

# 2022 Operating Statement

Podgorica,  
June 2023

OF CRNOGORSKI ELEKTROPRENOSNI SISTEM AD



CRNOGORSKI  
ELEKTROPRENOSNI  
SISTEM

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# Opening Statement

Dear friends,

Despite a very dynamic and challenging year, which we will remember as a year marked by the energy crisis at the global level, but which, thanks to the ability and expertise of our employees and applying the highest business standards, we successfully overcame, we will remember 2022 for numerous successes, new beginnings and exceptional financial indicators. In such circumstances, it was extremely important to preserve the Company's key resources and continue the trend of constant growth and achieving impressive results, and we succeeded in this.

With the realised net income of 20.3 million euros, which is the historical result of CGES, and the investment momentum that we have implemented to a good extent, we not only achieved the set goals, but with the help of all 317 employees, we exceeded them. It is important to point out that not only our owners will benefit from this profit, but also all end users, to whom we will return about two-thirds of this profit, which amounts to about 15 million, in the coming years through adjustments, i.e. through a reduction in the electricity transmission tariff.

We believe that the investments we have completed, as well as those that are in progress, have a strong impact on economic activity in our country and that they significantly contribute to the increase in employment and GDP growth, as well as to position the Company, and the state of Montenegro, in the place of one from the central actors of electric power events in Southeast Europe. We believe that we have demonstrated the stability and strength of CGES through the implementation of previous projects, among which the submarine interconnection with Italy stands out.



**Ivan Asanović,**  
Executive Director

Our primary goal in the coming period will be the development of the transmission network evenly throughout the country, respecting the needs of current and future users, taking into account sustainability and environmental friendliness, with full awareness of the importance of environmental protection. As a socially responsible company, we will devote full attention to this goal.

We continue to invest in the transmission network, which is clearly confirmed by the fact that we will invest 195 million euros in the next five years, remaining consistent with our strategic commitment to expand our business in a responsible, profitable and sustainable manner.

And finally, I want to sincerely thank all our employees - talented, brilliant and dedicated people, who achieve exceptional results through teamwork, and who share the Company's desire to inspire a better future for the communities in which we operate and live together. We continue on the path of success, with a firmly established business strategy, a motivating environment for our employees and support for valuable initiatives in the local community. I am sure that in the coming year we will have many reasons for mutual joy.







# About **us**

The core activity of Crnogorski elektroprenosni sistem (CGES) is electricity transmission. In accordance with EU regulations related to the liberalisation of the electricity market, the Company was registered as an independent joint-stock company on 27 March 2009. The reliability and quality of the service we provide to our customers are guaranteed by decades of experience in the development, operation, maintenance and control of the transmission system, acquired through a number of organisational forms within the Montenegrin electricity sector since 1957, when the first facility of the Montenegrin transmission network was put into operation.

In addition to controlling the operation of the transmission system in compliance with operational parameters, procedures of importance for operation in European interconnection and market principles, Crnogorski elektroprenosni sistem AD maintains, improves and develops the transmission network using the latest technologies. Thereby, the transmission of electricity in Montenegro, as an activity of public interest, continuously provides the preconditions for proper power supply to users, reliable placement of energy produced and significant transits through our territory. Wise business decisions are necessary in order to overcome periods of extensive works, significant investments and fluctuations in business costs without negative impact on users.

In addition to electricity transmission, the Company also has a license to provide telecommunication services, thanks to its network of optical telecommunication fibres, about 730 kilometres long, throughout the country.

From the connection of the first substation in Nikšić until today, the electricity transmission system of Montenegro has come a long way. The main goal of the Company, during all these decades of change and innovation, has always been and remains a satisfied transmission system user.

## Ownership structure

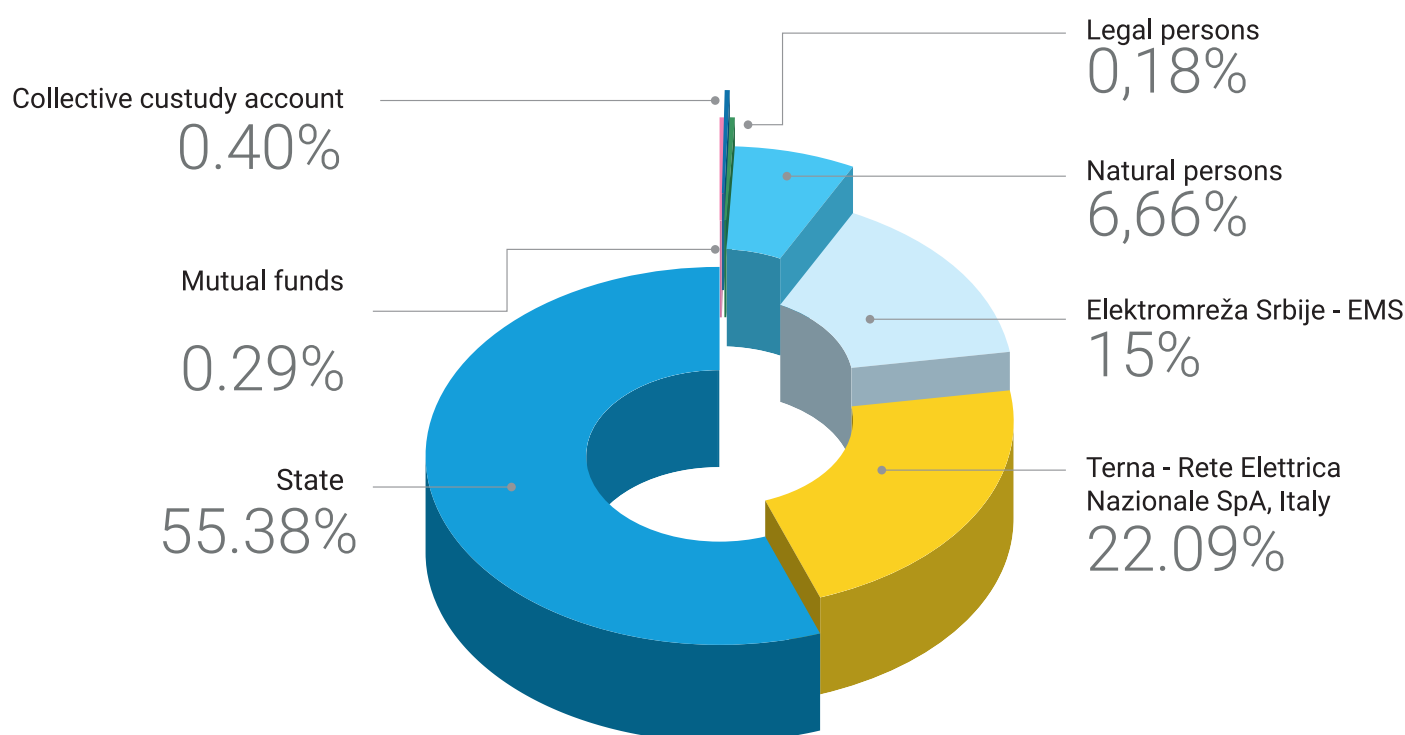
As of 31 December 2022, the share capital structure was the following:

The share capital of CGES amounts to €155,108,283, divided into 146,176,876 shares with the nominal value of €1.0611. The total number of shareholders, according to data from the Central Depository Agency as of 31 December 2022, is 6,940.

The ownership structure of CGES as of 31 December

2022 was the following: The State of Montenegro holds 55.38%, Terna Rete Nazionale S.p.A. 22.09%, JSC Elektromreža Srbije - Beograd 15.00%, natural persons 6.66%, collective custody accounts 0.40%, mutual funds 0.29%, legal persons 0.18%.

### Shareholders (%)



## Organisation

The authorities of the Company and their responsibilities are determined by the Companies Act and the By-Laws of the Company.

**The Shareholder Meeting** is the ultimate authority of the Company. Through the Meeting, shareholders pass and approve the most important acts, property, election and status related decisions. The XIII Annual Shareholder Meeting of CGES was held during 2022, as well as one Extraordinary Shareholder Meeting in December 2022.

In addition to decisions adopting the 2021 Operating Statement, 2021 Financial Statements with Auditor's Report and Decision on selection of an auditor for 2021, members of the Board of Directors were elected at the Meeting.

**The Board of Directors** is authorised to manage the Company, give guidelines to the Executive Director in terms of managing the Company's operations and monitor the Company's operations. CGES' Board of Directors consists of seven members who



after the removal of the previous convocation, were elected at the XIII Annual Shareholder Meeting held on 30 June 2022.

In terms of chairing the Board of Directors, this has been a dynamic year. In the period from January to July 2022, the Board was chaired by Aleksandar Mijušković, after which, according to the Decision of the Constitutive Meeting of the XVIII convocation, which followed the appointment of the new convocation of the Board of Directors, the chairmanship was taken over by a member of this body, Mijat Mirković. He presided over this body until 12 December 2022, after which, as a result of the XII Extraordinary Shareholder Meeting and in accordance with the Decision of the Constitutive Meeting of the XIX Convocation of the Board of Directors.

**The Executive Director** is authorised to manage the Company's assets and organise and lead the business activities of the Company, to represent the Company and to take care of the legality of the Company's work.

In November 2021, the Board of Directors of Crnogorski elektroprenosni sistem AD appointed Ivan Asanović, Bachelor of Science in Electrical Engineering, the former Acting Executive Director, to the position of Executive Director with a four-year term. Significant business experience and continuous professional development of Ivan Asanović, have determined the members of the CGES Board of Directors to unanimously decide on his appointment to this position.

## Social responsibility

For many years, we have been building ties with the community that do not rest only on our electric power infrastructure. The network of good social initiatives that we launch and those that we support day by day strengthens the relationship of trust with our employees, shareholders, partners and society as a whole. In this way, through planned socially responsible activities, we strive to share part of our business success with the community, and we succeed in this.

In this regard, also during 2022, Crnogorski elektroprenosni sistem initiated a network of good projects and thereby encouraged the development of culture, art, sport, education and environmental protection. When it comes to sport and the numerous sponsorships that were signed during 2022, it is necessary to point out that even then our focus was on support and long-term cooperation with the Paralympic Committee of Montenegro, and we are very proud of that. Of course, the sponsorship of the racing driver Filip Kunčer, whose results leave no one indifferent, with whom a general sponsorship was signed, but also the support of numerous so-called "small", but big clubs with great results, such as: Judo Club Straševina, Football Club Nacional, Volleyball Club Tempo, Basketball Club Podgorica, Table Tennis Club Gorštak and Ski Club Bjelasica.

When it comes to this extremely important segment, we sponsored the Public Institution Contem-

porary Arts Centre, i.e. a project that until now was not available to domestic audience and production, therefore, this sponsorship was of inestimable importance for the inclusion of the Montenegrin art scene in the most modern world. We have not forgotten individual artists, as well as writers.

