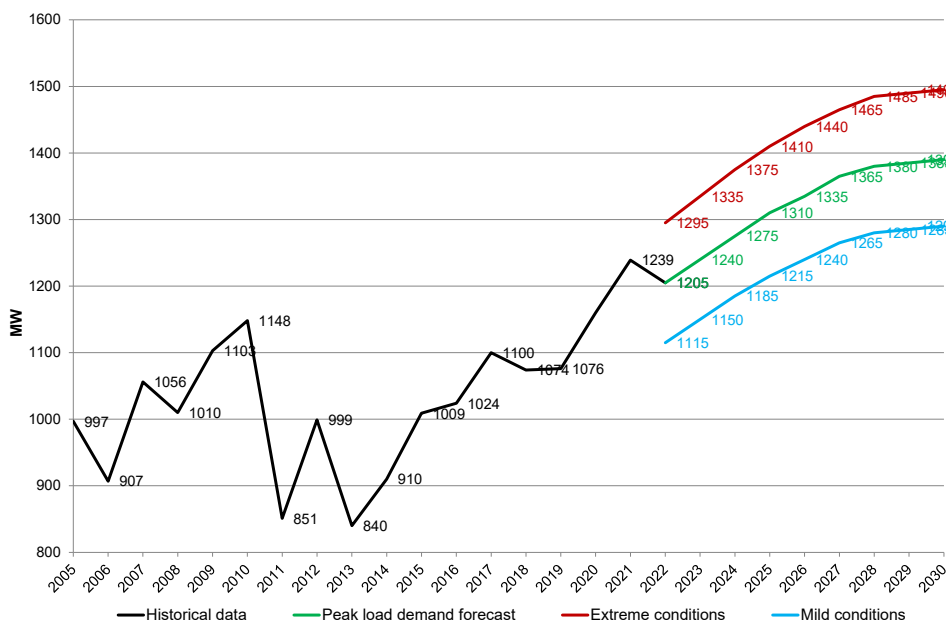


Figure 25 - Approved forecast of maximum total capacity (MW) 2022 – 2030

## Adequacy of electricity supply

Pursuant to the Laws Regulating the Electricity Market of 2021 and 2022, CERA is responsible for the adequacy of electricity in Cyprus, the reliability and security of the generation, transmission and distribution system, 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 Laws Regulating the Electricity Market of 2021 and 2022.

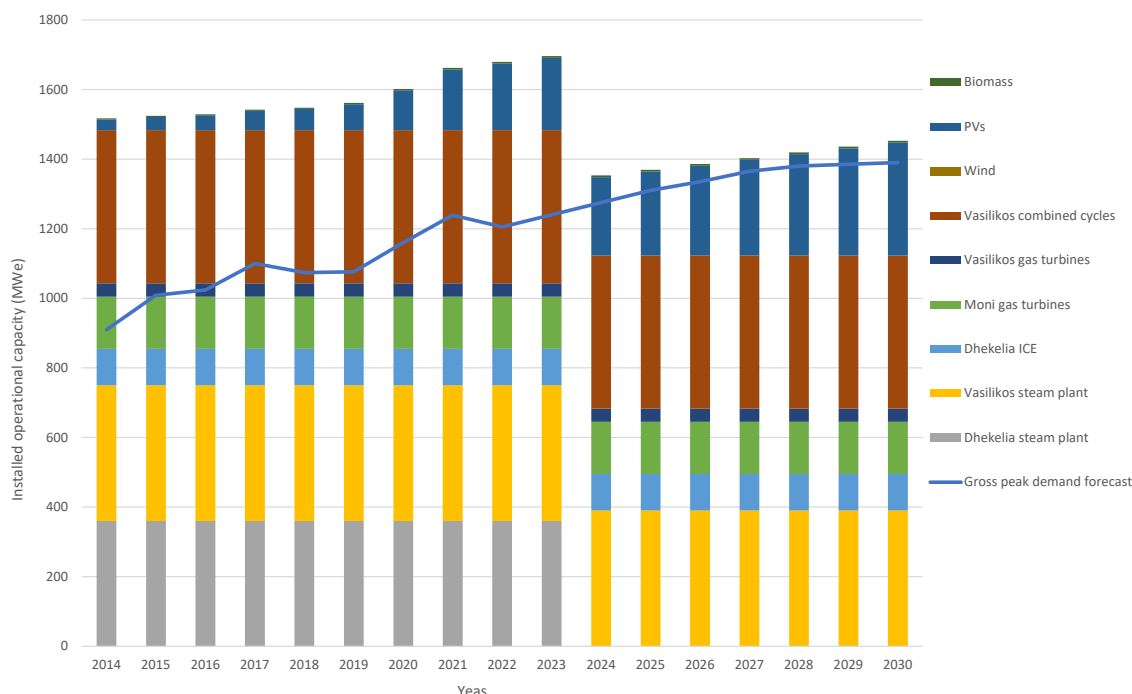
Based on the literature, there are many indicators that can be used to assess the capacity adequacy of an electrical system. These indices can be divided into two main categories, such as:

- deterministic indices, and
- probabilistic indices.

Deterministic indices assess the electrical system's ability to provide satisfactory installed capacity; however, without taking into account its daily operation. Probabilistic indices take the operation of the electrical system into account, and rely for example on the Loss of Load Expectation (LoLE) and the expected Energy Not Served (ENS). The calculation of probabilistic indices requires an analysis of the operation of the electrical system through simulations of the electricity generation system.

Figure 26 presents the installed operational capacity of existing generation plants at system peak demand. This figure does not take system operation, such as scheduled maintenance of electricity generation plants, unforeseeable damage to electricity generation plants, but also demand variation, into account.

As presented in Figure 26, during peak demand, provided that all plants are available, demand can be met by the existing generation.



**Figure 26 - Adequacy of electricity supply**

<sup>4</sup> Loss of Load Expectation (LoLE)

<sup>5</sup> Energy Not Served (ENS)

## Electricity prices

Figures 27, 28 and 29 present historical data for each year from 2016 until 2022 (in €/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 since 2017, regulated electricity tariffs by EAC have entered into force, which are based on the Statement of Regulatory Practice and Electricity Tariffs Methodology (Regulatory Decision 02/2015, KDP 208/2015), until the opening of the electricity market from which period the Regulatory Practice and Electricity Tariffs Methodology (Regulatory Decision 01/2021, KDP 359/2021) will enter into full force.

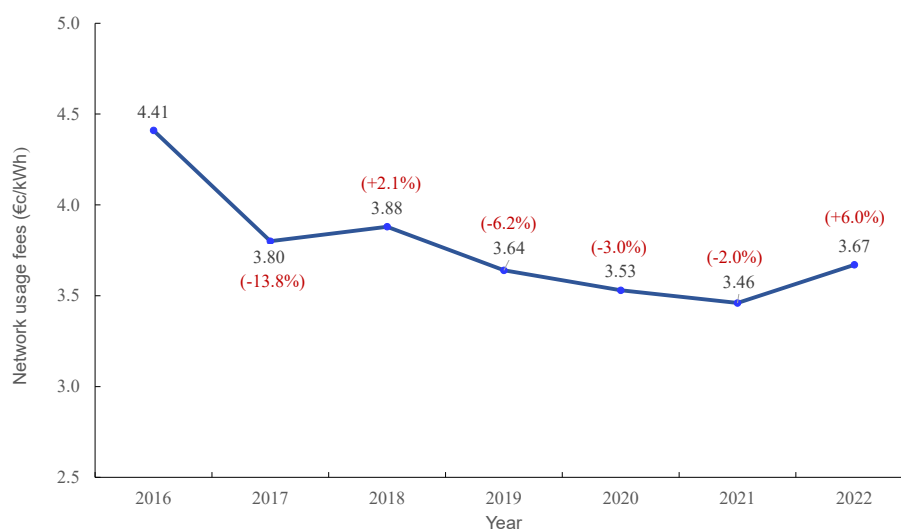


Figure 27 - Network usage fees for consumers connected to low voltage from 2016 to 2022

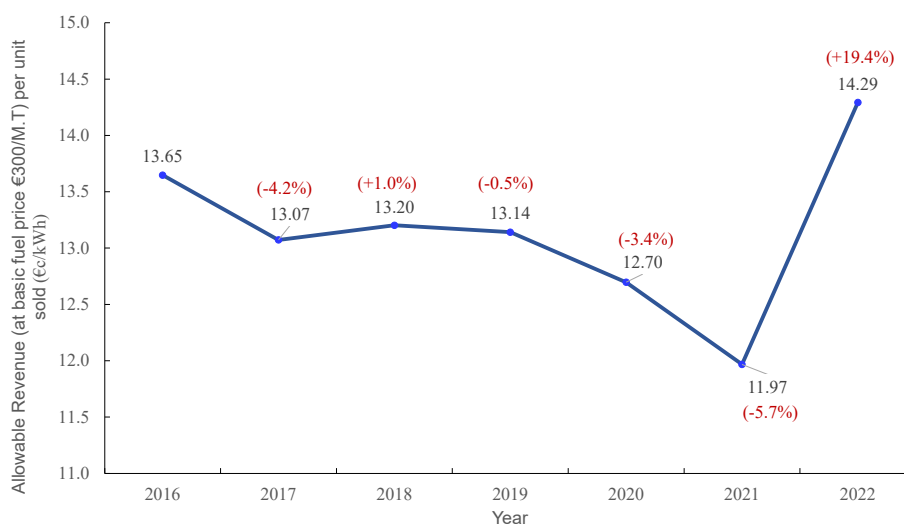


Figure 28 - EAC's allowed revenue per unit sold from 2016 to 2022

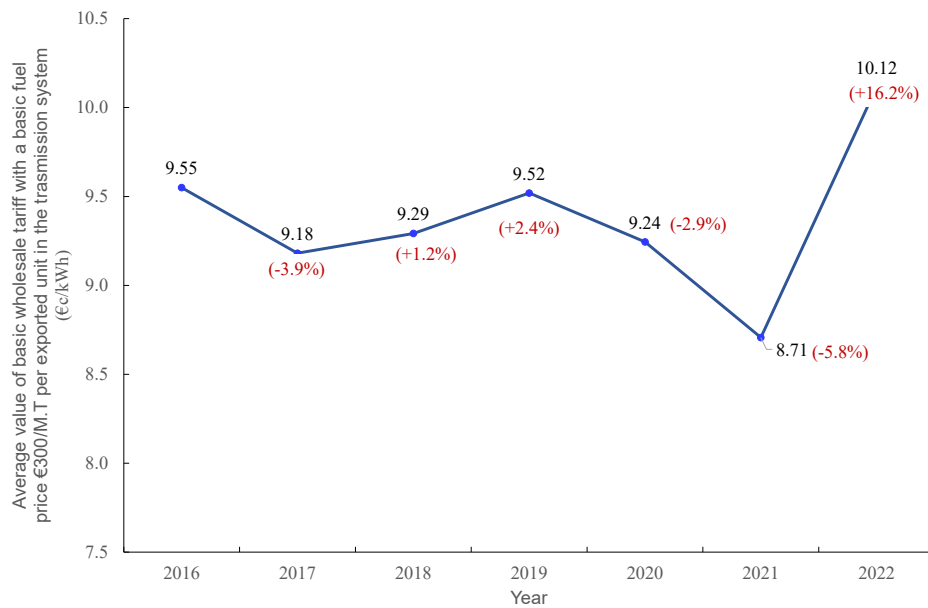


Figure 29 - Average price of basic wholesale tariff for the period from 2016 to 2022

The following figures present data pertaining to the final electricity price for various tariffs (includes the cost of fuel and CO<sub>2</sub> emission allowances over €300/MT), as well as data that effects the tariff amounts.

Figure 30 presents the analysis of the fuel price adjustment (€/kWh) that was charged per kilowatt-hour to low-voltage consumer bills from January 2017 to December 2022, regarding fuel, cost of purchasing CO<sub>2</sub> 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.

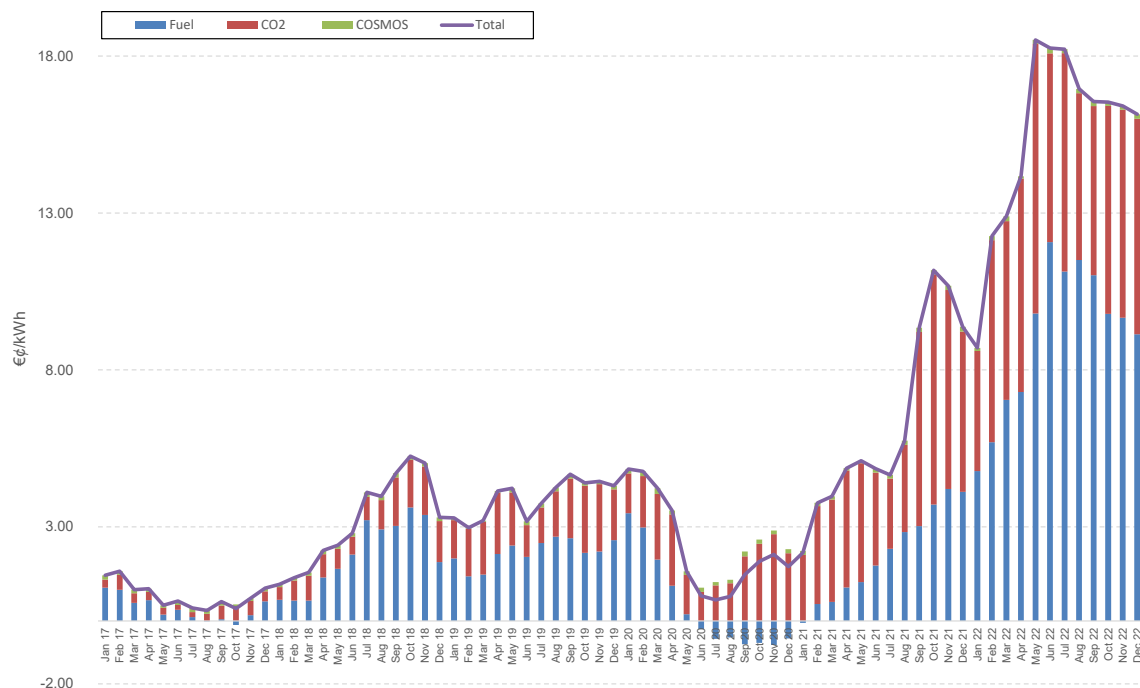


Figure 30 - Analysis of the cost of fuel adjustment, low voltage (€/kWh)

Figure 31 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 2022. Since the calculation of the WACF for June 2022, EAC Generation has implemented a new methodology regarding the purchase of greenhouse gas allowances. In short, according to this procedure, buying emission allowances is based on actual weekly fuel consumptions in order to fully implement the actual seasonality when buying emission allowances.