Among the long-term programmes are certainly partnerships with educational institutions, elementary schools and preschool institutions. We strive to provide the best possible conditions for children, but also for teaching staff, so that our donations for the purchase of IT equipment and numerous electronic devices have pleased educational institutions throughout Montenegro (Educational Centre in Šavnik, Public Institution Elementary School Mihailo Žugić in Odžaci, Public Preschool Institution Ljubica Popović, Children's Alliance Nikšić).

We also do not forget the individuals-talents who have earned our attention with their results in previous competitions.

Cooperation with municipalities and local communities is in our focus, especially those where CGES infrastructure is present. We have a feeling for problems that locals face and this is a good example of our responsibility. In this regard, we helped the local communities of Kosanica and Gornji Grbalj.

An open door policy and cooperation with the non-governmental sector and civil initiatives can lead to solving many pressing problems in society.

Realising the importance of these associations and such initiatives, many humanitarian actions in the previous period were supported by our Company, and we are proud of that. On this occasion we will mention: NGO Pandurica, Marija Kotri Foundation, Association for Help and Support of People with Cystic Fibrosis of Montenegro, Vermikompost farm, NGO New Chance (MNE: Nova šansa), humanitarian action Heart for Montenegro (MNE: Srcem za Crnu Goru), campaign to distribute gift packages to children from socially disadvantaged families and individuals.

Understanding the significance and importance of human resources, the primary task of the Company is to take care of its employees. For this reason, we also helped the CGES Trade Union, in the spirit of good partnership.

Our employees are our wealth. Being responsible towards them and their family members makes CGES stand out for that too. In accordance with such a value system, the Company expresses its responsibility in several ways. Namely, in the desire to approach each employee with dedication and responsibility, we granted scholarships to the children of deceased employees and in this way proved that,

unfortunately, we also take care of their families in these situations. We are also proud of this form of social responsibility.

We have focused part of our attention and concern on the not small number of individual requests for financial assistance for the treatment of mainly sick children, one-time financial assistance during studies, as well as those who are in an unenviable financial situation, all in accordance with the Procedure for granting donations, sponsorships, assistance and scholarships.

As a socially responsible company, which has always had a special sensibility towards domestic intelligence, the acquisition of knowledge and the improvement of future personnel, primarily electrical engineers, Crnogorski elektroprenosni sistem is recognised as one of the largest employers of electrical engineers, and precisely for this reason, we perceive the Faculty of Electrical Engineering in Podgorica as a strategic partner in the field of higher education, with whom we also signed a Contract on business and technical cooperation in 2022.





## Environmental protection

Within the permanent activities of the Company to ensure environmental protection, numerous activities were performed:

▶ Periodic measurements of electromagnetic radiation levels were performed by an accredited institution in the following substations (SSs): SS 400/110/35 kV Lastva, SS 400/110/35 kV Ribarevine, SS 220/110/35 kV Mojkovac, SS 110/35 kV Budva, SS 110/35 kV Kotor, SS 110/35 kV Virpazar and SS 110 kV Danilovgrad, and on the 400 kV overhead line Lastva - Čevo. Along with the measurement reports, expert opinions on meeting the requirements for sources of electromagnetic fields with regard to prescribed exposure limits for electromagnetic fields were submitted for each facility.

The measurements were performed in accordance with the Law on Protection against Non-ionizing Radiation, and the measured values are lower than prescribed by the Rulebook on the limits of exposure to electromagnetic fields.

Pursuant to the provisions of the Law on Protection against Non-ionizing Radiation, an Exposure Risk Assessment was made for professionally exposed persons and persons responsible for the application of protection measures against non-ionizing radiation, and four employees were professionally trained to implement protection measures against non-ionizing radiation.

▶ Waste management is performed in accordance with the principles of sustainable development, i.e. more efficient use of resources, which means preventing waste whenever possible, proper storage of waste (especially hazardous), preparation of existing waste for reuse, recycling or energy recovery, where most of the waste produced is recycled. Our company handles waste in accordance with the Law on Waste Management

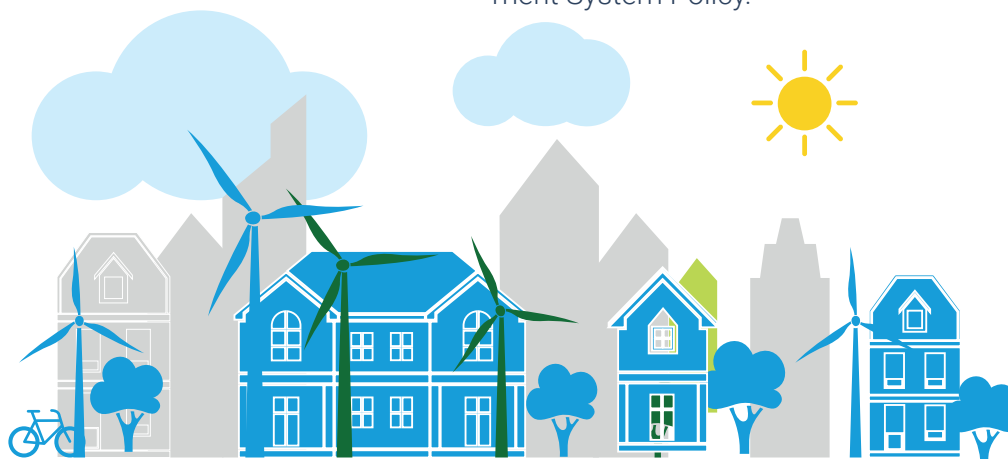
and according to the Waste Management Plan of CGES AD. Annual reports on waste management are submitted to the Nature and Environment Protection Agency of Montenegro and MONSTAT. In 2022, due to large investments in the replacement of high-voltage equipment, in addition to ongoing maintenance of equipment, a significant increase in produced waste is recorded compared to previous years.

▶ The Annual Waste Report FY 2021 was submitted to the Environmental Protection Agency, and the data from the report were also submitted to MONSTAT.

▶ Data on installed equipment with SF6 gas in 2021 was submitted to the Environmental Protection Agency for the purpose of updating the comprehensive inventory of air emissions for 2020.

▶ Compensation measures were implemented in the previous year related to the settlement of liabilities to the Environmental Protection Fund of Montenegro (ECO FUND), which collects and invests funds in building a sustainable society in Montenegro and PE National Parks of Montenegro for the purpose of passing transmission system facilities through national parks.

The implementation of the integrated management system (ISO 9001, ISO 14001 and ISO 45001), which is ongoing, as far as the environment is concerned, it is expected to improve the performance of the environmental management system, fulfil obligations for compliance with identified aspects and impacts and achieve goals in accordance with the adopted Integrated Management System Policy.



## On the path to even better cooperation

Recognising the importance and role of one of the most prestigious events in the world for the promotion of the state and its potentials, Crnogorski elektroprenosni sistem in cooperation with the Ministry of Capital Investments and Elektroprivreda Crne Gore took part in the EXPO - "Dubai 2020", under the slogan "Green Energy Transition" in Montenegro". CGES was represented by the Chairman of the Board of Directors, Aleksandar Mijušković, and the Executive Director, Ivan Asanović, who presented details of development and investment projects in the Montenegrin energy sector to potential investors at numerous bilateral and multilateral meetings.

With the aim of continuous improvement and careful monitoring of all changes in such a dynamic sector as energy, representatives of CGES also participated in the 37th International Conference "Energy 2022". This conference has become a kind of vanguard of the energy sector, where science and profession meet with energy companies and energy-related industry to analyse and improve the existing regulatory framework and the economic-financial environment, thus charting the paths of energy development.

CGES also participated in the panel with the topic "Renewable energy sources - present and future" as



The Chairman of the Board of Directors, Aleksandar Mijušković, participated in the NET conference, organised by Elektroprivreda Crne Gore, on the panel "Liberalisation of the market and the advantages of establishing a regional electricity exchange".

part of the "Sixth days of engineers of the Engineering Chamber of Montenegro", where the Executive Director of the Company, Ivan Asanović, informed attendees about the trend of rapid growth in the generation of electricity from renewable sources,

with the progress and development of transmission capacities in Montenegro, but also with all other advances, modernisations and improvements aimed at strengthening the electricity transmission infrastructure for the security of the entire system.

The Executive Director was also a member of the Montenegrin delegation led by the Prime Minister of Montenegro, which participated in the regional conference "Possibility of investing in renewable energy sources in the Western Balkans" at the invitation of the Kingdom of Norway, which organised the conference in cooperation with the Nordic Business Alliance, the Norway-Bosnia and Herzegovina Business Association and the Norwegian partners for cooperation in the field of energy.

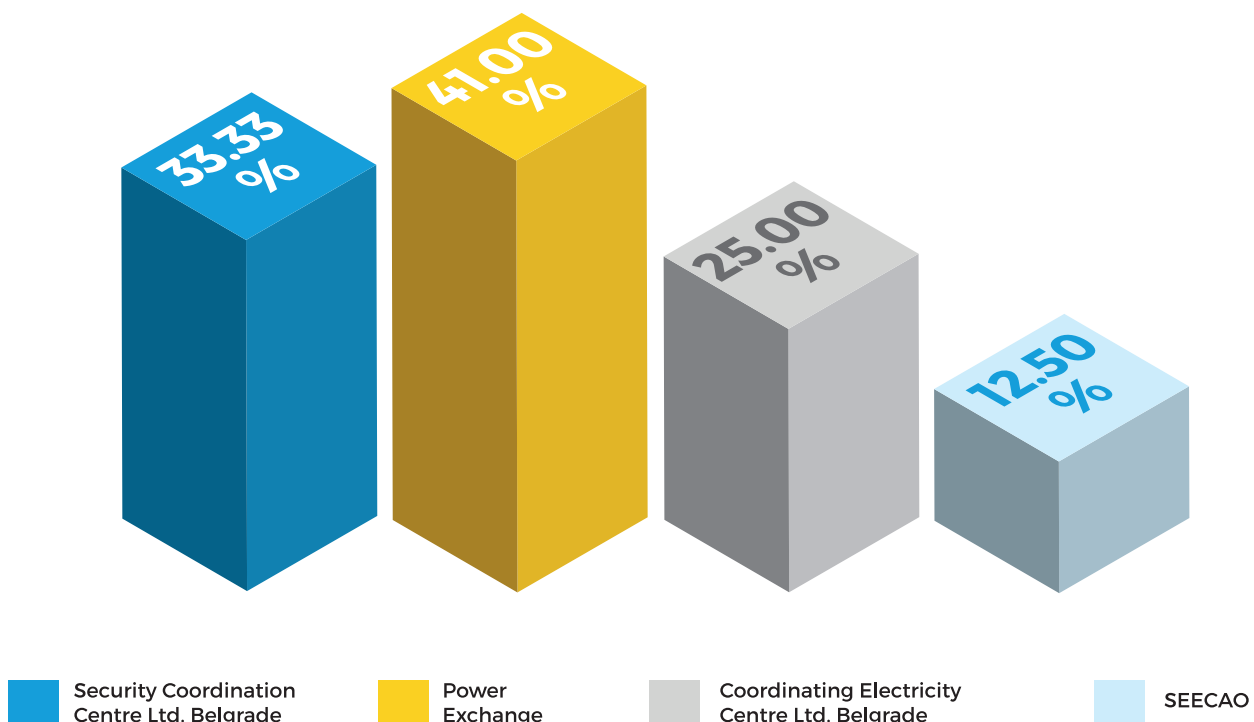
Last, but not least, this year CGES achieved wonderful cooperation through an agreement on business and technical cooperation with the Olive Growers Association Boka through which the project Our Olive, the most beautiful combination of the philosophy of sustainable business, cooperation with local communities and care about the environment. was implemented. Namely, CGES improved the area in the immediate vicinity of SS Lastva by raising a plantation of 1,000 olive trees.

Dean of the Faculty of Electrical Engineering, PhD Saša Mujović, and the Chairman of the Board of Directors, Aleksandar Mijušković, signed an agreement on business and technical cooperation with the aim of strengthening the strategic cooperation that has been nurtured for years, in honour of which one of the amphitheatres of this higher education institution was named "CGES".

## Legal persons in which CGES has an ownership share

CGES has control and impact on the operations and decision-making, proportionally to its ownership share, of the following legal persons:

## Legal persons in which CGES has an ownership share







# Our team

The energy sector is undergoing a radical and rapid transformation: requirements for the transmission system operator are evolving, challenges are increasing, and our ways of working and the skills we need are changing. In this context, our human

resources are vital to accepting the challenges of the current energy transition, and thus to the growth and development of our company. No change can happen if it is not initiated by people.

## Human resources

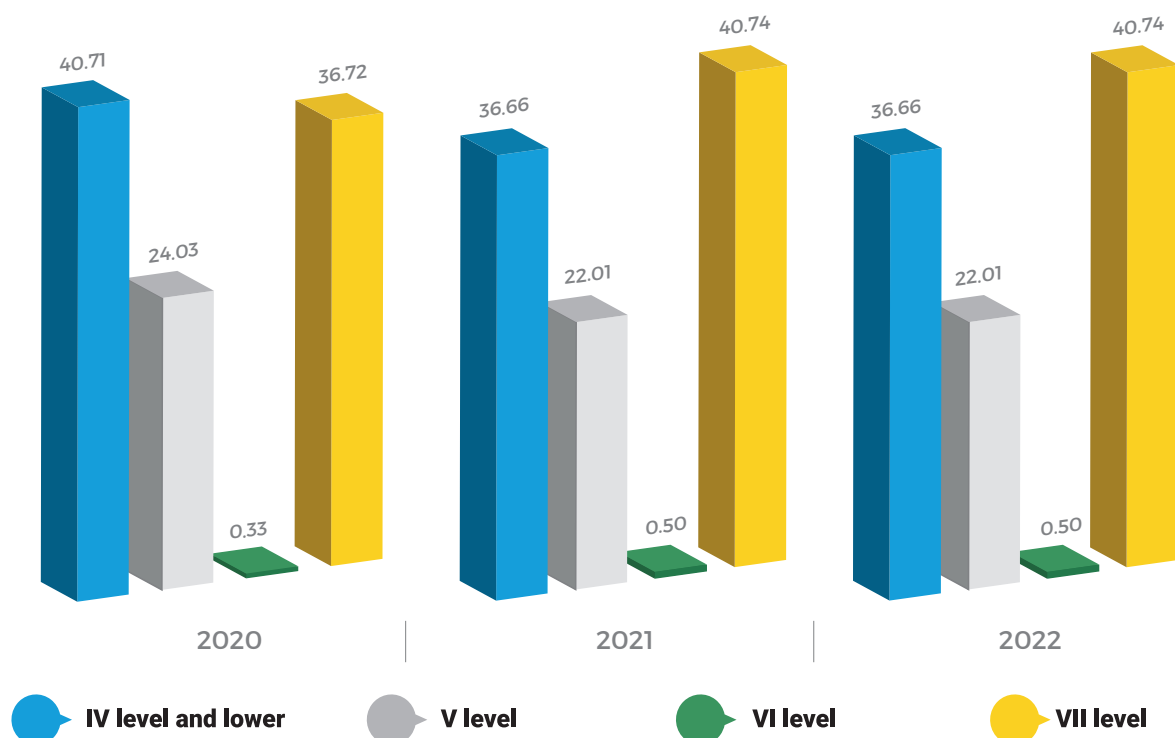
Considering the company's plan to, by valorising its potentials, with a focus on the development of the transmission system, be recognised for the best quality services and ready to meet the challenges of the energy transition process, we continuously strive to pay special attention to the improvement of human resources policy bearing in mind that success is guaranteed by the knowledge, competence and commitment of employees to common goals. It is vital for us to have the best staff in the team, so we strive to identify new ways of working, use new ways of thinking and thus create more productive conditions.

Our team is being built gradually, making efforts to establish and adjust the structure of human resources that can optimally meet all tasks. The needs for employee engagement are analysed and planned taking into account the wide range of responsibilities of the transmission system operator and the strategic goals of the Company.

During 2022, the emphasis was placed on improving human resources to provide preconditions for an adequate response to legal obligations within the company's competence and the requirements of the European Network of Transmission System Operators for Electricity (ENTSO-E), as well as to establish adequate operation and control of infrastructure, which is a consequence of the implementation of projects approved by the Energy and Water Regulatory Agency (ERA) and implemented by the end of 2021.

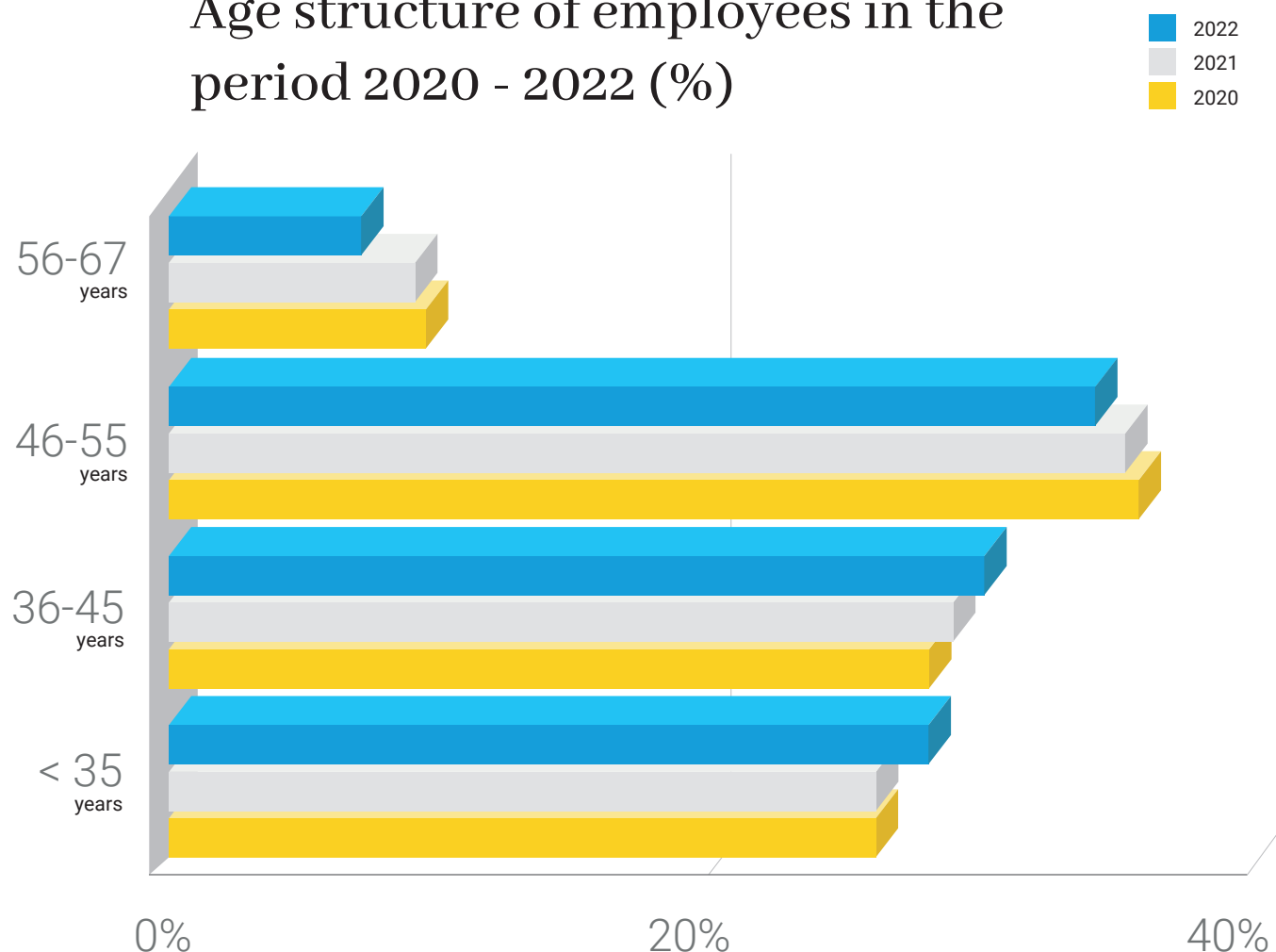
For the above reason, we are recording an increase in the number of employees and changes in the staff and age structure. As of 31 December 2022, the total number of employees in CGES was 316. That number includes 300 employees with indefinite-term employment contracts, and 16 employees with fixed-term employment contracts.

Qualification structure of employees in the period 2020 - 2022 (%)





## Age structure of employees in the period 2020 - 2022 (%)



It is important to note that a significant part of new employees in the previous period was engaged in various jobs in the Company through an agency for temporary assignment of employees, so we are pleased to ascertain that the opportunity to establish an employment relationship was provided to candidates who, thanks to their previous valuable work experience, were ready to adequately respond to the tasks entrusted to them.

Nine years in a row, we have been supporting the Programme for vocational training of persons who acquired a higher level of education of the Government of Montenegro, so 12 persons carried out the vocational training within our Company during 2022. In addition, employees were trained on the topic of the use of software packages for the analysis of TNA and PSS/E systems, Siemens Siprotec 5 protection devices and PCM ABB, implementation of digital substation projects, project management,

with special reference to building contracts based on FIDIC conditions, risk management in accordance with ISO 31000: 2018 and the application of accounting standards and financial planning and reporting, analysis of financial statements and other topics related to quality accounting and financial management. Internally, in the coordination of several sectors, trainings for work on the newly installed control and protection equipment were carried out in SS Budva, SS Bar, SS Ulcinj, SS Cetinje, while in cooperation with the implementers of the DMS system, comprehensive training was carried out in several thematic areas. In the organisation of the Montenegrin Centre for Adult Education, two CGES' employees were trained as coordinators for the protection of critical infrastructure and accordingly received appropriate certificates.