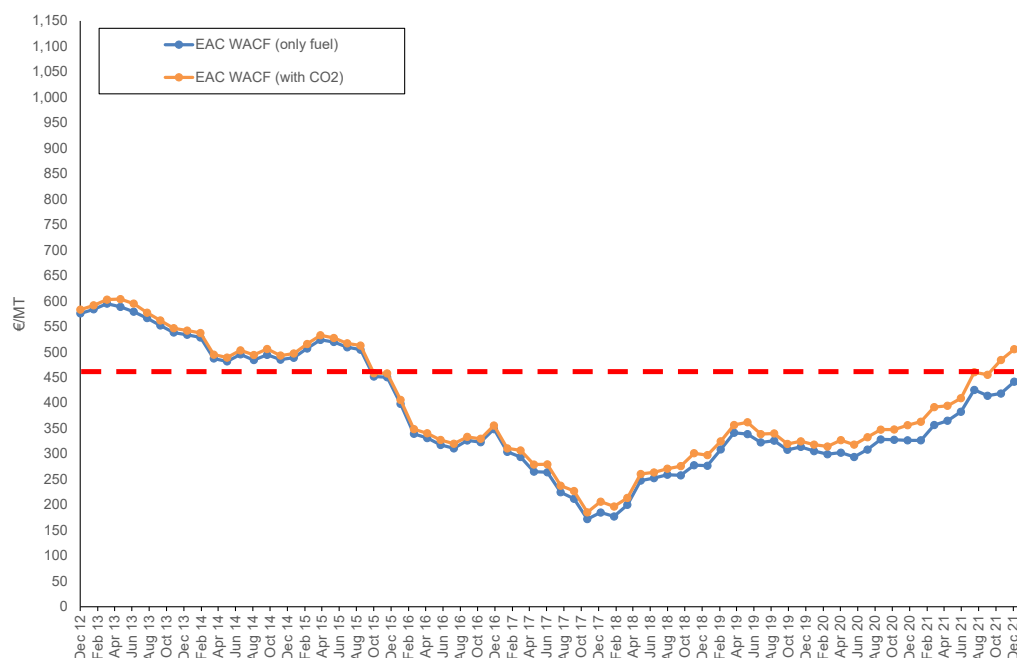


Figure 31 - WACG EAC Generation (only fuel, including CO2 cost)

Figure 32 shows the fuel mix from January 2016 to December 2022 that has been consumed for electricity generation. As shown in the Figure, the fuel mix for electricity generation ratio for the months of January to December 2022 were on average, HFO: 66.5%, GasOil: 33.5%.

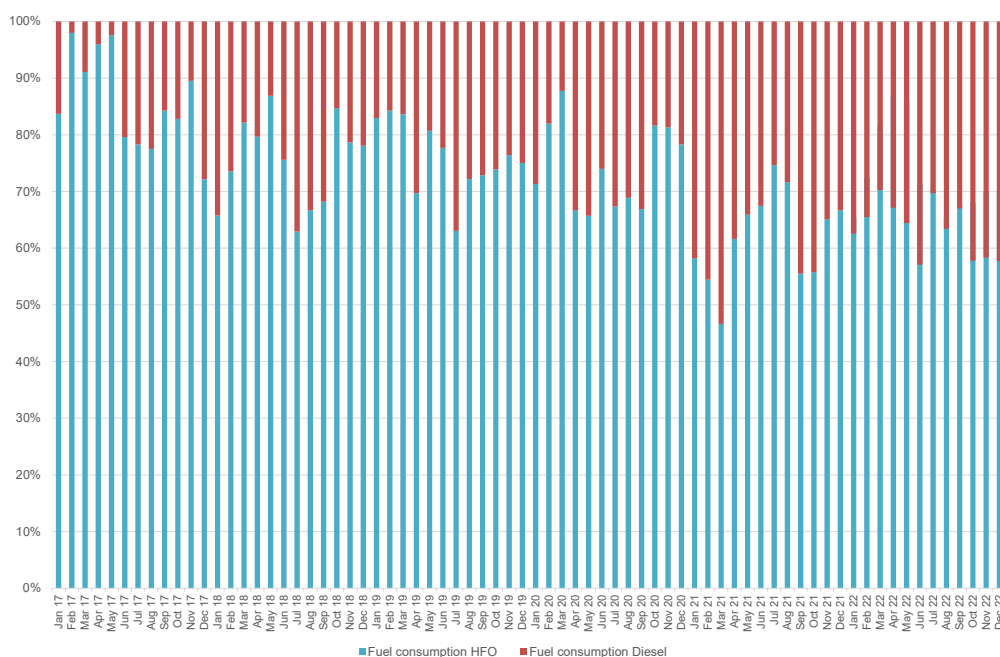
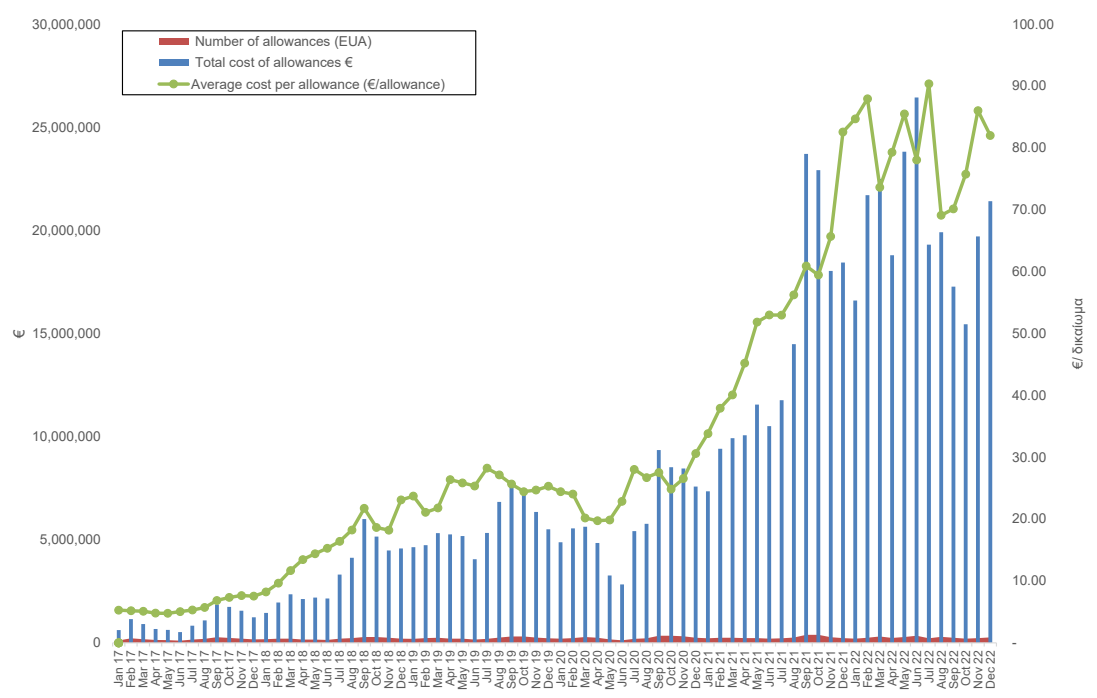


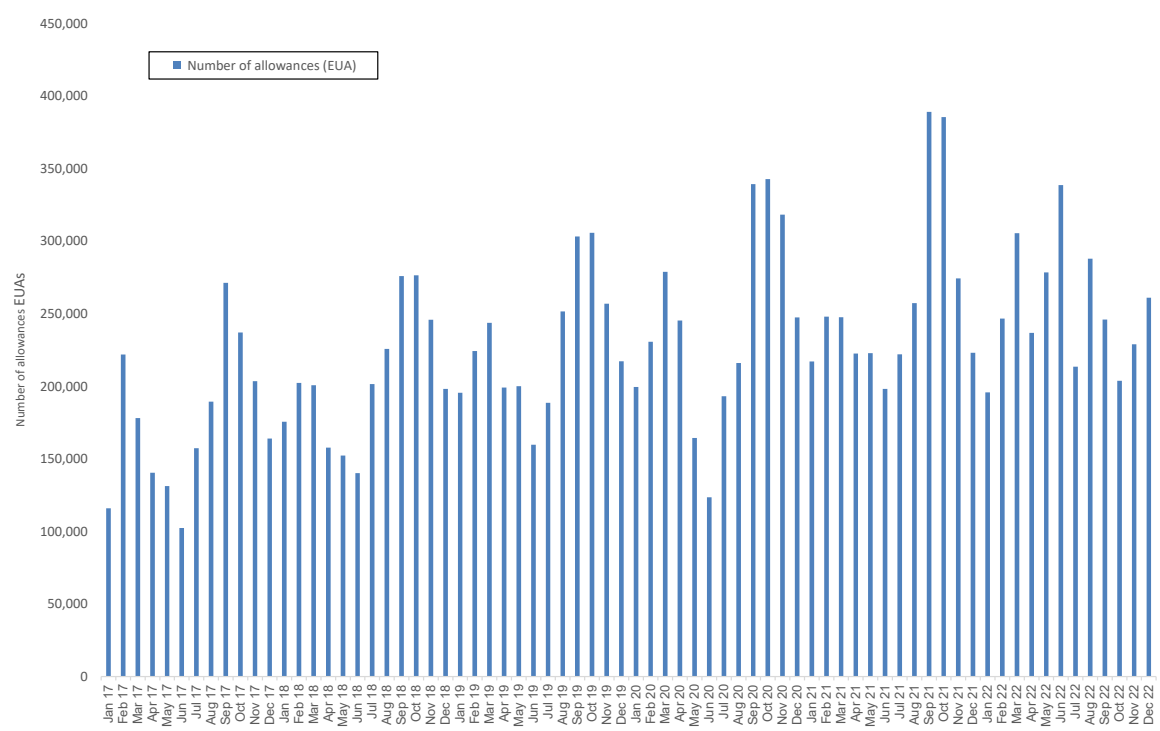
Figure 32 - Fuel mix for EAC electricity generation (consumption %)

Figure 33 shows the total and average unit cost for the purchase of greenhouse gas emission allowances from January 2017 to December 2022.



**Figure 33** - Total cost for the purchase of CO2 emission allowances by EAC Generation, average cost per allowance

Figure 34 shows the number of greenhouse gas emission allowances that have been purchased by EAC Generation from January 2017 to December 2022.



**Figure 34** - Number of CO2 emission allowances that were purchased by EAC Generation

Figure 35 shows the average tariff for household use (code 01) with a bi-monthly consumption of 600kWh from December 2012 to December 2022, inclusive of VAT and RES fee.

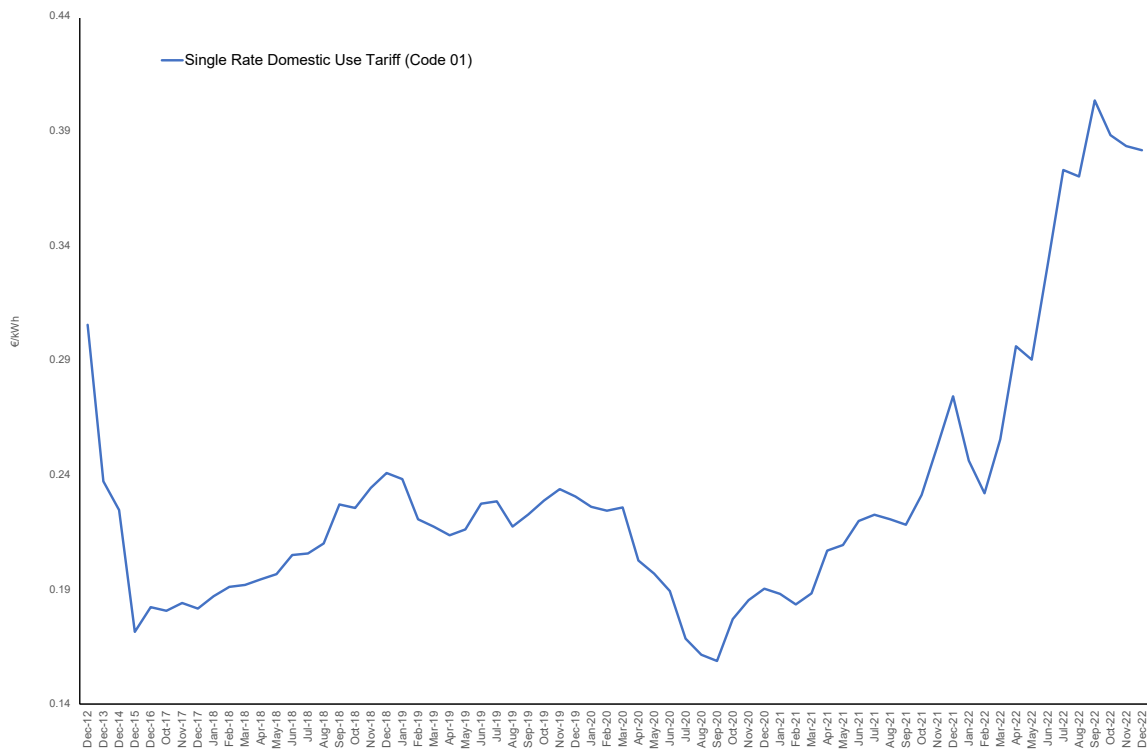


Figure 35 - Average tariff for household use (code 01)

Figure 36 shows the fee percentages for Public Service Obligations (PSO), VAT and RES on the total bill amount for an average household consumer (bi-monthly consumption 600kWh) from October 2017 to December 2022.

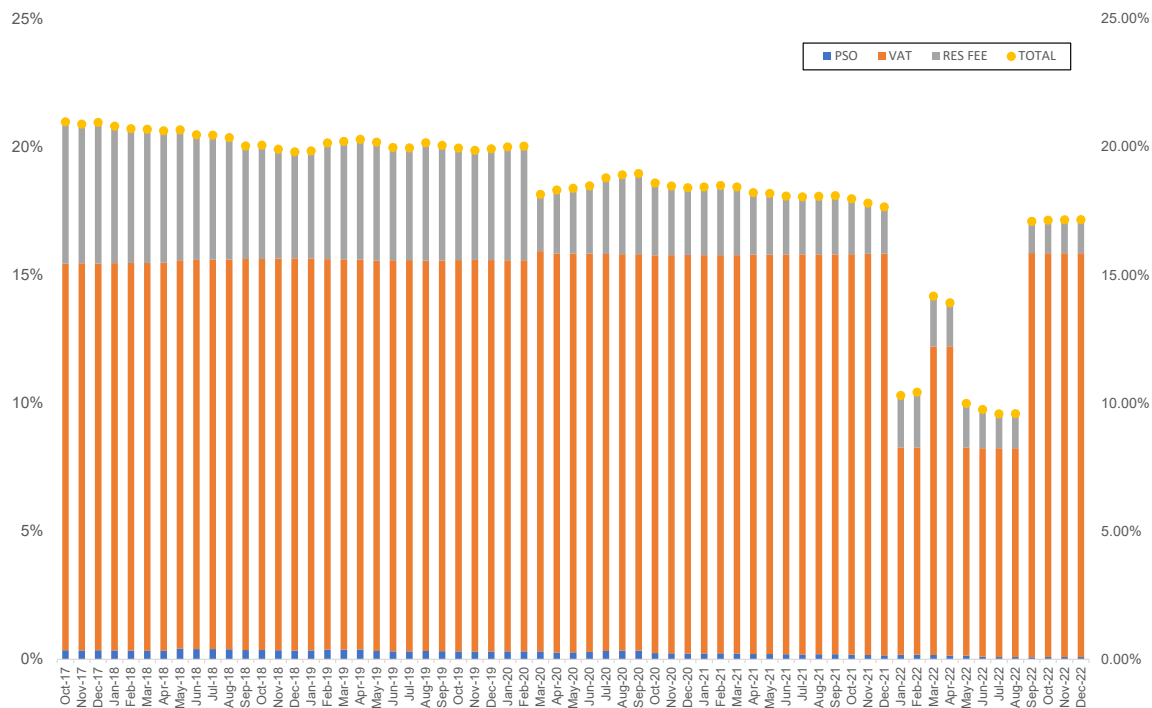


Figure 36 - PSO, VAT and RES analysis for tariff 01

Figure 37 shows the average of tariff 10 - bi-monthly low voltage single rate commercial use tariff - from October 2017 to December 2022 , inclusive of VAT and RES fee.

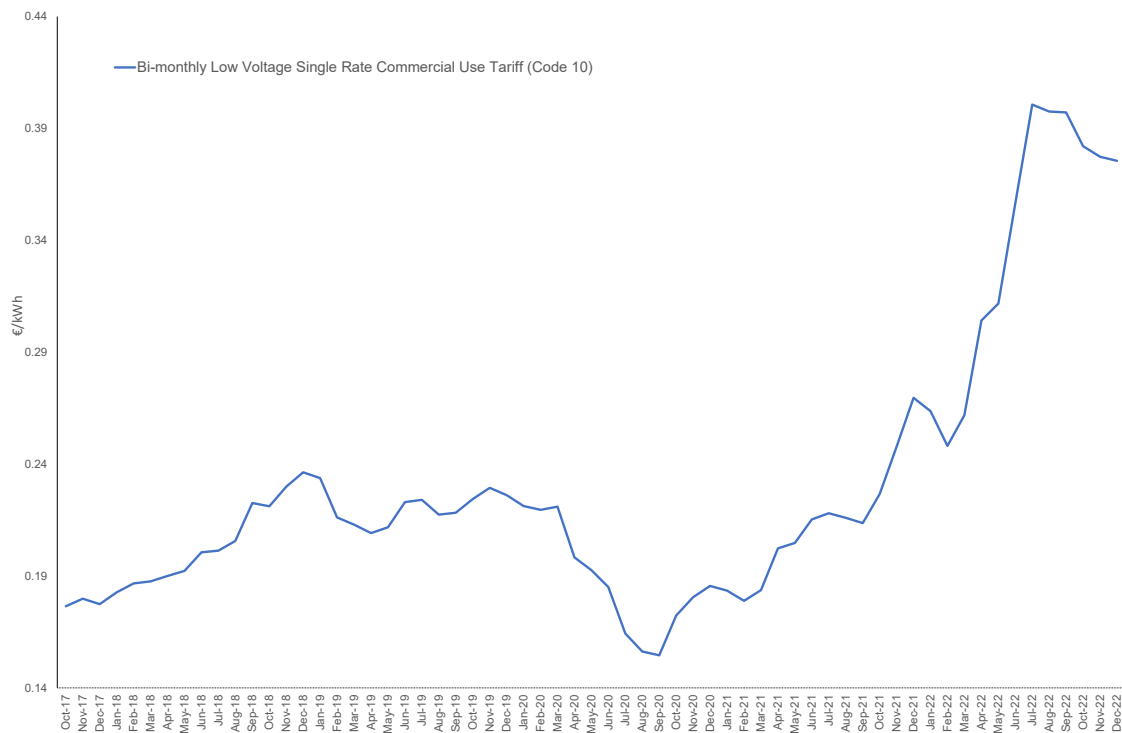


Figure 37 - Average bi-monthly low voltage single rate commercial use tariff (code 10)

Figure 38 shows the average Tariff 30 - Monthly Low Voltage Seasonal Two-Rate Commercial and Industrial Use Tariff - from October 2017 to January 2022, inclusive of VAT and RES fee.

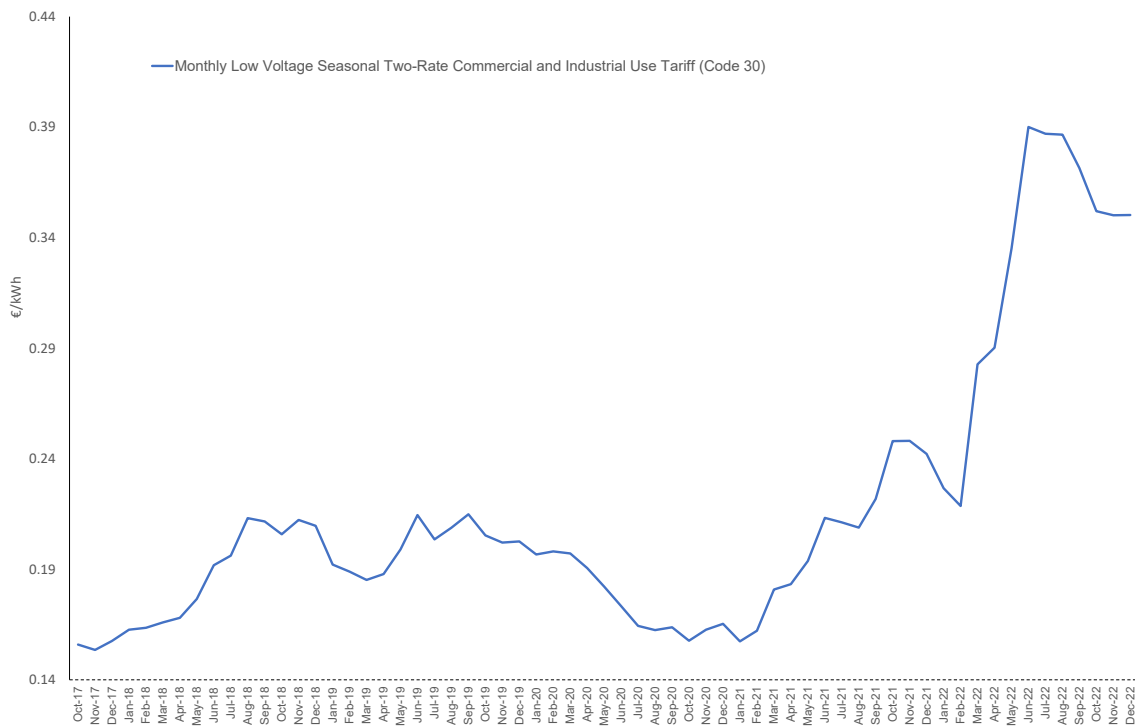


Figure 38 - Average monthly low voltage seasonal two-rate commercial and industrial use tariff (code 30)



Figure 39 shows the average tariff 40 - monthly medium voltage seasonal two-rate commercial and industrial use tariff - from October 2017 to December 2022, inclusive of VAT and RES fee.

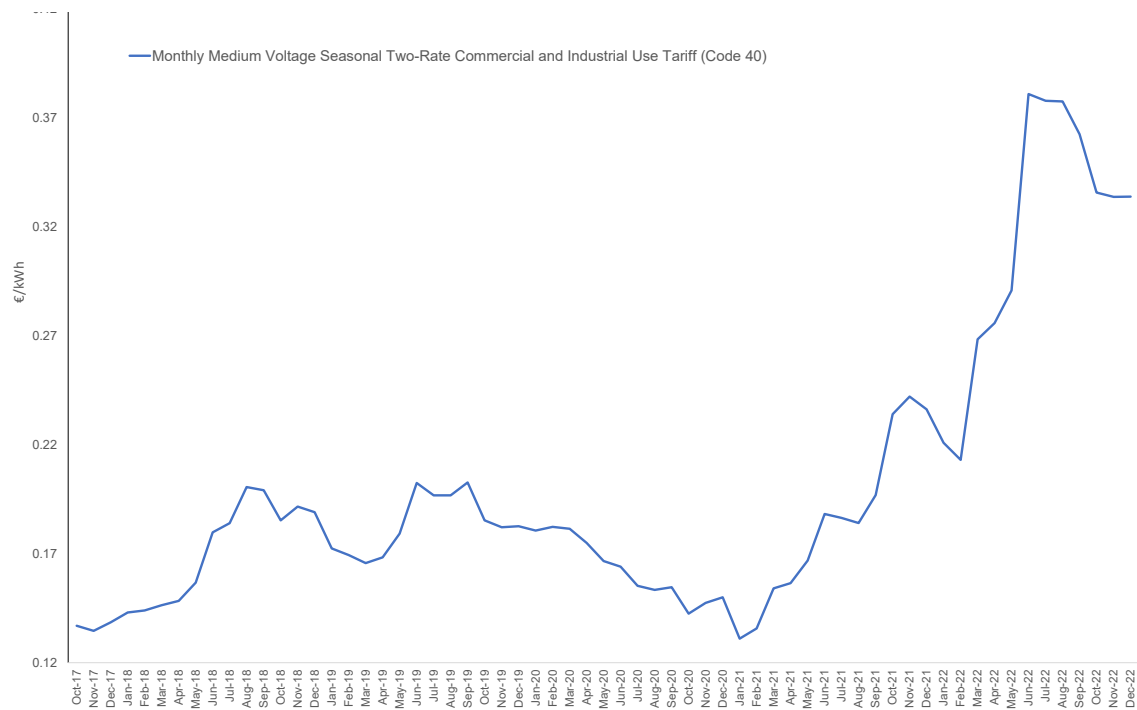


Figure 39 - Monthly two-rate commercial and industrial use tariff (code 40)

Figure 40 shows the average for tariff 50 - monthly high voltage seasonal two-rate commercial and industrial use tariff - from October 2017 to December 2022, inclusive of VAT and RES fee.