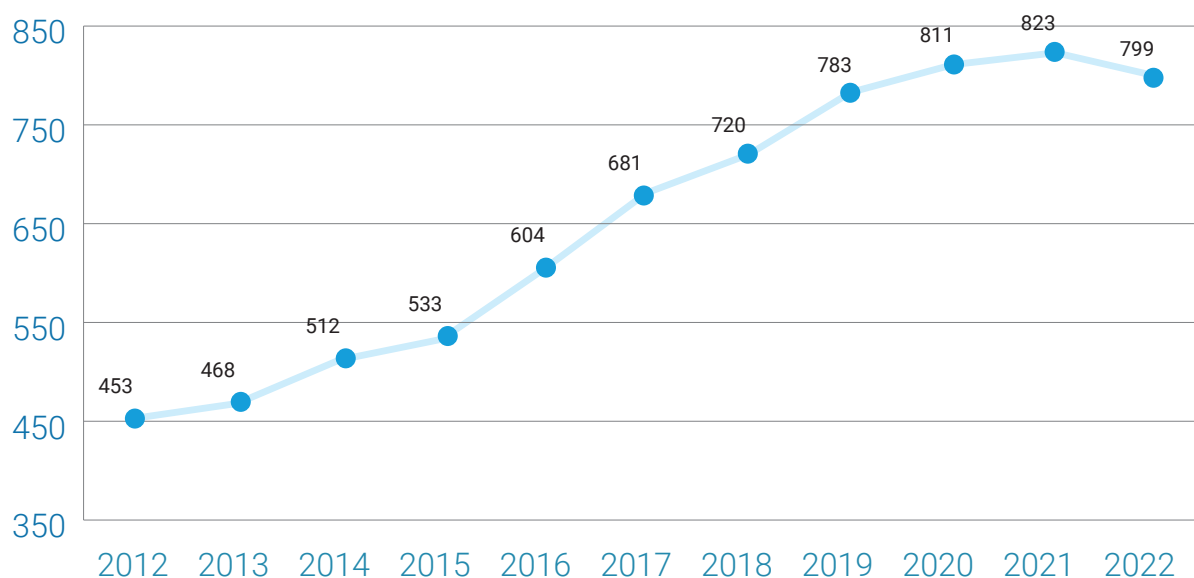


## Value of assets per employee

Taking into account the significance of the energy sector for the total employment rate in the country, on the one hand, and the necessity of optimisation of all costs of the core activity, including personnel cost, on the other, the Company has been improving from year to year one of the main efficiency param-

eters – the value of assets per employee. Therefore, the intention is to achieve an optimal compromise between contributions to the national standard through hiring of new employees and optimisation of regulated costs.

### Value of assets per employee [€1,000] in the period from 2012 to 2022



## Occupational safety and health

The Law on Occupational Safety and Health (Official Gazette of Montenegro, no. 34/14 and 44/18) stipulates that occupational safety and health shall be provided and implemented by applying modern technical and technological, organisational, health, social and other measures and assets of protection in accordance with this Law, other regulations, ratified and published international agreements. Pursuant to the aforementioned Law, occupational safety and health is an activity of public interest. In accordance with the activities it performs, CGES strives to provide at all times adequate occupational safety measures for its employees, that is, working conditions that do not lead to injuries at work, occupational diseases and work-related diseases and that create prerequisites for full physical and psychological protection of employees.



During 2022, numerous activities were performed in the field of occupational safety and health:

▶ Periodic specialist medical examinations of employees at workplaces with special working conditions were performed, at the request of employees or employer;

▶ Existing HV collective protection equipment was inspected;

▶ Training for safe work was organized for employees in high-risk workplaces and employees who changed job positions, all in accordance with the Law on Occupational Safety and Health;

▶ Occupational health and safety records were updated;

▶ Training for providing first aid by employees was carried out;

▶ Assets of personal occupational safety were provided for all CGES' facilities in accordance with the Standard of Assets and Equipment of Personal Occupational Safety;

▶ Assets of collective occupational safety were provided for all CGES' facilities in accordance with the Standard of Assets and Equipment of Collective Occupational Safety;

▶ A control inspection was carried out by the Labour Inspectorate, Department for Occupational Safety;

▶ As part of the procurement of the Microsoft Dynamics BC365 ERP system upgrade, a programme module was implemented for recording data on occupational safety and health.

As in 2020 and 2021, CGES continued to implement measures and recommendations issued by the competent authorities to prevent the importation of COVID-19 and its spread among employees and made sure to provide protection for all its employees, as well as instructions in case of illness of employees. Accordingly, disinfection of the work space was carried out if necessary.



# Our network

## Current state

The transmission system in Montenegro, pursuant to the Energy Law, consists of facilities (substations) and lines (overhead lines and cables) at 400 kV, 220 kV and 110 kV voltage level.

Crnogorski elektroprenosni sistem AD Podgorica owns 1,512 km of overhead lines as follows:

- ▶ six 400 kV overhead lines, 348.8 km long,
- ▶ one 400 kV section Čevo – Brezna, 54 km long, which is in operation under 110 kV voltage, 8 dalekovoda 220 kV, dužine 374.7 km,
- ▶ eight 220 kV overhead lines, 374.7 km long,
- ▶ thirty-seven 110 kV overhead lines, 625 km long, of which three 2x110 kV overhead lines, 65.3 km long,

▶ four 110 kV overhead lines that are in operation under 35 kV voltage, 97 km long,

▶ two underground 110 kV cable lines, 7.3 km long,

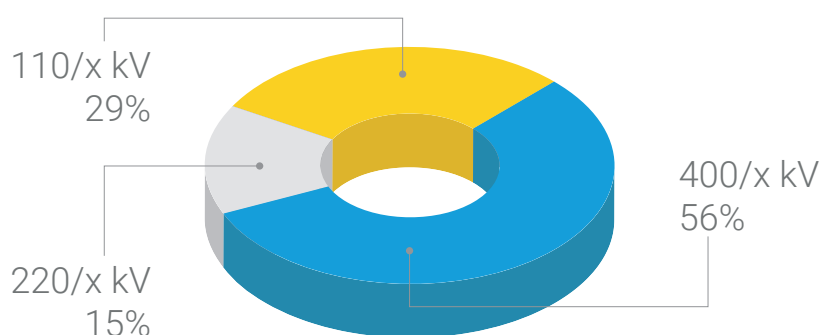
▶ one combined 110 kV line, 5.15 km long (2.48 km of overhead line and 2.67 km of cable length),

as well as 4,166.5 MVA of installed transformation capacity in: 4 trafostanice 400/x (2335 MVA),

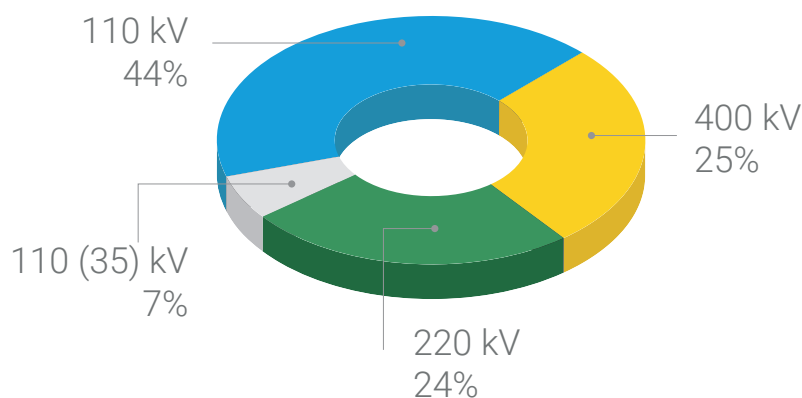
- four 400/x substations (2,335 MVA),
- two 220/x substations (616 MVA),
- nineteen 110/x substations (1,215.6 MVA).

CGES also controls 220 kV and 110 kV plants in HPP Piva and HPP Perućica (owned by EPCG), as well as 110 kV plants in WPP Krnovo (owned by KGE) and SS Highway (MNE: Autoput) 1 and SS Highway 2 (owned by Monteput).

## Transformation capacity by voltage levels



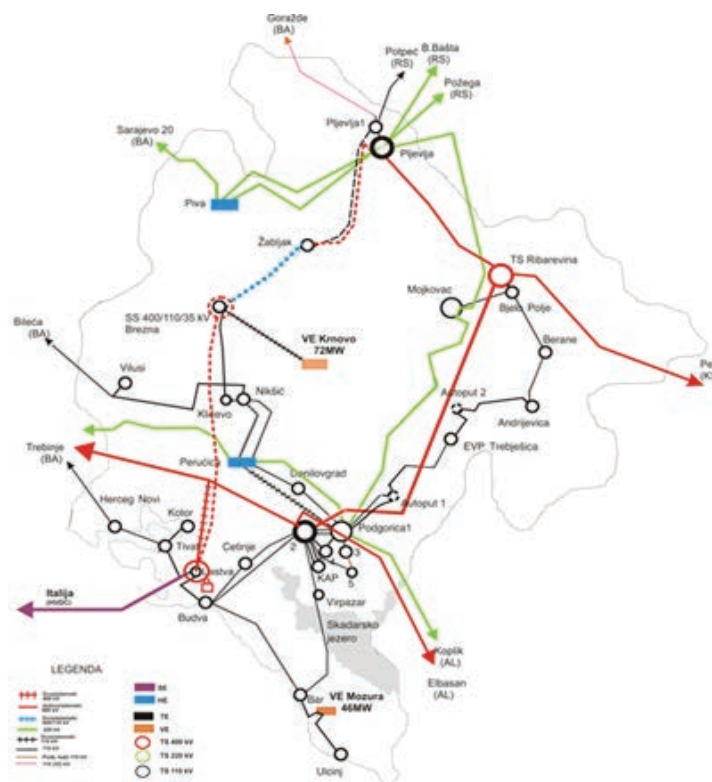
## Overhead line lengths by voltage levels





The transmission system of Montenegro has a considerable number of interconnective overhead lines with neighbouring electric power systems:

- ▶ With the electric power system of Serbia, the transmission system of Montenegro is connected via two 220 kV OHLs and with one 110 kV OHL;
- ▶ With the electric power system of Kosovo, the transmission system of Montenegro is connected via one 400 kV OHL;
- ▶ With the electric power system of Bosnia and Herzegovina, the transmission system of Montenegro is connected via one 400 kV OHL, two 220 kV OHL, one 110 kV OHL and one 110 (35) kV OHL;
- ▶ With the electric power system of Albania, the transmission system of Montenegro is connected via 400 kV OHL and one 220 kV OHL; and
- ▶ With the electric power system of Italy, transmission system of Montenegro is connected via 500kV HVDC submarine cable.