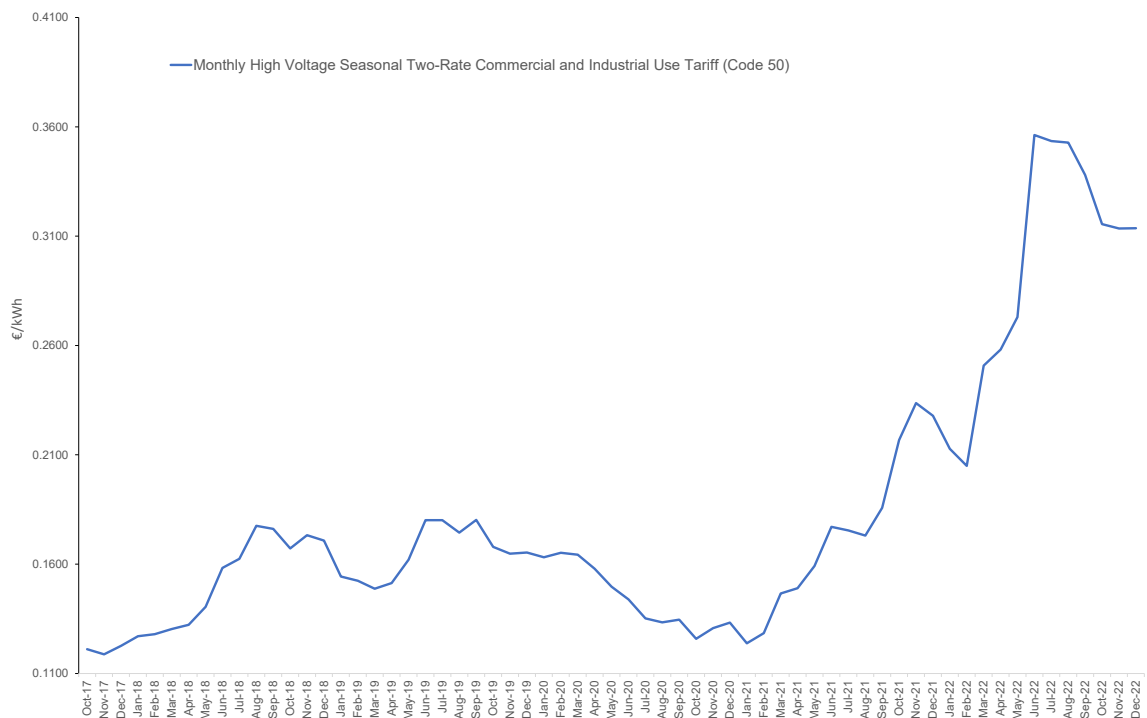
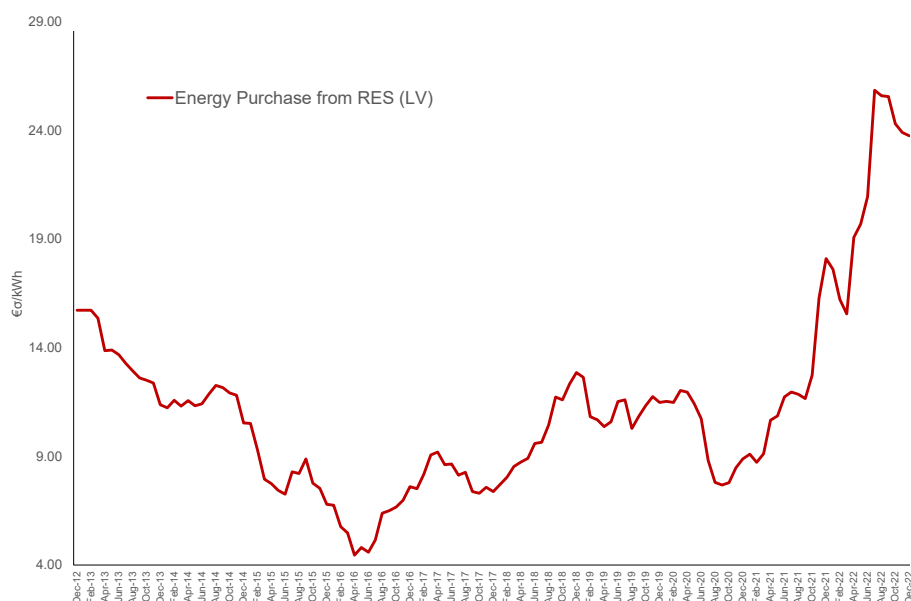


Figure 40 - Monthly high voltage seasonal two-rate commercial and industrial use tariff (code 50)

Figure 41 shows the cost of purchasing energy from RES, at low voltage, from December 2012 to December 2022.



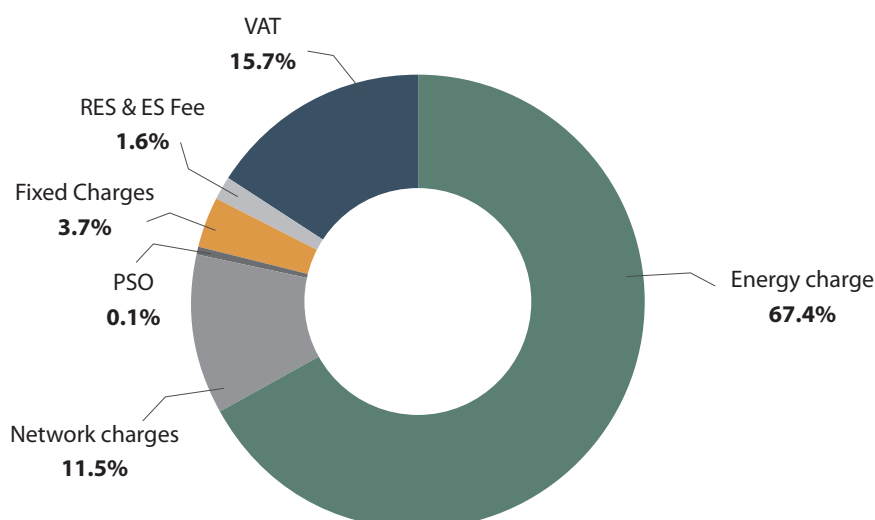
**Figure 41** - Cost of purchasing energy from RES (low voltage) - in €/kWh

The above Figures show that in 2022, the electricity tariffs for all categories had the highest upward trend compared to the previous years.

The increase in the average tariffs in 2022 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

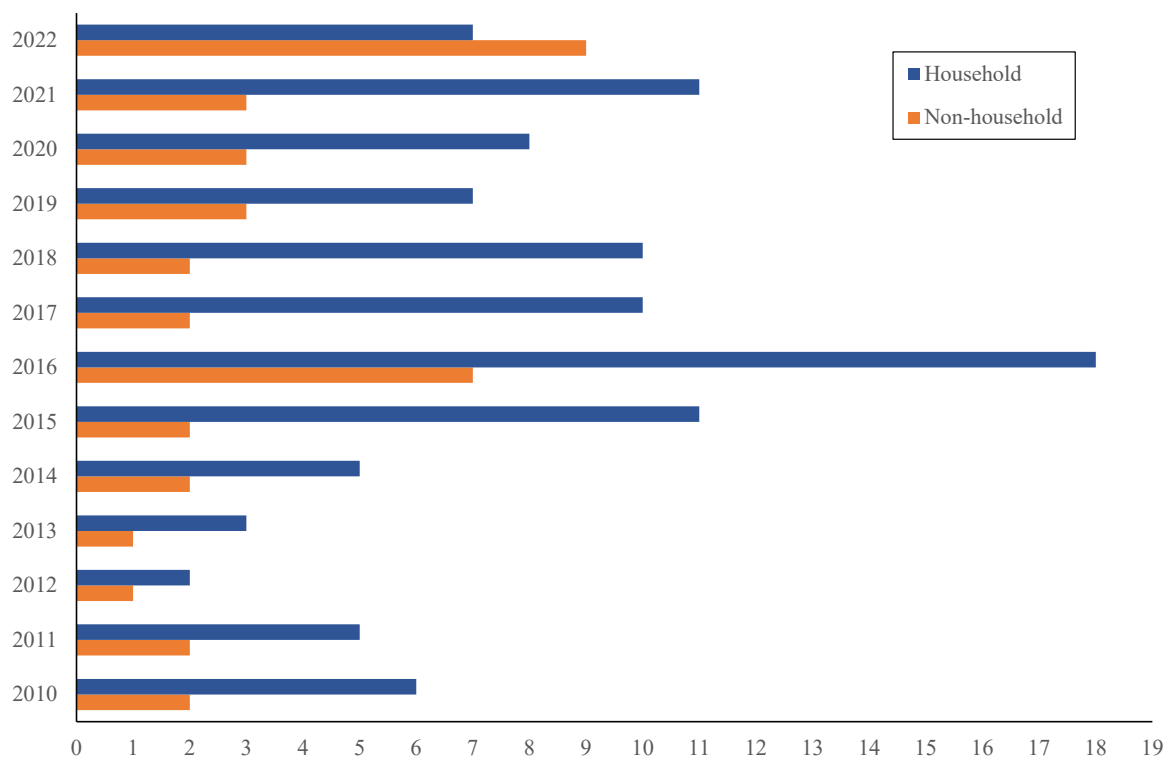
Figure 42 shows the analysis of the electricity bill per charge category for a typical household consumer with bi-monthly consumption of 600kWh in December 2022, at the basic price (i.e., the basic fuel price €300/Metric Ton).



**Figure 42** - Analysis of electricity bill for a typical household consumer with bi-monthly consumption of 600 kWh (% on the final bill), December 2022

## Electricity prices in the European Union

Figure 43 below shows where Cyprus ranks compared to the rest of the EU Member States, in terms of the electricity prices that are charged to final household and non-household consumers. As one can see, Cyprus is among the Member States with the highest energy prices with respect to non-household consumers. Electricity prices for household consumers range among the EU's average household electricity prices.



**Figure 43** - Ranking of Cyprus compared to the rest of the EU Member States in terms of electricity prices for the period 2010 - 2022<sup>6</sup>.

<sup>6</sup> <https://ec.europa.eu/eurostat/databrowser/view/TEN00117/default/table>

# 5 /

## NATURAL GAS MARKET

### Legislative framework for the natural gas market

The current Laws Regulating the Natural Gas Market of 2004 to 2022, which embrace the important features of the Third Energy Package, provide for the regulation of the natural gas market in the Republic of Cyprus and, among others, establish rules for the transmission, distribution, supply and storage of natural gas. In addition, they specify 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 licences for the transmission, distribution, supply and storage of natural gas. Also, CERA's duties, responsibilities, range of activities and role are described.

It is noted that the Laws Regulating Natural Gas Market of 2004 to 2022 contain the key provisions for the imminent introduction of natural gas in the country's energy balance. However, they do not specify the market model and the organizational framework that will be used for the development of the market, thereby providing reasonable flexibility to decision-makers to make the proper choices. In addition, they allow for derogations, according to the provisions of the Directive; however, without specifically establishing these derogations, leaving them 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 (Third Energy Package), 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 of 2004 to 2022 provide for Cyprus the possibility of derogation 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, 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 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; therefore, the supplier is 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 Ltd) was appointed as a TSO, a DSO and a

Liquefied Natural Gas Facility Operator (LNG Operator) for a period of thirty years (30), starting from the date of issuance of the corresponding licences by CERA.

Furthermore, with Decision no. 91,503 dated 7 July 2021 and based on the provision of the Law, the Council of Ministers appointed the DEFA Ltd as the Storage System Operator (SSO) for a period of thirty years (30), starting from the date of issuance of the corresponding licences by CERA. In addition, it decided on the partial derogation of implementation until 2025:

- of Article 18 of the Laws Regulating the Natural Gas Market of 2004 to 2022, on the independence of the Transmission System Operator (TSO), which provides that the TSO 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 TSO 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 TSO shall be independent only in terms of organization and not decision-making regarding the supply of natural gas, and
- Article 24 of the Laws Regulating the Natural Gas Market of 2004 to 2022, on the independence of the DSO, which provides that the DSO 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 DSO 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 DSO shall be independent only 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 LNG by 2020 at the latest, the Council of Ministers decided, in June 2017, to assign to DEFA Ltd the announcement of two tenders 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 Ltd (ETYFA Ltd) was established which will implement the required infrastructure for the arrival of LNG.

In October 2018, DEFA Ltd, acting on behalf of ETYFA Ltd, published an invitation to tender for the design, construction and operation of the LNG import terminal station 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 the Republic of Cyprus.

CERA's obligations pertaining to the purchase of natural gas and its regulatory jurisdiction are defined in the Laws Regulating the Natural Gas Market of 2004 to 2021. 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 respect, CERA:

- by Regulatory Decision 01/2019 issued Statement of Regulatory Practice and Natural Gas Tariffs Methodology which includes the provisions in place during the emerging market period. The Statement specifies, inter alia, how the Operator will make its proposals to CERA which, in accordance with this Statement, will approve the required revenue from the use of the facilities that fall under the Operator's jurisdiction and the how the sole supplier, will make its proposals to CERA on the allocation of the cost of using all natural gas facilities to the various consumer categories which will be taken into account by CERA when approving supply tariffs. The Statement of regulatory practice and natural gas tariffs methodology was published in the Official Gazette on 14 June 2019.
- by Decision 91/2020, dated 5 March 2020, CERA issued the rules for supplying natural gas. These rules regulate the rights and obligations that natural gas suppliers and customers have, during negotiation and conclusion of contracts, as well as when fulfilling their contractual obligations, in accordance with the Articles 23 and 46 of the Law.
- by Decision 245/2020, dated 31 July 2020, it decided to issue Regulatory Decision No. 04/2020 entitled "Accounting unbundling of activities of natural gas undertakings" which concern the issuance of instructions and guidelines with respect to the Accounting Unbundling of activities of natural gas undertakings, which was published in the Official Gazette on 07 August 2020.
- by Decision 246/2020, dated 31 July 2020, it decided to issue Regulatory Decision No. 04/2020 entitled "Regulatory Accounting Instructions for the preparation of separate accounts of natural gas undertakings" regarding the provision of guidelines to the Liable Organizations on the preparation of separate accounts, to ensure unhindered approval of tariffs by CERA and to prevent discrimination among consumers of the same category. More specifically, it was specified how the Liable Organizations should prepare, monitor and submit the separate accounts and what information to include in these separate accounts. Regulatory Decision No. 05/2020 was published in the Official Government Gazette on 07 August 2020.
- 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.
- by Decision 43/2022, dated 12 July 2022, it decided to issue Regulatory Decision No. 07/2022 entitled "Regulatory Decision regarding the Statement of Regulatory Practice for the supply of natural gas via virtual pipelines" with which it determined, inter alia, the roles and responsibilities of involved Operators, the supply undertaking and the final customers, as well as matters pertaining to the relevant infrastructures that are required for the transportation of compressed natural gas and LNG via virtual pipelines. Regulatory Decision 07/2022 was published in the Official Government Gazette on 15 July 2022.

## Licensing

The licencing of natural gas related activities are regulated by the Laws Regulating the Natural Gas Market of 2004 to 2022 and the Natural Gas Market Regulations (Issuing Licences) (KDP 298/2006).

The licences issued by CERA, in accordance with Article 8 of Laws Regulating the Natural Gas Market of 2004 to 2022, concern the following activities:

- Construction and/or operation of natural gas facilities and/or storage facility and/or pipeline networks, pipelines and similar equipment.
- Execution of the duties of the owner of the natural gas facility and/or storage facility and/or pipeline networks, pipelines and similar equipment.
- Execution of the duties of the operating system.
- Supply of natural gas, inter alia, to wholesale customers.
- Supply of natural gas to eligible customers.
- Supply of natural gas to non-eligible customers.
- Execution of the duties of the operator of the natural gas import/storage/transmission/distribution network.
- Execution of the duties of the owner of the natural gas import/storage/transmission/distribution network.

## Operating licence for Liquefied Natural Gas Facility

An Operating Licence for a Liquefied Natural Gas Facility was issued to DEFA Ltd in 2021.

By Decision 221/2022, dated 12 July 2022, CERA decided to amend terms of the Licence, aimed at providing flexibility to the Licensee regarding the conditions for maintaining natural gas within the temporary natural gas storage pipelines, and establishing a time schedule within which the Licensee must submit a quarterly update on the progress of the implementation of the LNG facility and the estimated commencement date of its commercial operation.

### **Applications for LNG Facility Construction, Ownership and Operation Licence**

On 31 March 2020, Hoegh LNG Ltd submitted an application to CERA for a LNG facility construction, ownership and exploitation licence. CERA assessed the application as to its completeness under Regulation 4 of the Licensing Regulations (KDP 298/2006) and asked the applicant to submit additional information in order to complete the application. Following the extensions that CERA has granted to the applicant further to its requests, the deadline for the submission of the supplementary information has been set for 31 December 2022.

## Liquefied Natural Gas Storage Operating Licence

An application for a Liquefied Natural Gas Storage Operating Licence was not submitted in 2022.

## Licence for the construction, ownership, exploitation and operation of a Natural Gas Transmission System

In 2021, a licence for the Construction, Ownership, Exploitation and Operation of a Natural Gas Transmission System was issued to the Natural Gas Public Company (DEFA Ltd).

## Construction, Ownership, Exploitation and Operation of a Natural Gas Distribution System Licence

An application for the issuance of a Construction, Ownership, Exploitation and Operation of a Natural Gas Transmission System Licence was not submitted in 2022.

## Natural Gas Supply Licence

An application for the issuance of a Supply Licence or the issuance of a Natural Gas Supply Licence to selected customers or non-selected customers was not submitted in 2022.

## Regulatory framework for hydrogen economy

Having regard to the EU's hydrogen strategy, the strong interest of European Energy Regulators regarding the hydrogen's role in the energy market, the particular characteristics of the Republic of Cyprus energy system, as well as the advantages of using hydrogen, CERA, with the contribution of external professional consultants, moved forward in September 2022 with the preparation of a Report on the need to develop a regulatory framework that will govern the hydrogen market in the Republic of Cyprus entitled, "Guidelines on the Development of a Hydrogen Value Chain in the Republic of Cyprus" (CERA Report No. 18/2022).

This Report, as published on CERA's website, inter alia provides the potential means of hydrogen penetration into the energy market of the Republic of Cyprus, the benefits of using hydrogen with particular emphasis on



electricity generation and the actions required for the development of a legislative and regulatory framework based on European Directives as these will be formulated in the context of the “Fit for 55” measures, the “Hydrogen and Decarbonised Gas Market Package”, and the REPowerEU plan for the integration of hydrogen to the energy system. On a regulatory level, it is deemed that the basic principles for market operation, which will guarantee transparency and control, will need to be determined, thus creating the appropriate conditions for investments.

The Guidelines constitute the commencement of CERA’s preparation for drafting the regulatory framework for the hydrogen market. Pursuant to these Guidelines, the development of a hydrogen value chain in the Republic of Cyprus by 2030 can be implemented in two phases:

- Phase 1 (2022-2025): Early stage of market development.  
In this phase, priority should be given to establishing a national energy policy for hydrogen, determining the basic principles for stakeholder engagement and harmonisation with the national legislative and regulatory framework with relevant European Directives. Based on the national policy, the legislative and regulatory framework and the required preparation of engaged stakeholders, the hydrogen value chain could launch its development and the initial pilot quantities can be used in selected applications.
- Phase 2 (2026-2030): Development of the hydrogen market in the Republic of Cyprus.  
This phase should focus on the design and implementation of targeted measures to resolve problems in individual parts of the hydrogen value chain as they arise. In this phase it is important to achieve harmonisation with European and international practices regarding the development of the hydrogen market; while it is expected that hydrogen will participate in covering the country’s energy needs.

## 6 /

# PROTECTION OF CONSUMERS AND COMPLAINT RESOLUTION

## Protection of consumers and resolution of complaints



The Council of European Energy Regulators (CEER), in cooperation with all regulatory authorities, promote measures to implement the protection and upgrade of the rights of energy consumers and, in particular, vulnerable consumers. A key measure is the support of CEER by the regulatory authorities, which announce the establishment of its new website that is exclusively focused on informing 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, is preparing informative material, which is available in electronic format at the Points of Single Contact, namely Citizen Service Centres and at the District Offices of the Ministry of Energy, Commerce and Industry (MECI).

By Decision 88/2022, having regard to the Laws Regulating the Electricity Market (Complaint Handling Procedure) Regulations of 2005 (KDP 570/2005), CERA decided to define the Consumer Complaint Submission Procedure, which is posted on CERA's website, **<https://www.cera.org.cy/el-gr/katanalotes>**.

According to this procedure:

- Any energy consumer may submit a written complaint to the supplier and / or Owner of the Distribution System (ODS) and/or Distribution System Operator (DSO) regarding an alleged breach of its obligations, responsibilities and duties arising from electricity supply performance indicators or a breach in relation to any other matter falling within the obligations, responsibilities and duties of the supplier and/or the ODS and/or the DSO.

- The supplier and/or ODS and/or DSO shall respond to consumer complaints within the specified performance indicator deadline:

PERFORMANCE INDICATORS	SPECIFIED DEADLINE OR RESPONSE TIME
Response to complaints, requests, letters or information	20 days
Investigation into voltage-related complaints	30 days
Investigation into meter accuracy-related complaints	30 days
Response to bill-related complaint	3 days

- The supplier and/or ODS and/or DSO shall consider the complaint within the specified performance indicator deadline and inform the consumer of its decision or action on the complaint within the specified performance indicator deadline.
- In the event that the consumer is not satisfied with the decision or action taken by the supplier and/or ODS and/or DSO, the consumer is entitled to submit a new complaint within seven days of receiving such decision or response by the supplier and/or ODS and/or DSO.
- Consumer may submit a written complaint to CERA if he or she is not satisfied with the response/decision by the supplier and/or ODS and/or DSO or if the supplier and/or ODS and/or DSO fail to respond to the complaint within the specified performance indicator deadlines or comply with the requirements set out in the performance indicators.

**Only consumers that followed the above procedure and were NOT satisfied by the supplier and/or ODS and/or DSO, can lodge a written complaint to CERA.**

## Performance indicators

In exercising the powers conferred by the Laws Regulating the Electricity Market of 2021 and 2022, CERA has issued, with the approval of the Council of Ministers and after being submitted to the House of Representatives and approved by the latter, 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 Electricity Authority of Cyprus, as the Owner of the Distribution System and Licenced Supplier. These amounts have been recorded for the period from 1 January 2022 to 31 December 2022. Also presented, for comparison purposes, are the corresponding results of previous years.

## Distribution system owner (eac) performance indicators

Fine paid by EAC (€) to electricity consumers

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

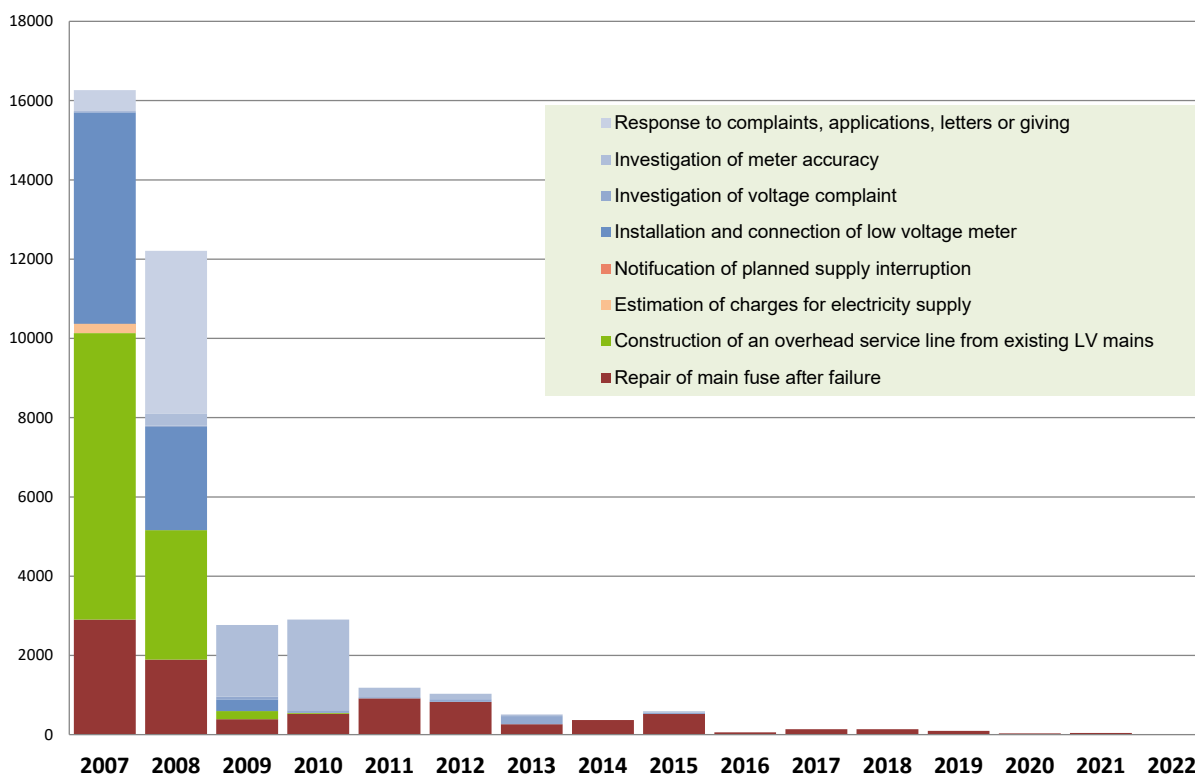


Figure 44 - Performance indicators of ODS (EAC)

#### Fine paid by EAC (€) to electricity consumers

PERFORMANCE INDICATOR	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1 Repair of main fuse after failure	2905	1896	393	529	914	828	265	367	521	60	137	137	94	34	43	9
2 Installation and connection of low voltage meter	5331	2605	290													
3 Construction of an overhead service line from existing LV mains	7227	3264	205	17												
4 Estimation of charges for electricity supply	239															
5 Notifucation of planned supply interruption																
6 Investigation of voltage complaint	34	34	68	68	34	68	205		34							
7 Investigation of meter accuracy		308	1811	2289	239	137	31		34							
8 Response to complaints, applications, letters or giving	530	4102					17									

Table 3 - Performance indicators of the ODS (EAC)

## EAC supplier performance indicators

### PERFORMANCE INDICATORS FOR THE SUPPLIER (EAC)

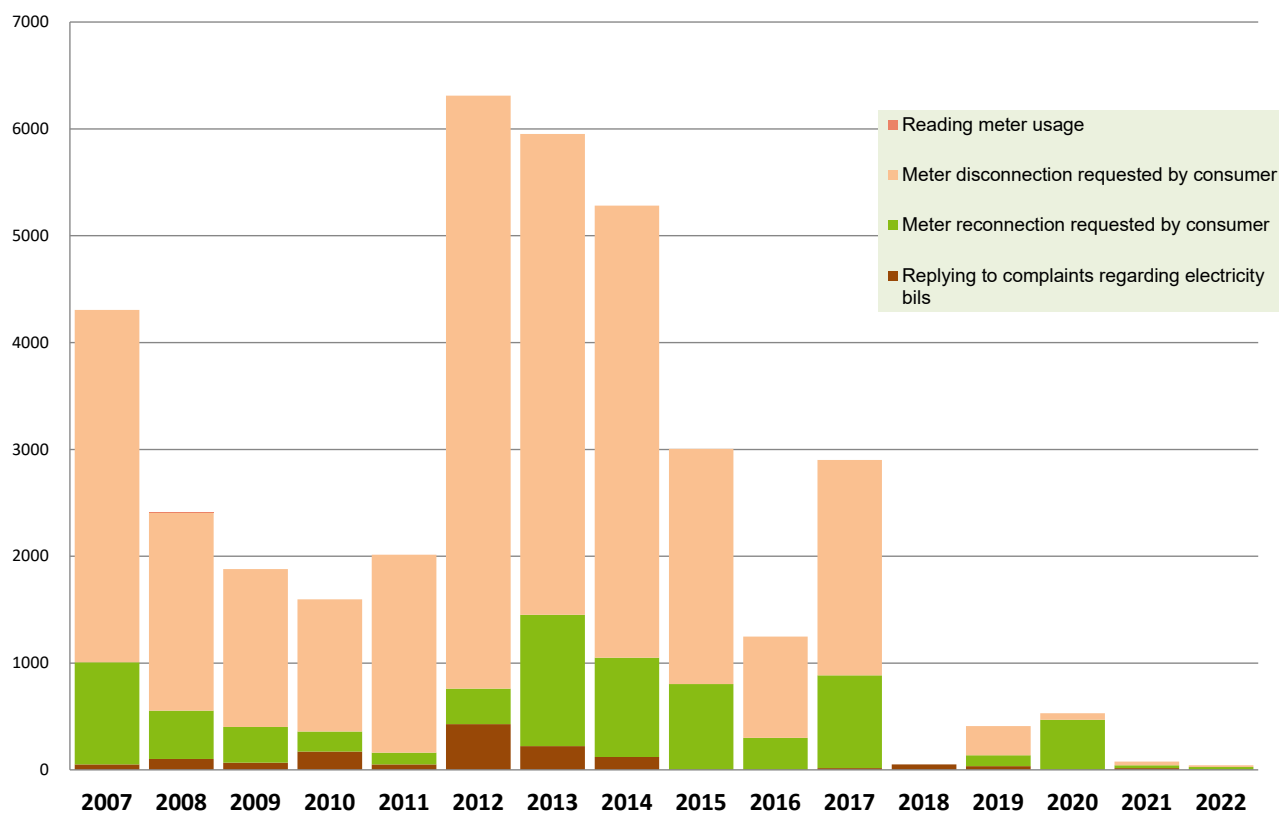


Figure 45 - EAC Supplier performance indicators

### Fine paid by EAC (€) to electricity consumers

PERFORMANCE INDICATORS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<sup>1</sup> Replying to complaints regarding electricity bills	51	103	68	171	51	427	222	120			17	51	34		17	
<sup>2</sup> Arrangement of appointments																
<sup>3</sup> Meter reconnection requested by consumer	957	453	333	188	111	333	1230	931	803	299	868		102	470	26	26
<sup>4</sup> Meter disconnection requested by consumer	3298	1853	1477	1238	1853	5551	4501	4231	2203	948	2015		273	60	34	17
<sup>5</sup> Reading meter usage			9													
<sup>6</sup> Response to complaints, applications, letters or giving informations*																