## Transmission system users

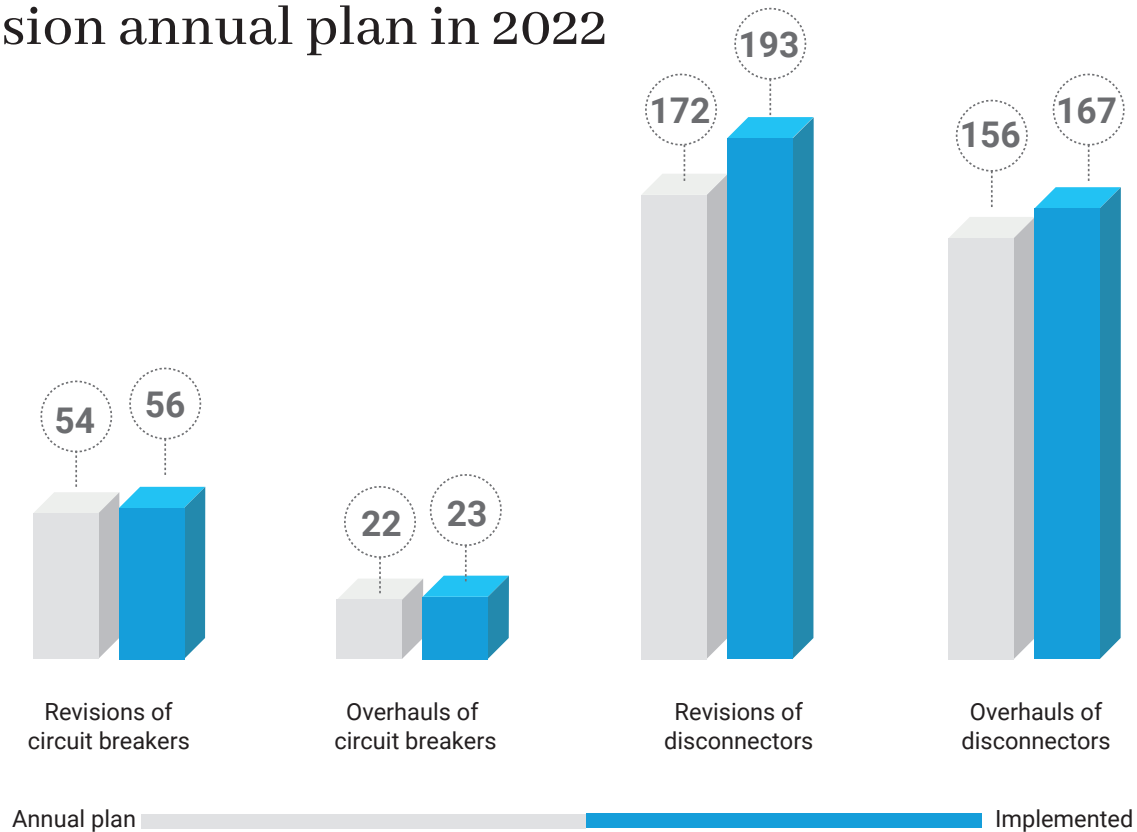
### Substation and overhead line maintenance, relay protection and testing

The following facilities are connected to the electricity transmission network owned by CGES:

- ▶ Hydroelectric power plants Perućica (installed capacity 310 MW) and Piva (347 MW),
- ▶ Thermal power plant Pljevlja (210 MW),
- ▶ Wind power plants Krnovo (72 MW) and Možura (46 MW),
- ▶ Direct consumers:
  - o Aluminium Plant Podgorica,
  - o Tošćelik – Steelworks Nikšić,
  - o Railway Infrastructure of Montenegro (ŽICG);
- ▶ CEDIS, which through distribution network supplies around 400.000 registered distribution consumers with electricity.

In the previous year, the Substation Maintenance Division implemented 389 work orders, which represents an increase of 31% compared to 2021. The implementation significantly exceeded the plan for 2022 because the works planned for 2021, unplanned works - preventive maintenance based on inspections and tests were completed. Among the more significant works, the replacement of the circuit breaker at the 220 kV voltage level stands out. The circuit breakers in the bays of 220 kV OHL Perućica and 220 kV OHL Koplik in substation Podgorica 1 220/110/35 kV were replaced. One hundred and ten kV circuit breakers were also replaced in SS Podgorica 1 220/110/35 kV, in bays TR4 110/35 kV, as well as in the bay TR1 220/110 kV and in SS Herceg Novi 110/35 kV, where the circuit breaker in the coupling bay was replaced. As every year, 35 kV circuit breakers were replaced in cells where it was estimated that the reliability of the existing low-oil circuit breakers was reduced. The Substation Maintenance Division implemented 108% of the overhaul and revision plan for high-voltage equipment. The graph shows the implementation by voltage levels.

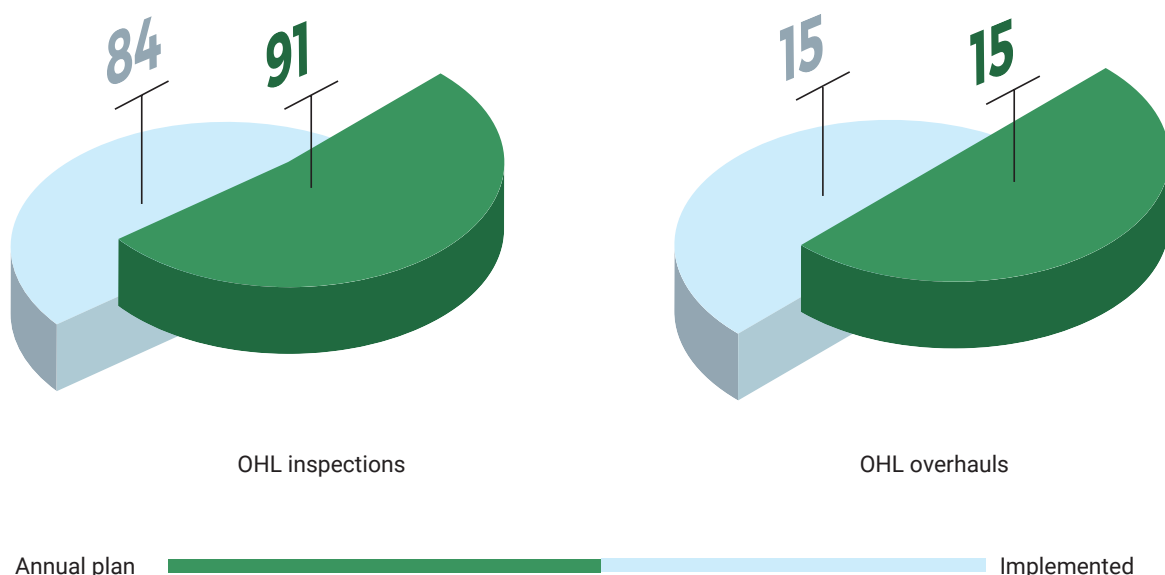
## Implementation of the HV equipment overhaul and revision annual plan in 2022



The overhead line maintenance division successfully completed 333 work orders, including 84 inspections and 15 overhead line overhauls, which is 92.3% of the planned inspections, or 100% of the planned overhauls. After regular inspections, the overhead lines were repaired for deficiencies that were estimated to affect the operational security of overhead lines. In addition to regular and planned

works, 37 work orders related to emergency interventions were carried out. Emergency interventions are mainly caused by the occurrence of an atmospheric discharge or an additional load. The planned activities of the Overhead Line Maintenance Department as well as their implementation are shown in the graph below.

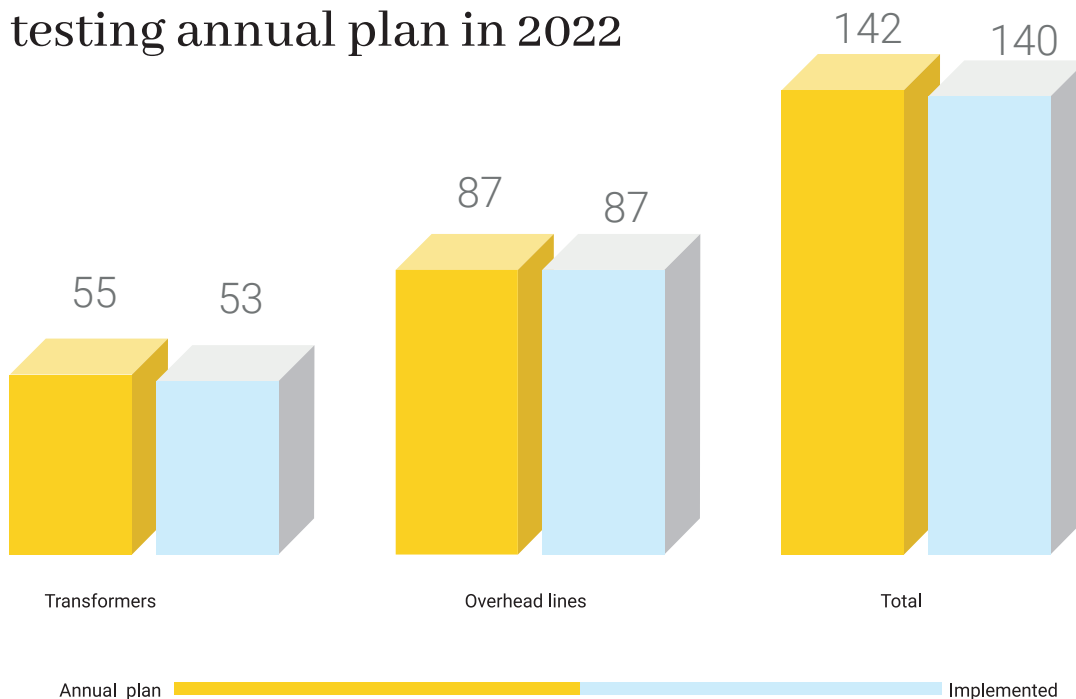
## Implementation of the overhead line inspection and overhaul annual plan in 2022



During the previous year, the Relay Protection Division implemented 214 work orders. The annual plan was almost fully implemented, except for testing the

protection of two 110/35 kV transformers that supply the Steelworks, due to the impossibility of coordinating the disconnection.