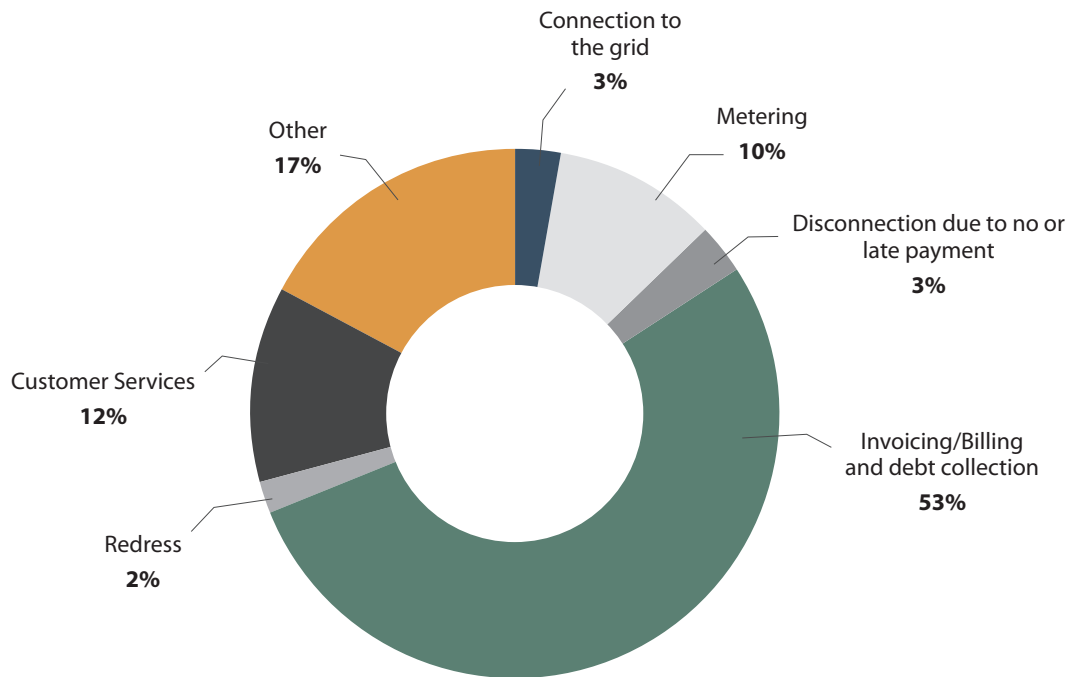
\*This indicator is included in indicator (8) of EAC as ODS

Table 4 - EAC Supplier performance indicators

From Tables 3 and 4 and Figures 44 and 45, 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 46 below details the type and number of complaints submitted to CERA in 2022. It should be noted that all complaints have been examined and consumers have been informed accordingly.



**Figure 46** - Complaints submitted to CERA in 2022

# REPORT AND FINANCIAL STATEMENTS

For the year ended 31 December 2022

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## TOP MANAGEMENT AND OTHER OFFICERS

### 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  
(As contractors for the contract EY 3/2020, where Coordinating Contracting Authority is The Audit Office of the Republic of Cyprus)  
Certified Accountants and Registered Auditors  
25th Martiou street 35 (Kennedy corner 32)  
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, Hawaii Tower  
Offices 301 303, 3rd floor  
1066 Nicosia, Cyprus

Stelios Amerikanos & Co LLC  
12, Demostheni Severi Ave  
Office 601, 6th Floor  
1080 Nicosia  
Cyprus

### Registered office:

20, Agias Paraskevis  
2002 Strovolos, Nicosia  
Cyprus

### Bankers:

Bank of Cyprus Public Company Ltd  
Hellenic Bank Public Company Ltd  
Eurobank Cyprus Ltd  
Housing Finance Corporation



# TOP MANAGEMENT REPORT

The Top Management of the Cyprus Regulatory Authority (CERA) (the 'Authority') presents its report and audited financial statements of the Authority for the year ended 31 December 2022.

## **Principal activities and nature of operations of the Authority**

The establishment of the Authority arises from the obligations of Cyprus towards the European Union. The Authority'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, 29 and 31 of the financial statements.

## **Results**

The Authority's results for the year are set out on page 108.

## **Top Management**

The members of the Top Management as at 31 December 2022 and at the date of this report are presented on page 1. 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. 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 29 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 33 to the financial statements.

## **Related party transactions**

Disclosed in note 30 of the financial statements.

**Independent Auditors**

The Independent Auditors, VGDA Accountants Limited, who were appointed by the Top Management for the audit of the financial statements for the years ended 31 December 2020, 31 December 2021 and 31 December 2022, following a tender procurement by The Audit Office of the Republic - since the Auditor General is by law the Independent Auditor of the Authority - in accordance to the Law on the Provision of Evidence and Information to the Auditor General and its subsequent amendments (Law 113(I)/2002) which grants the right to the Auditor General of the Republic to delegate at his discretion the audit of the financial statements of any legal person/organization under his control to licensed auditors or licensed auditing firms.

By order of the Top Management,



**Dr. Andreas Poullikkas - Chairman**  
Chairman

Nicosia, Cyprus, 9 June 2023

# 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 7 to 40 and comprise the statement of financial position as at 31 December 2022, 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 2022, 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 41 to 45, 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 controls as the Top Management determines 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 Top Management 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**

As contractors for the contract EY 3/2020, where Coordinating Contracting Authority is the Audit Office of the Republic of Cyprus  
Certified Public Accountants

25th Martiou street 35 (Kennedy corner 32)  
2nd floor  
1087 Nicosia, Cyprus

9 June 2023

# STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022

	Σημ.	2022 €	2021 €
<b>Revenue</b>	8	<b>2.120.938</b>	2.224.650
Other operating income	9	<b>89.035</b>	140.252
Selling and distribution expenses		-	(140)
Administration expenses		<b>(2.408.026)</b>	(2.294.016)
Net impairment (loss)/profit on financial and contract assets		<b>(27.629)</b>	25.423
<b>Operating (deficit)/surplus</b>	10	<b>(225.682)</b>	96.169
Finance income		<b>46.122</b>	49.288
Finance costs		<b>(81.524)</b>	(36.377)
Net finance (costs)/income	13	<b>(35.402)</b>	12.911
(Deficit)/surplus before tax		<b>(261.084)</b>	109.080
Tax	14	<b>(1.686)</b>	(2.247)
<b>Net (deficit)/surplus for the year</b>		<b>(262.770)</b>	106.833
<b>Other comprehensive income</b>			
<i>Items that will not be classified subsequently to profit or loss:</i>			
Remeasurements of post-employment benefit obligations		<b>1.005.291</b>	433.084
		<b>1.005.291</b>	433.084
<i>Items that may be classified subsequently to profit or loss:</i>			
Financial assets at fair value through other comprehensive income - Fair value losses		<b>(456.000)</b>	(98.130)
		<b>(456.000)</b>	(98.130)
<b>Other comprehensive income for the year</b>		<b>549.291</b>	334.954
<b>Total comprehensive income for the year</b>		<b>286.521</b>	441.787

The notes on pages 115 to 151 form an integral part of these financial statements.

# STATEMENT OF FINANCIAL POSITION

As at 31 December 2022

	Σημ.	2022 €	2021 €
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	16	<b>144.066</b>	168.081
Right-of-use assets	17	<b>1.350.752</b>	432.724
Intangible assets	18	<b>3.267</b>	-
Financial assets at fair value through other comprehensive income	19	<b>2.725.950</b>	3.181.950
Financial assets at fair value through profit or loss	21	<b>179.763</b>	112.088
		<b>4.403.798</b>	3.894.843
<b>Current assets</b>			
Trade and other receivables	20	<b>197.743</b>	111.730
Cash at bank and in hand	22	<b>7.503.225</b>	7.629.414
		<b>7.700.968</b>	7.741.144
<b>Total assets</b>		<b>12.104.766</b>	11.635.987
<b>RESERVES AND LIABILITIES</b>			
<b>Reserves</b>			
Other reserves		<b>(264.437)</b>	191.563
Retained surplus		<b>7.095.207</b>	6.357.557
<b>Total reserves</b>		<b>6.830.770</b>	6.549.120
<b>Non-current liabilities</b>			
Lease liabilities	24	<b>1.238.120</b>	258.473
Provisions for other liabilities and charges	12, 25	<b>1.400.332</b>	2.281.596
		<b>2.638.452</b>	2.540.069
<b>Current liabilities</b>			
Trade and other payables	26	<b>184.857</b>	147.482
Deferred income	27	<b>2.211.555</b>	2.098.699

The notes on pages 115 to 151 form an integral part of these financial statements.

(continued)

	Note	2022 €	2021 €
Borrowings	23	3.676	6.729
Lease liabilities	24	145.814	187.190
Current tax liabilities	28	3.777	1.468
Provisions for other liabilities and charges	12, 25	85.865	105.230
		<b>2.635.544</b>	2.546.798
<b>Total liabilities</b>		<b>5.273.996</b>	5.086.867
<b>Total equity and liabilities</b>		<b>12.104.766</b>	11.635.987

On 9 June 2023 the Top Management of Cyprus Energy Regulatory Authority authorised these financial statements for issue.



**Dr. Andreas Poulikkas**  
Chairman



**Philippos Philippou**  
Vice chairman



**Neophytos Hadjigeorgiou**  
Member

The notes on pages 115 to 151 form an integral part of these financial statements.



## STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2022

	Note	Fair value reserve - Financial assets at fair value through other comprehensive income €	Total €	Σύνολο €
<b>Balance at 1 January 2021</b>		<b>289.693</b>	<b>5.821.027</b>	<b>6.110.720</b>
<b>Comprehensive income</b>				
Net surplus for the year		-	106.833	106.833
Other comprehensive income for the year		(98.130)	-	(98.130)
Defence contribution on deemed distribution	15	-	(3.389)	(3.389)
<b>Other movements</b>				
Actuarial gain for the year		-	433.086	433.086
<b>Balance at 31 December 2021/ 1 January 2022</b>		<b>191.563</b>	<b>6.357.557</b>	<b>6.549.120</b>
<b>Comprehensive income</b>				
Net deficit for the year		-	(262.770)	(262.770)
Other comprehensive income for the year		(456.000)	-	(456.000)
Defence contribution on deemed distribution	15	-	(4.871)	(4.871)
<b>Other movements</b>				
Actuarial gain for the year		-	1.005.291	1.005.291
<b>Balance at 31 December 2022</b>		<b>(264.437)</b>	<b>7.095.207</b>	<b>6.830.770</b>

The fair value reserve for investments represents accumulated gains and losses arising on the revaluation of financial assets at fair value through other comprehensive income 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 115 to 151 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. From 1 March 2019, the deemed dividend distribution is subject to a contribution of 1.70% to the General Health System, a rate which increased to 2.65% from 1 March 2020, except for the period from April 2020 to June 2020 when the rate was 1.70%. This amount of deemed dividend distribution is reduced by any actual dividend already distributed for the year to which the profits refer. 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 Authority's case the deemed distribution is calculated on interest receivable.

The notes on pages 115 to 151 form an integral part of these financial statements.

# STATEMENT OF CASH FLOWS

For the year ended 31 December 2022

	Note	2022 €	2021 €
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
<b>(Deficit)/surplus before tax</b>		<b>(261.084)</b>	109.080
Adjustments for:			
Depreciation of property, plant and equipment	16	<b>40.049</b>	47.270
Depreciation of right-of-use assets	17	<b>168.844</b>	180.422
Amortisation of computer software	18	<b>1.633</b>	836
Fair value gains on financial assets at fair value through profit or loss		<b>(67.675)</b>	(34.578)
Actuarial (loss) /gain		<b>1.005.291</b>	433.084
Impairment charge/(reversal of impairment) on cash and cash equivalents	22	<b>27.795</b>	(15.931)
Reversal of impairment of trade receivables	20	<b>(166)</b>	(905)
Interest income	13	<b>(46.122)</b>	(49.288)
Interest expense	13	<b>56.863</b>	21.293
		<b>925.428</b>	691.283
<b>Changes in working capital:</b>			
Increase in trade and other receivables		<b>(85.847)</b>	(4.177)
(Decrease)/increase in other financial liabilities		<b>(3.052)</b>	6.727
Increase/(Decrease) in trade and other payables		<b>39.387</b>	(12.620)
Increase in deferred income		<b>112.856</b>	22.690
Decrease in provisions	25	<b>(900.629)</b>	(311.352)
<b>Cash generated from operations</b>		<b>88.143</b>	392.551
Tax refunded/(paid)		<b>623</b>	(779)
<b>Net cash generated from operating activities</b>		<b>88.766</b>	391.772
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Payment for purchase of intangible assets	18	<b>(4.900)</b>	-
Payment for purchase of property, plant and equipment	16	<b>(16.036)</b>	(107.961)
Interest received		<b>46.122</b>	49.288
<b>Net cash generated from/(used in) investing activities</b>		<b>25.186</b>	(58.673)

The notes on pages 115 to 151 form an integral part of these financial statements.