## Implementation of the protection testing annual plan in 2022

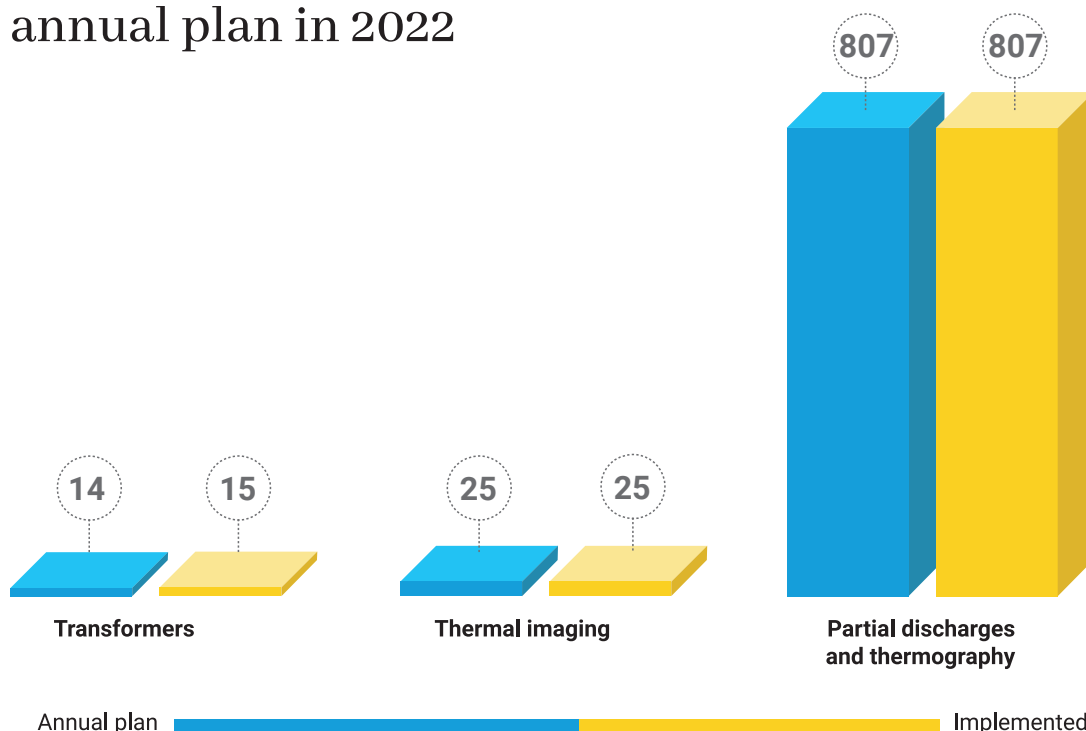


In addition to work on regular protection testing, the Protection Division had significant participation in investment projects during 2022. As part of the project of reconstruction of SS Podgorica 1, acceptance tests of 17 bays were carried out, while in SS Pljevlja 2 and SS Podgorica 2, acceptance tests of 20 bays

were performed after the replacement of primary equipment as part of the project Replacement of HV equipment in substations.

**In the past year, the Testing Division implemented 136 work orders and completely fulfilled the annual plan.**

## Implementation of the Testing Division annual plan in 2022





Apart from work on the implementation of the annual plan and other activities, the Testing Division introduced a new method for testing transformers, the Sweep Frequency Response Analysis (SFRA) - a completely non-invasive, quick and simple method that can be used to determine, monitor and localise irregularities in the geometry of the windings and core of transformer.

Care for electric power facilities includes regular monitoring and testing of equipment, regular inspections, examinations and overhauls as well as fast, efficient and quality elimination of defects and

handling emergency situations, all in such a way as to ensure that the voltage-free time of any electricity transmission system user does not exist or is minimal.

Of the investments in existing facilities in 2022, it is important to emphasize the implementation of the project Replacement of HV equipment in SSs and the project Reconstruction of protection and control systems, which are implemented within the project financed from the European Commission grant. The project includes works in 15 substations.







# Transmission System Control

CGES, as the founder and member of ENTSO-E, continuously works on improving internal rules and procedures of transmission system control, while respecting the requirements that apply to all European transmission system operators and the specifics of our network, and all in order to provide the highest quality transmission service for our customers.

Transmission system monitoring and control is performed from the National Dispatching Centre (NDC) and the Reserve Dispatching Centre (RDC) by using the SCADA system and other state-of-the-art software tools software tools.

Electric power system control includes system ma-

nagement (maintenance of frequency stability, voltage stability, application of defensive measures and restoration of operation after disturbances), system monitoring in terms of static and transient stability, as well as operational control of switching operations.

An increasingly demanding task of maintaining balance between the users' needs and generation, as well as ensuring a highly reliable electric power network, under the most favourable conditions for users, requires activities to improve methodologies and encourages development of cooperation at the regional level.

## 2022 control novelties

CGES readily welcomed the start of the application of the long-developed ENTSO-E Common Grid Model Exchange Standard - CGMES. After the external audits conducted in the previous year (Audit 1 and Audit 2), from the very beginning of the year, the process of creating a model in a new format was successfully implemented. In cooperation with the neighbouring WB6 TSOs, CGES started work on the implementation of the regional methodology for the coordination of operational security, initiating several improvements at the regional level.

Since July 2022, CGES has been conducting operational security analyses in two shifts, which is a significant step forward in approaching the most modern European practice. On the initiative of CGES, the practice of convening daily operational teleconferences (DOPT) at the regional level, in coordination with the SCC, has been started since November, in which remedial measures are considered, if necessary, to eliminate critical system conditions, observed in operational analyses at the day-ahead level.

The previous practice confirmed the full justification of the initiative and raised mutual communication between planners and system operators in the region to a new level.

As in previous years, a special challenge for the staff involved in the operational control and planning of system operation was to provide the prerequisites for the implementation of development projects through numerous disconnections of transmission system elements, without having a negative impact on the quality of the power supply to user. The timely stopped cascading disruption, having a regional character since 28 June 2022, which did not result in the interruption of the electricity transmission service to end system users, although it almost resulted in the separation of Continental Europe synchronous zone into two synchronous areas, it is the most vivid confirmation of the training and readiness of the operational staff of the NDC to work at the highest level of quality.

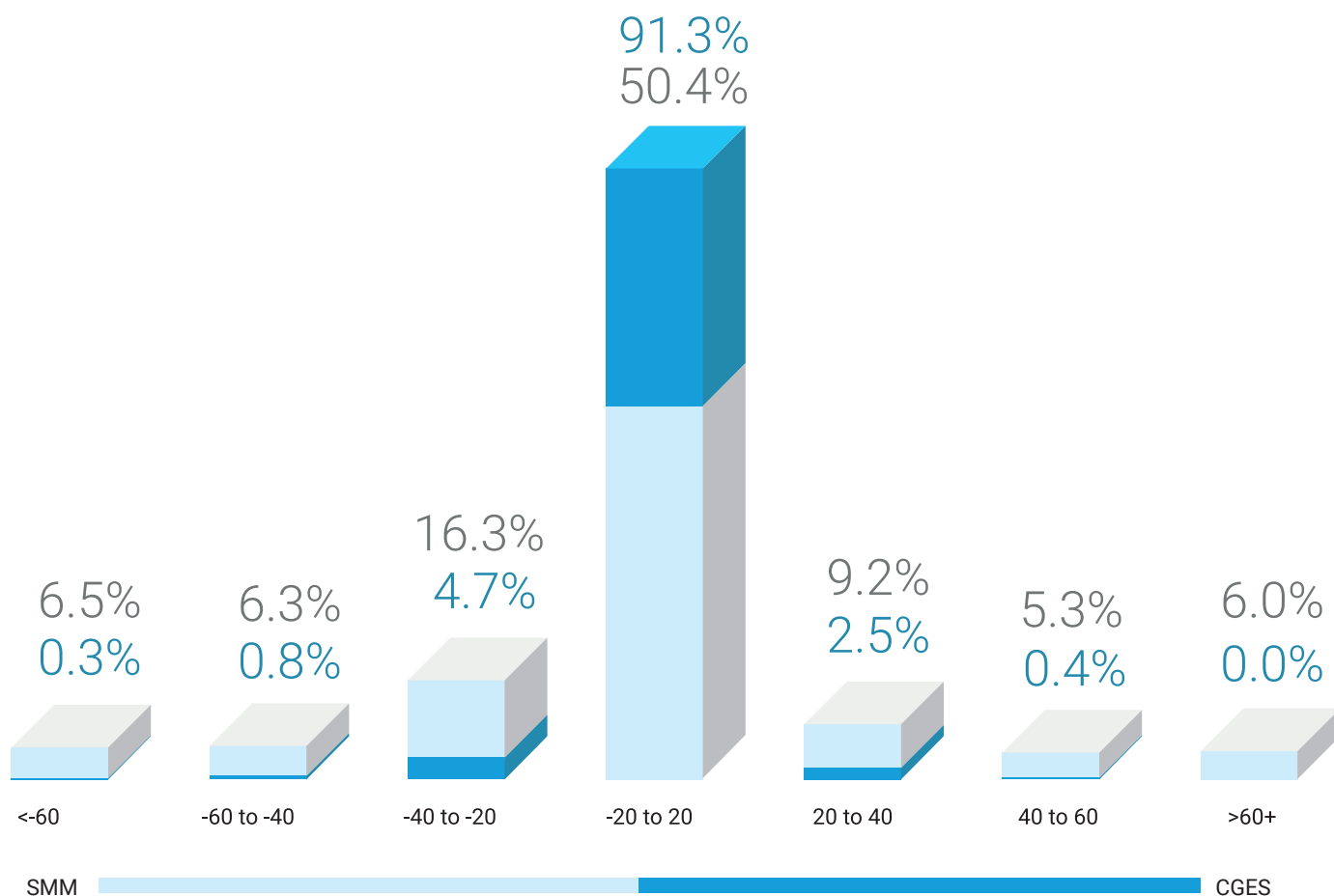


## System regulation

CGES is obliged to regulate the power of exchange with the neighbouring electric power systems, limiting unexpected unbalances in the range from -20 MW to +20 MW. The diagrams below show the regulation error of CGES as a member of the SMM block. The trend of good regulation from 2021 (about 79% of the time the deviation was within the desired range) was further improved in 2022, so the desired level of quality was achieved in as much as 91.3% of the time, and deviations outside the scope of  $\pm 40$  MW were almost not even recorded (less than 2% of the time). Also during 2022, the quality of the control area managed by CGES is significantly above comparable regulations (e.g. the average quality of regulation of the SMM block, which, in addition to Montenegro, also includes Serbia and North Macedonia).

During 2022, fine adjustments were made to the control and management system, which resulted in the described improvement of the regulation of the Montenegrin electric power system. The implemented INOM (Imbalance Netting Optimization Module) option relieved the regulation capacities of domestic power plants participating in secondary regulation, and the level of regulation was further improved. During 2022, apart from the perennial secondary regulation service provider, HPP Perućica, HPP Piva was also actively included in the secondary regulation system.

### Distribution of hourly regulation error [MW] in 2022



## Quality of electricity transmission service

CGES, in accordance with the Rules of Minimum Quality Requirements for Electricity Delivery and Supply, records and processes data relevant for service quality assessment. The purpose of these Rules is to encourage transmission system operators, distribution system operators and suppliers to reach and maintain the levels of general and individual indicators of the minimum quality requirements of electricity supply set out in these Rules.

The basic quality indicators related to the transmission system are the following:

▶ AIT (Average Interruption Time) - provides information on the average duration of interruptions in power supply to customers, parts of distribution systems and closed distribution systems connected to the transmission system, expressed in hours on a yearly basis;

▶ ENS (Energy Not Supplied) - provides information on undelivered electricity to customers, parts of distribution systems and closed distribution systems connected to the transmission system due to planned and unplanned power supply interruptions, in cases where the use of alternative routes of the transmission and distribution network provides power supply to users, expressed in MWh on an annual basis.

The table below shows the quality indicators in 2021 and 2022:

Year	2021.	2022.
ENS (MWh)	2.007	2.237
AIT (h)	5,46	2,35

Compared to 2021, ENS is higher by 230 MWh, primarily due to the large number of planned works on the modernisation of the network, which in cooperation with the distribution system operator were performed with the supply to end customers from alternative directions, and which means that the quality of the energy transmission service to end system users remained at last year's level.