(continued)

	Note	2022 €	2021 €
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Payments of leases liabilities		<b>(199.485)</b>	(198.000)
Interest paid		<b>(7.990)</b>	(5.598)
Defence contribution on deemed distribution paid		<b>(4.871)</b>	(3.389)
<b>Net cash used in financing activities</b>		<b>(212.346)</b>	(206.987)
<b>Net (decrease)/increase in cash and cash equivalents</b>		<b>(98.394)</b>	126.112
Cash and cash equivalents at beginning of the year		<b>7.629.414</b>	7.487.371
Impairment charge/(reversal of impairment) on cash and cash equivalents		<b>(27.795)</b>	15.931
<b>Cash and cash equivalents at end of the year</b>	22	<b>7.503.225</b>	7.629.414

The notes on pages 115 to 151 form an integral part of these financial statements.

# NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2022

## 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 the Authority was incorporated as a separate legal entity. The Authority supervises and controls the Office of the Authority. Its registered office is at 20, Agias Paraskevis, 2002 Strovolos, Nicosia, Cyprus. The financial statements relate to the Authority and the Office of the Authority.

### **Principal activities**

The establishment of the Authority arises from the obligations of Cyprus towards the European Union. The Authority'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 2022. 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 legal entity 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 stand-alone 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 retirement benefits in the form of lump sum amounts based on a fixed benefit retirement plan to its employees. 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 office 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.

### **Intangible assets**

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and expenditure is reflected in profit or loss in the year in which the expenditure is incurred. The useful lives of intangible assets are assessed to be either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in profit or loss in the expense category consistent with the function of the intangible asset.

Intangible assets with indefinite useful lives are tested for impairment annually either individually or at the cash generating unit level. Such intangibles are not amortised. The useful life of an intangible asset with an indefinite life is reviewed annually to determine whether indefinite life assessment continues to be supportable. If not, the change in the useful life assessment from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in profit or loss when the asset is derecognised.

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 rate is 33.33%.

### **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:

	2022	2021
	€	€
<b>Fixed rate instruments</b>		
Financial assets	<b>7.503.225</b>	7.629.414
	<b>7.503.225</b>	7.629.414

#### Sensitivity analysis

An increase of 100 basis points in interest rates at 31 December 2022 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.

	2022	Profit or loss
	€	2021
		€
Variable rate instruments	<b>75.032</b>	76.294
	<b>75.032</b>	76.294



### 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.

#### *(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, the Authority 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/counterparty, 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. Top 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 2022 or 1 January 2022 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 2022 and 31 December 2021:

<b>Authority internal credit rating</b>	<b>External credit rating from Moody's agency</b>	<b>2022</b>	2021
		<b>€</b>	<b>€</b>
Performing	Ba3	<b>4.451.719</b>	4.991.183
Performing	B1	<b>3.051.506</b>	2.638.231
<b>Total</b>		<b>7.503.225</b>	7.629.414

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:

<b>Impairment losses</b>	<b>2022</b>	2021
	€	€
Impairment charge on cash and cash equivalents	<b>(43.726)</b>	(15.931)
Impairment charge trade receivables	-	(166)
Reversal of impairment cash and cash equivalents	<b>15.931</b>	40.449
Reversal of impairment trade receivables	<b>166</b>	1.071
<b>Net impairment (loss)/profit on financial and contract assets</b>	<b>(27.629)</b>	25.423

**(iv) Financial assets at fair value through profit or loss**

**(v) Credit related commitments**

The primary purpose of these instruments is to ensure that funds are available to a borrower as required. Guarantees which represent irrevocable assurances that the Authority will make payments in the event that a counterparty cannot meet its obligations to third parties, carry the same credit risk as loans receivable. Commitments to extend credit represent unused portions of authorisations to extend credit in the form of loans or guarantees. With respect to credit risk on commitments to extend credit, the Authority is potentially exposed to loss in an amount equal to the total unused commitments, if the unused amounts were to be drawn down. The Authority monitors the term to maturity of credit related commitments, because longer term commitments generally have a greater degree of credit risk than shorter term commitments.

## 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.

<b>31 December 2022</b>	Carrying amounts	Contractual cash flows	3 months or less	3-12 months	1-2 years	2-5 years	More than 5 years
	€	€	€	€	€	€	
Lease liabilities	1.383.934	1.383.934	-	145.814	317.974	552.340	367.806
Bank overdrafts	3.676	3.676	3.676	-	-	-	-
Trade and other payables	168.433	168.433	168.433	-	-	-	-
	<b>1.556.043</b>	<b>1.556.043</b>	<b>172.109</b>	<b>145.814</b>	<b>317.974</b>	<b>552.340</b>	<b>367.806</b>

<b>31 December 2021</b>	Carrying amounts	Contractual cash flows	3 months or less	3-12 months	1-2 years	2-5 years	More than 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	-	-	-	-
	<b>557.519</b>	<b>557.519</b>	<b>158.129</b>	<b>140.917</b>	<b>258.473</b>	-	-

### 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 for three years. The Authority has assessed whether the extension option is reasonably certain to be exercised by considering the terms of the agreement and has concluded that it is not reasonably certain that will be exercised.

#### **• 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's past experience and its future expectations. However, the actual outcome may vary from the amount recognised.

## 8. Revenue

<b>Disaggregation of revenue</b>	<b>2022</b>	2021
	€	€
Annual fees	<b>1.945.247</b>	2.099.410
Rendering of services	<b>175.691</b>	125.240
	<b>2.120.938</b>	2.224.650

## 9. Other operating income

<b>Disaggregation of revenue</b>	<b>2022</b>	2021
	€	€
Fair value gains on financial assets at fair value through profit or loss	<b>67.676</b>	34.578
Sundry operating income	<b>21.359</b>	105.674
	<b>89.035</b>	140.252

## 10. Operating surplus

	<b>2022</b>	2021
	€	€
Operating (deficit)/surplus is stated after charging the following items:		
Amortisation of computer software (included in "Administration expenses") (Note 18)	<b>1.633</b>	836
Depreciation of property, plant and equipment (Note 16), (Note 17)	<b>208.893</b>	227.692
Staff costs including Top Management in their executive capacity (Note 11)	<b>1.620.417</b>	1.447.421
Auditors' remuneration current year	<b>3.082</b>	3.083
Auditors' remuneration prior years	<b>(10.000)</b>	-
Trade receivables impairment charge for bad and doubtful debts	<b>-</b>	140

## 11. Staff costs

	<b>2022</b>	2021
	€	€
Salaries	<b>1.305.118</b>	1.114.557
Social security costs	<b>204.156</b>	173.907
Expenses related to defined benefits plan (Note 12)	<b>111.143</b>	158.957
	<b>1.620.417</b>	1.447.421

## 12. 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 2022 and it was based on the following assumptions:

	2022	2021
Discount rate	<b>3,83%</b>	1,24%
Expected return on assets	<b>3,83%</b>	1,24%
Inflation	<b>2,50%</b>	1,50%
General salary increase	<b>0,50%</b>	0,50%
Total salary increase	<b>1,75% + for the general increase of salaries and incremental promotions</b>	1,25% + for the general increase of salaries and incremental promotions
Percentage increase in pensions	<b>1,50%</b>	1%
Increase of pension insurable earnings	<b>2,50%</b>	1,50%
Increase of basic insurable earnings	<b>2%</b>	2%
Mortality table	<b>60% of PA90 for men and 65% of PA90 for women</b>	60% of PA90 for men and 65% of PA90 for women

Movement in the accumulated provision with respect to the retirement plan liabilities as shown in other liabilities is as follows:

	2022 €	2021 €
Current service costs	<b>81.084</b>	104.056
Interest on obligation	<b>30.059</b>	18.575
Pre service cost	-	36.326
	<b>111.143</b>	158.957



Movement in the accumulated provision with respect to the retirement plan liabilities as shown in other liabilities is as follows:

	2022 €	2021 €
Balance at 1 January	2.386.826	2.698.178
Provision for the year	111.143	158.957
Actuarial gain	(1.005.291)	(433.084)
Payment of benefits	(25.416)	(55.708)
Contributions by Top Management	18.935	18.483
<b>Balance at 31 December</b>	<b>1.486.197</b>	<b>2.386.826</b>

At 31 December 2022 the actuarial position in respect of the defined benefit plan was as follows:

	2022 €	2021 €
Present value of accrued plan obligations	1.486.197	2.386.826
<b>Provision for plan liabilities recognised in the statement of financial position</b>	<b>1.486.197</b>	<b>2.386.826</b>

### 13. Finance income/(costs)

	2022 €	2021 €
Interest income	46.122	49.288
<b>Finance income</b>	<b>46.122</b>	<b>49.288</b>
Interest expense on lease liabilities	(51.363)	(15.695)
Other interest expense	(5.500)	(5.598)
Sundry finance expenses	(24.661)	(15.084)
<b>Finance costs</b>	<b>(81.524)</b>	<b>(36.377)</b>
<b>Net finance (costs)/income</b>	<b>(35.402)</b>	<b>12.911</b>

## 14. Tax

	<b>2022</b>	2021
	€	€
Defence contribution	<b>1.686</b>	2.247
<b>Charge for the year</b>	<b>1.686</b>	2.247

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.

The tax on the Authority's results before tax differs from theoretical amount that would arise using the applicable tax rates as follows:

	<b>2022</b>	2021
	€	€
(Deficit)/surplus before tax	<b>(261.084)</b>	109.080
Tax calculated at the applicable tax rates		
Tax effect of expenses not deductible for tax purposes	<b>(32.636)</b>	13.635
Tax effect of allowances and income not subject to tax	<b>48.873</b>	41.500
Tax effect of tax loss for the year	<b>(16.237)</b>	(55.270)
Defence contribution current year	-	135
Tax charge	<b>1.686</b>	2.247
	<b>1.686</b>	2.247

## 15. Dividends

	<b>2022</b>	2021
	€	€
Defence contribution on deemed distribution	<b>4.871</b>	3.389
	<b>4.871</b>	3.389

Deemed dividends are subject to special contribution for defence at 17% for shareholders that are both Cyprus tax resident and Cyprus domiciled.

## 16. Property, plant and equipment

	Computer equipment	Office equipment	Motor vehicles	Furniture, fixtures and office equipment	Books	Total
	€	€	€	€	€	€
<b>Cost</b>						
Balance at 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
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>225.325</b>	<b>124.596</b>	<b>24.968</b>	<b>120.555</b>	<b>6.287</b>	<b>501.731</b>
Additions	12.051	3.045	-	390	550	16.036
<b>Balance at 31 December 2022</b>	<b>237.376</b>	<b>127.641</b>	<b>24.968</b>	<b>120.945</b>	<b>6.837</b>	<b>517.767</b>
<b>Depreciation</b>						
Balance at 1 January 2021	99.061	79.026	19.975	83.123	5.196	286.381
Charge for the year	29.114	7.280	4.993	5.731	151	47.269
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>128.175</b>	<b>86.306</b>	<b>24.968</b>	<b>88.854</b>	<b>5.347</b>	<b>333.650</b>
Charge for the year	28.884	6.101	-	4.859	207	40.051
<b>Balance at 31 December 2022</b>	<b>157.059</b>	<b>92.407</b>	<b>24.968</b>	<b>93.713</b>	<b>5.554</b>	<b>373.701</b>
<b>Net book amount</b>						
<b>Balance at 31 December 2022</b>	<b>80.317</b>	<b>35.234</b>	<b>-</b>	<b>27.232</b>	<b>1.283</b>	<b>144.066</b>
<b>Balance at 31 December 2021</b>	<b>97.150</b>	<b>38.290</b>	<b>-</b>	<b>31.701</b>	<b>940</b>	<b>168.081</b>

## 17. Right of use assets

	<b>Buildings</b>
	<b>€</b>
<b>Cost</b>	
Balance at 1 January 2021	825.432
Adjustment to right of use asset	(21.802)
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>803.630</b>
Adjustment to right of use asset	715.966
<b>Balance at 31 December 2022</b>	<b>1.519.596</b>
<b>Depreciation</b>	
Balance at 1 January 2021	190.484
Charge for the year	180.422
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>370.906</b>
Charge for the year	168.842
Adjustment to right of use asset	(370.904)
<b>Balance at 31 December 2022</b>	<b>168.844</b>
<b>Net book amount</b>	
<b>Balance at 31 December 2022</b>	<b>1.350.752</b>
<b>Υπόλοιπο στις 31 Δεκεμβρίου 2021</b>	<b>432.724</b>

Amounts recognised in profit and loss:

	<b>2022</b>	2021
	<b>€</b>	€
Depreciation expense on right of use assets	<b>155.492</b>	180.422
Interest expense on lease liabilities	<b>(51.363)</b>	(15.672)

In the statement of cash flows, the income receipts due to the write off of right-of-use assets include:

	<b>2022</b>	2021
	<b>€</b>	€
Net book amount	<b>(370.904)</b>	-
Income receipts due to the write off of right-of-use assets	<b>(370.904)</b>	-

## 18. Intangible assets

	<b>Computer software</b>
	<b>€</b>
<b>Cost</b>	
Balance at 1 January 2021	16.841
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>16.841</b>
Additions	4.900
<b>Balance at 31 December 2022</b>	<b>21.741</b>
<b>Amortisation</b>	
Balance at 1 January 2021	16.005
Amortisation for the year (Note 10)	836
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>16.841</b>
Amortisation for the year (Note 10)	1.633
<b>Balance at 31 December 2022</b>	<b>18.474</b>
<b>Net book amount</b>	
<b>Balance at 31 December 2022</b>	<b>3.267</b>

## 19. Financial assets at fair value through other comprehensive income

	2022 €	2021 €
Balance at 1 January	3.181.950	3.280.080
Revaluation difference transferred to equity	(456.000)	(98.130)
<b>Balance at 31 December</b>	<b>2.725.950</b>	<b>3.181.950</b>

	Κόστος		Εύλογη αξία	
	2022 €	2021 €	2022 €	2021 €
Bonds	2.990.387	2.990.387	2.725.950	3.181.950
	<b>2.990.387</b>	<b>2.990.387</b>	<b>2.725.950</b>	<b>3.181.950</b>

The details of the investments are as follows:

Name	2022 €	2021 €
Government Bonds of the Republic of Cyprus	2.725.950	3.181.950
	<b>2.725.950</b>	<b>3.181.950</b>

## 20. Trade and other receivables

	2022 €	2021 €
Trade receivables	59.397	19.507
Less: credit loss on trade receivables	-	(166)
Trade receivables net	59.397	19.341
Deposits and prepayments	104.059	58.759
Accrued income	32.328	33.630
Other receivables	1.959	-
	<b>197.743</b>	<b>111.730</b>

The Authority has not recognised a loss for the impairment of its trade receivables during the year ended 31 December 2022 (2021: €140).