Considering that the prescribed deadline for fulfilling the obligations of the transmission system operator

is 24 hours, we point out that this standard was met in every one of the 194 cases.

It is important to point out that the ratio of energy not supplied and energy transmitted for 2022 amounts to 0.027%.

Through the improvement of both network infrastructure and operational procedures, CGES is constantly making efforts to improve the indicator of the general minimum of transmission quality.

Total interruption time	Planned		Unplanned	
	2021	2022	2021	2022
Total interruption time since the beginning of the year (min)	29.230	12.193	520.813	14.526

## Cross-border transmission capacities and market operations

By improving the Auctions Rules for Allocation of Transmission Capacities at the Border of the Control Areas of EMS and CGES through the introduction of the "UIOSI" principle, it led to an increase in interest in the allocation of capacity for the border in question. Namely, it enabled to make available the allocated capacity from annual and monthly auctions, which is not used through the application of

long-term cross-border exchange plans, to market participants in daily auctions.

The mentioned changes from a technical point of view proved to be justified in terms of optimal utilisation of cross-border capacities, while from the point of view of electricity market participants, the principle of "resale" is a more favourable market variant because there is a possibility to reimburse

financial resources due to the non-utilisation of capacity and the unique (marginal) price at which market participants pay for the reservation of capacity for individual auctions, which improves the market environment.

In addition, CGES is an active participant in international working groups established for the purpose of coupling day-ahead electricity market, and gives a specific contribution through the activities of the Power Exchange, which it founded. In this regard, CGES recognised the need for mutual integration of markets in Southeast Europe, as well as with EU countries, given the close physical connection pro-

vided by the HVDC submarine cable between Italy and Montenegro.

It is important to note that the implementation of the methodology for the settlement of unintentional deviations (Fskar) as well as the implementation of the contract with EMS regarding INOM, affected the entire process of quantitative and financial calculation of deviations of balance responsible entities, that is, that the prices of deviations, costs, revenues of the transmission system operator when balancing the transmission system be close to the prices of the region and the European market.

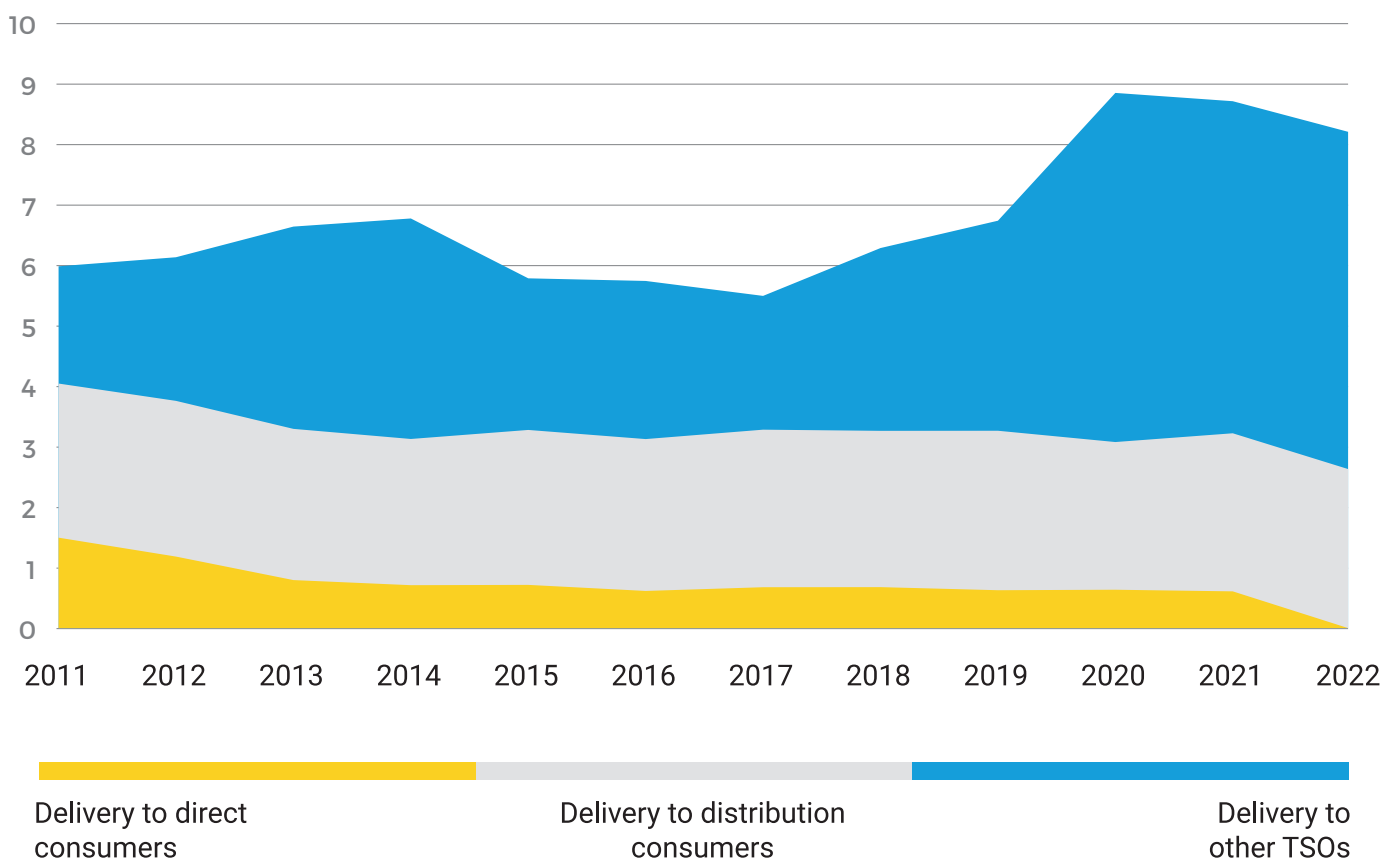
## Electric power indicators

### Electricity transmitted

In 2022, CGES' network transmitted a total of 8,324.56 GWh of electricity for the needs of the Montenegrin electric power system and the transit of electricity for the needs of other systems and the interconnection.

As in 2021, we have had trends in record amounts of total energy transmitted by CGES through its transmission system, as shown in the following diagram:

### Energy transmitted in 2022 (TWh)





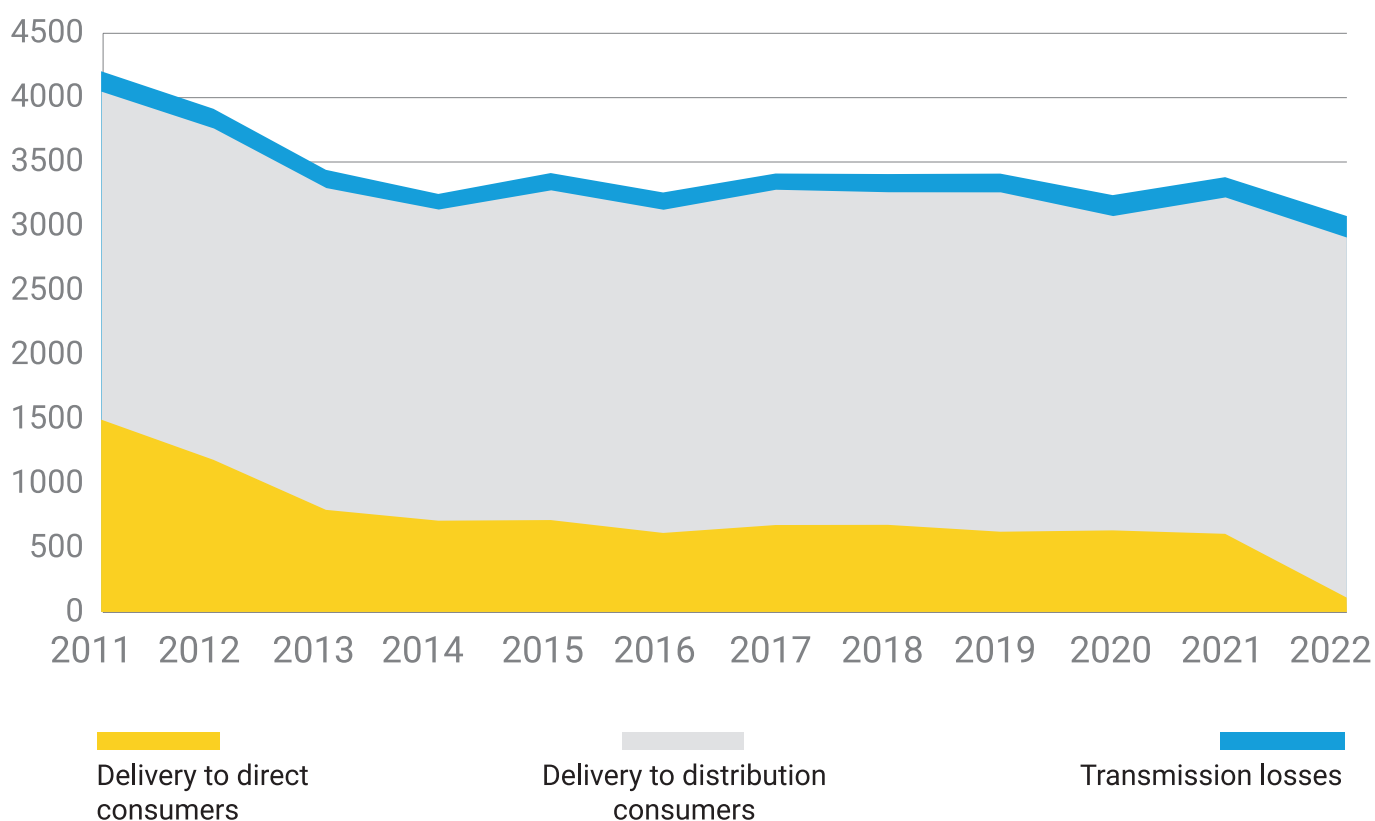
## Electricity consumption

In 2022, the total electricity consumption in Montenegro amounted to 2,980.121 GWh, which is a decrease of 11.65% compared to the values from 2021, and was caused by a significant drop in

consumption of the Podgorica Aluminium Plant due to the cessation of aluminium production (shut-down of electrolysis).