The Authority does not hold any collateral over the trading balances.

Movement in provision for impairment of receivables:

	<b>2022</b>	2021
	€	€
Balance at 1 January	<b>166</b>	1.071
Impairment losses recognised on receivables	<b>(166)</b>	(905)
<b>Balance at 31 December</b>	<b>-</b>	166

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.

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

	<b>2022</b>	2021
	€	€
Balance at 1 January	<b>112.088</b>	77.510
Change in fair value	<b>67.675</b>	34.578
<b>Balance at 31 December</b>	<b>179.763</b>	112.088

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 2022 their market value was €1.70 per share (2021: €1.06 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.

## 22. Cash at bank and in hand

Cash balances are analysed as follows:

	<b>2022</b>	2021
	€	€
Cash in hand	<b>197</b>	2.030
Cash at bank	<b>4.230.720</b>	3.344.826
Bank deposits	<b>3.316.034</b>	4.298.489
Accumulated impairment losses on cash and cash equivalents	<b>(43.726)</b>	(15.931)
	<b>7.503.225</b>	7.629.414

For the purposes of the statement of cash flows, the cash and cash equivalents include the following:

	<b>2022</b>	2021
	€	€
Cash at bank and in hand	<b>4.187.191</b>	3.330.925
Bank overdrafts (Note 23)	<b>(3.676)</b>	(6.729)
	<b>4.183.515</b>	3.324.196

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.

## 23. Borrowings

	<b>2022</b>	2021
<b>Current borrowings</b>	€	€
Bank overdrafts (Note 22)	<b>3.676</b>	6.729



## 24. Lease liabilities

	2022	2021
	€	€
Balance at 1 January	445.663	649.793
Repayments	(199.485)	(198.000)
Interest	63.823	16.335
Adjustments	1.073.933	(22.465)
<b>Balance at 31 December</b>	<b>1.383.934</b>	<b>445.663</b>

	Minimum lease payments	Interest	Principal	Minimum lease payments	Interest	Principal
	2022	2022	2022	2021	2021	2021
	€	€	€	€	€	€
Within one year	203.940	58.126	145.814	198.000	10.810	187.190
Between one and five years	1.451.499	213.379	1.238.120	264.000	5.527	258.473
	<b>1.655.439</b>	<b>271.505</b>	<b>1.383.934</b>	<b>462.000</b>	<b>16.337</b>	<b>445.663</b>

All lease obligations are denominated in Euro.

## 25. Provisions for other liabilities and charges

	Pension and other post retirement obligations
	€
Balance at 1 January 2021	2.698.178
Charged to profit or loss	158.957
Payment of benefits	(55.709)
Contributions by members	18.484
Actuarial gain	(433.084)
<b>Balance at 31 December 2021/ 1 January 2022</b>	<b>2.386.826</b>
Charged to profit or loss	111.143
Payment of benefits	(25.416)
Contributions by members	18.935
Actuarial gain	(1.005.291)
<b>Balance at 31 December 2022</b>	<b>1.486.197</b>

The amounts included in the statement of financial position include the following:

	<b>2022</b>	2021
	€	€
Provisions to be used after more than twelve months	<b>1.400.332</b>	2.281.596
Provisions to be used within twelve months	<b>85.865</b>	105.230

## 26. Trade and other payables

	<b>2022</b>	2021
	€	€
Trade payables	<b>19.609</b>	12.297
Prepayments from clients	<b>14.477</b>	3.125
VAT	<b>1.006</b>	576
Government grants refund	<b>49.203</b>	16.793
Accruals	<b>9.400</b>	38.390
Other creditors	<b>85.144</b>	72.912
Defence tax on deemed distribution	<b>4.871</b>	3.389
Defence tax on rent payable	<b>1.147</b>	-
	<b>184.857</b>	147.482

## 27. Deferred income

	<b>2022</b>	2021
	€	€
Client advances	<b>2.211.555</b>	2.098.699
	<b>2.211.555</b>	2.098.699

## 28. Current tax liabilities

	<b>2022</b>	2021
	€	€
Special contribution for defence	<b>3.777</b>	1.468
	<b>3.777</b>	1.468

## 29. Operating Environment of the Authority

The geopolitical situation in Eastern Europe intensified on 24 February 2022 with the commencement of the conflict between Russia and Ukraine. As at the date of authorising these financial statements for issue, the conflict continues to evolve as military activity proceeds. In addition to the impact of the events on entities that have operations in Russia, Ukraine, or Belarus or that conduct business with their counterparties, the conflict is increasingly affecting economies and financial markets globally and exacerbating ongoing economic challenges.

The European Union as well as United States of America, Switzerland, United Kingdom and other countries imposed a series of restrictive measures (sanctions) against the Russian and Belarussian government, various companies, and certain individuals. The sanctions imposed include an asset freeze and a prohibition from making funds available to the sanctioned individuals and entities. In addition, travel bans applicable to the sanctioned individuals prevents them from entering or transiting through the relevant territories. The Republic of Cyprus has adopted the United Nations and European Union measures. The rapid deterioration of the conflict in Ukraine may as well lead to the possibility of further sanctions in the future.

Emerging uncertainty regarding global supply of commodities due to the conflict between Russia and Ukraine conflict may also disrupt certain global trade flows and place significant upwards pressure on commodity prices and input costs as seen through early March 2022. Challenges for companies may include availability of funding to ensure access to raw materials, ability to finance margin payments and heightened risk of contractual non performance. The impact on the Authority largely depends on the nature and duration of uncertain and unpredictable events, such as further military action, additional sanctions, and reactions to ongoing developments by global financial markets. The financial effect of the current crisis on the global economy and overall business activities cannot be estimated with reasonable certainty at this stage, due to the pace at which the conflict prevails and the high level of uncertainties arising from the inability to reliably predict the outcome.

The event did not exist in the reporting period and is therefore not reflected in the recognition and measurement of the assets and liabilities in the financial statements as at 31 December 2022 as it is considered as a non adjusting event.

The Authority has limited direct exposure to Russia, Ukraine, and Belarus and as such does not expect significant impact from direct exposures to these countries.

Despite the limited direct exposure, the conflict is expected to negatively impact the tourism and services industries in Cyprus. Furthermore, the increasing energy prices, fluctuations in foreign exchange rates, unease in stock market trading, rises in interest rates, supply chain disruptions and intensified inflationary pressures may indirectly impact the operations of the Authority. The indirect implications will depend on the extent and duration of the crisis and remain uncertain.

## 30. 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:

### 30.1 Top Management's remuneration

The remuneration of Top Management was as follows:

	2022 €	2021 €
Top Management's remuneration in their executive capacity	265.022	255.577
	<u>265.022</u>	<u>255.577</u>

## 31. Contingent liabilities

As at 31 December 2022 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 set for November 29, 2023 and the Plaintiff through the lawsuit claims the amount of €22,015,373 as damages under Article 146.6 of the Constitution and the amount of €1,300,651 as special damages for expenses and losses for the purposes of submitting applications, licensing and preparation for the operation of the wind park for electricity production. The possible outcome of the case in question cannot be predicted with certainty, however, based on the parties' written positions and the available testimony, it is considered that the Action against CERA does not have much chance of success.

### Energean International Limited against Cyprus Energy Regulatory Authority (Lawsuit number 306/2020):

The appeal was registered on February 4, 2020 challenging CERA's decision to reject the application for a license to own, construct and operate a natural gas facility. The possible outcome of the case is to be rejected with costs in favor of CERA as the application does not fall within the scope of the Natural Gas Market Regulation Law (Law 183(I)/2004). The case is set for September 28, 2023. In case of success of the appeal, CERA will be asked to pay the Claimants the costs of the court proceedings as they will be awarded by the court decision.

### Energean International Limited against Cyprus Energy Regulatory Authority (Lawsuit number 947/2020):

The appeal was registered on October 7, 2020 challenging CERA's decision to reject the application for a license to supply natural gas to wholesale customers. The possible outcome of this case is to be dismissed with costs in favor of CERA as based on the decision of the Council of Ministers no. 87.649 the license to supply natural gas under a monopoly regime may be granted to a legal entity under public law that has been established by law and is controlled by the Republic and the Applicant does not meet the conditions. The case was heard on February 20,

2023 and a Court Decision is pending. If the appeal is successful, CERA will be asked to pay the Applicants the costs of the court proceedings as they will be awarded by the court decision.

## 32. Commitments

### Operating lease commitments

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

	<b>2022</b>	2021
	<b>€</b>	€
Within one year	<b>269.167</b>	297.274
Between one and five years	<b>184.144</b>	115.334
	<b>453.311</b>	412.608

## 33. 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.

Except from the matters mentioned above, 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 105 to 107**

## DETAILED INCOME STATEMENT

For the year ended 31 December 2022

	Page	2022 €	2021 €
<b>Revenue</b>			
Annual fees		<b>1.945.247</b>	2.099.410
Rendering of services		<b>175.691</b>	125.240
<b>Other operating income</b>			
Sundry operating income		<b>21.359</b>	105.674
Fair value gains on financial assets at fair value through profit or loss		<b>67.676</b>	34.578
Reversal of impairment cash and cash equivalents		<b>15.931</b>	40.449
Reversal of impairment trade receivables		<b>166</b>	1.071
		<b>2.226.070</b>	2.406.422
<b>Operating expenses</b>			
Administration expenses	153	<b>(2.408.026)</b>	(2.294.016)
Selling and distribution expenses	153	-	(140)
		<b>(181.956)</b>	112.266
<b>Other operating expenses</b>			
Impairment charge on cash and cash equivalents		<b>(43.726)</b>	(15.931)
Impairment charge trade receivables		-	(166)
<b>Operating (deficit)/surplus</b>		<b>(225.682)</b>	96.169
Finance income	154	<b>46.122</b>	49.288
Finance costs	154	<b>(81.524)</b>	(36.377)
<b>Net (deficit)/surplus for the year before tax</b>		<b>(261.084)</b>	109.080

## OPERATING EXPENSES

For the year ended 31 December 2022

	2022	2021
	€	€
<b>Administration expenses</b>		
Top Management remuneration	265.022	255.577
Staff salaries	1.040.096	857.475
Benefits in kind	-	1.505
Social security costs	165.702	141.037
Medical fund	38.454	32.870
Expenses related to defined benefits plan	111.143	158.957
Municipality taxes	1.060	1.000
Electricity	32.016	18.626
Water supply and cleaning	26.961	27.971
Insurance	2.523	1.821
Repairs and maintenance	4.635	1.209
Sundry expenses	352	200
Telephone and postage	1.069	2.241
Stationery and printing	6.345	7.676
Subscriptions and contributions	25.794	30.148
Newspapers and publications	23	-
Equipment maintenance	1.400	4.528
Staff training	82.343	42.625
Computer software	26.812	23.858
Certification and legalisation expenses	1.470	-
Auditors' remuneration current year	3.082	3.083
Auditors' remuneration prior years	(10.000)	-
Accounting fees	-	4.100
Legal fees	17.495	7.231
Other professional fees	2.173	3.683
Overseas travelling	16.581	2.463
Inland travelling and accommodation	29	170
Irrecoverable VAT	66.387	98.653
Entertaining	11.124	3.216
Motor vehicle running costs	31.523	4.001
Carriage and clearing	701	1.970
Consulting fees	194.058	300.428
Announcements and publications	5.617	3.661
Sundry allowances and representations	20.910	22.140
Events costs	3.100	1.240
Parking rent	1.500	125
Amortisation of computer software	1.633	836
Depreciation of right of use assets	40.049	-
Depreciation on fixed assets	168.844	227.692
	<b>2.408.026</b>	<b>2.294.016</b>
<b>Selling and distribution expenses</b>		
Bad debts written off	-	140
	-	140

## FINANCE INCOME/COSTS

For the year ended 31 December 2022

	2022	2021
	€	€
<b>Finance income</b>		
Bank interest	1.122	2.855
Other interest received	45.000	46.351
Interest on trade balances	-	82
	<b>46.122</b>	<b>49.288</b>
<b>Finance costs</b>		
<b>Interest expense</b>		
Interest expense on lease liabilities	51.363	15.695
Bank interest	5.377	5.430
Interest on taxes	123	168
<b>Sundry finance expenses</b>		
Bank charges	21.990	14.994
Other finance expenses	2.671	90
	<b>81.524</b>	<b>36.377</b>

## COMPUTATION OF DEFENCE CONTRIBUTION

For the year ended 31 December 2022

	Income	Rate	Defence
	€		€ c
<b>INTEREST</b>			
Interest that was not subject to deduction at source	45.000	3%	1.350,00
Interest that was subject to deduction at source	1.122	30%	336,60
	<b>46.122</b>		<b>1.686,60</b>
<b>DEFENCE CONTRIBUTION DUE TO IRD</b>			<b>1.686,60</b>



## COMPUTATION OF CORPORATION TAX

For the year ended 31 December 2022

	Page	€	€
Net loss per income statement	152		(261.084)
<b>Add:</b>			
Depreciation		210.526	
Impairment charge on cash and cash equivalents		136.604	
Interest on taxes		43.726	
Other non allowable expenses		123	
			<u>390.979</u>
			129.895
<b>Less:</b>			
Fair value gains on financial assets at fair value through profit or loss		67.676	
Reversal of impairment cash and cash equivalents		15.931	
Reversal of impairment trade receivables		166	
Interest income		46.122	
			<u>(129.895)</u>
<b>Chargeable income for the year</b>			<u><u>-</u></u>