Consumption (GWh)			
Year	2021	2022	Difference
Supply to distribution consumers	2.613,01	2699,024	3,3%
Supply to direct consumers	606,892	138,847	-77,1%
Transmission losses	158,412	142,253	-10,2%
Total:	3.378,31	3.378,31	4,3%

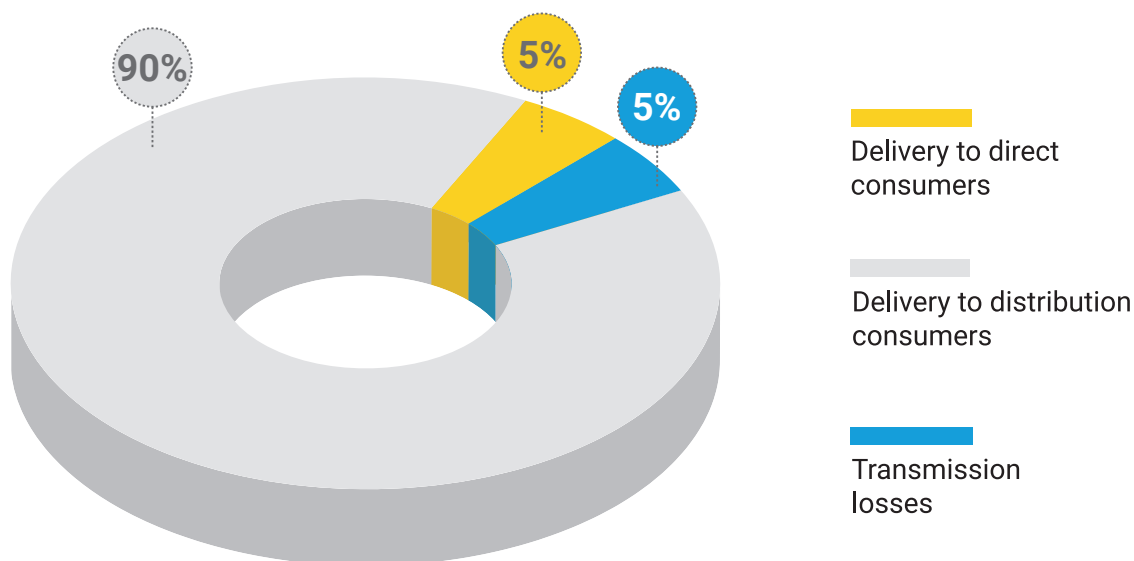
## Total electricity consumption in the period 2011-2022 (GWh)



As is well known, with the commissioning of the HVDC submarine cable in 2020, there was a significant increase in electricity transit through the transmission system of Montenegro and this trend continues. Namely, in 2022, the transit realised was higher than in 2021 by 3.29%.

Higher utilisation of the network of the highest voltage level continued in 2022, so the rate of transmission losses compared to the total energy transmitted in 2022 was 1.71%, which is approximately the same as in 2021 when it had value of 1.79%.

## Share by type of consumption in 2022



From the diagram it can be concluded that almost all electricity consumption in Montenegro refers to customers at the distribution level.

The maximum load of the Montenegrin transmission network was recorded on 8 August 2022 and it amounted to 11,044.63 MWh, with import of 20,478.297 MWh and transit of 16,755.033 MWh. The maximum consumption value of 545 MW at 14h was also realised on that day.

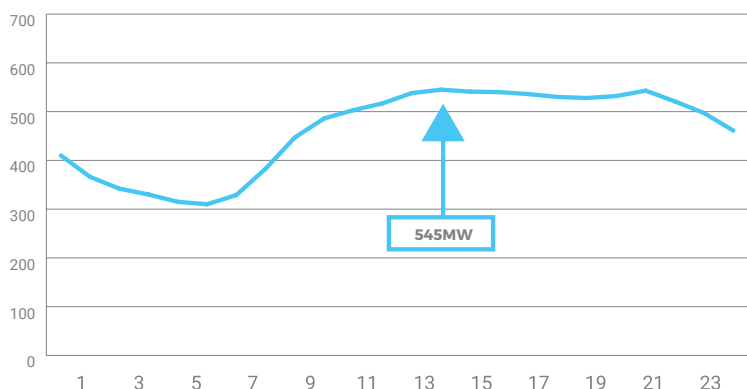
Below is an overview of the maximum/minimum system load as well as the achieved maximum and minimum consumption on a daily basis in 2022.

In 2022, peak consumption in Montenegro was 545 MW, compared to 586 MW in 2021.

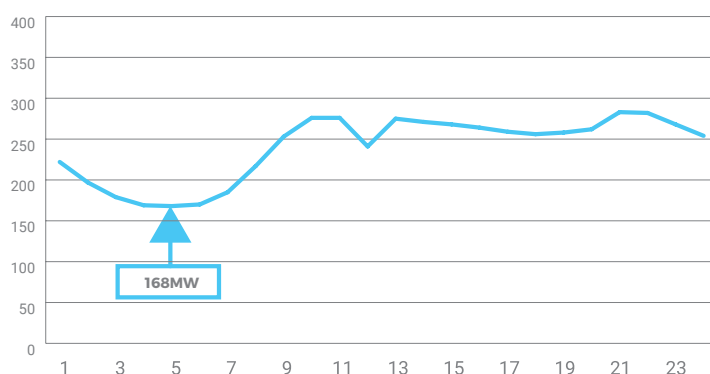
Maximum power			Maximum daily consumption	
MW	Hour	Day	MWh	Day
545	14	08.08.2022.	11.044,63	08.08.2022.
Maximum power			Minimum daily consumption	
MW	Sat	Dan	MWh	Dan
168	5	16.05.2022.	5.945,05	12.05.2022.

The minimum consumption of 168 MW was recorded on 16 May 2022 during the 7th hour.

Maximum load - 8.8.2022

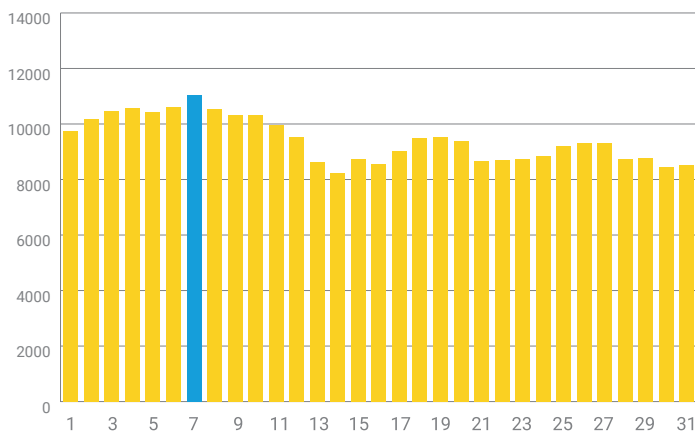


Minimum load - 16.5.2022

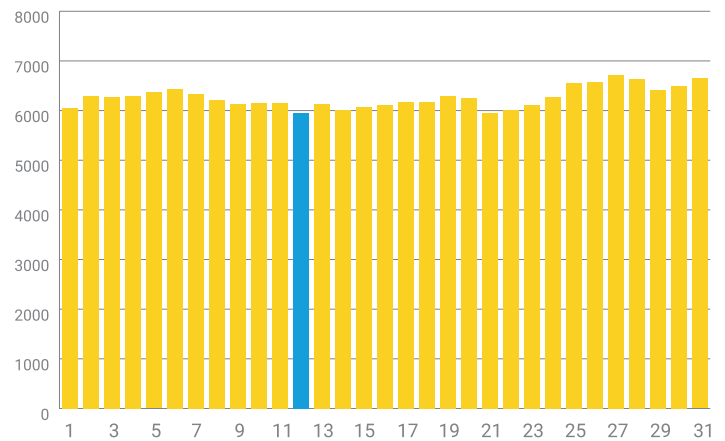


The highest daily consumption was realised on 8 August, while the lowest on 16 May 2022.

Daily consumption 8.8.2022



Daily consumption 12.5.2022

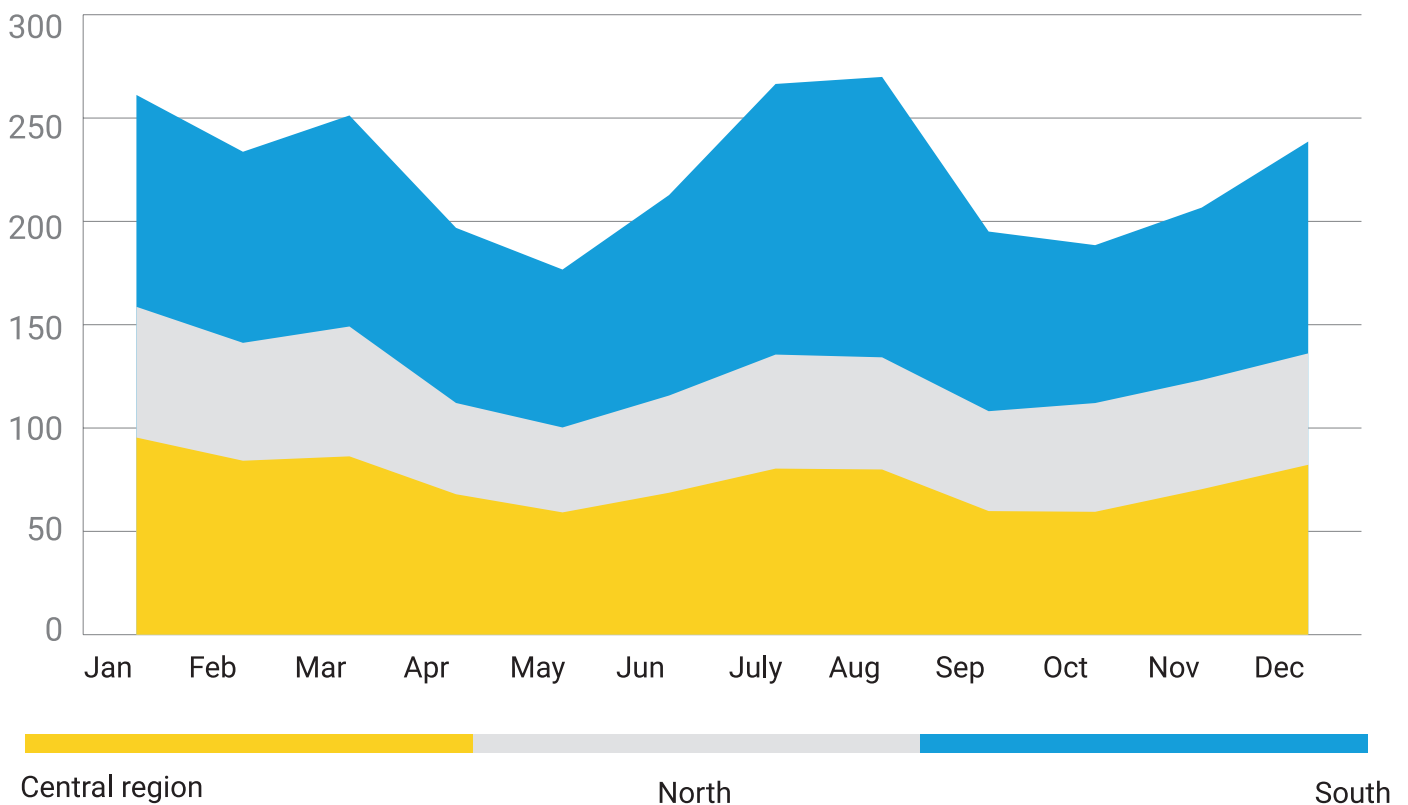


### Electricity delivered to the distribution network

In 2022, we recorded the usual maximum consumption on the coast with a characteristic “peak” in this period of the year. The trend of energy delivered to

the distribution network is presented in the following diagram:

## Energy delivered to the distribution network in 2022 (GWh)





## Electricity generation

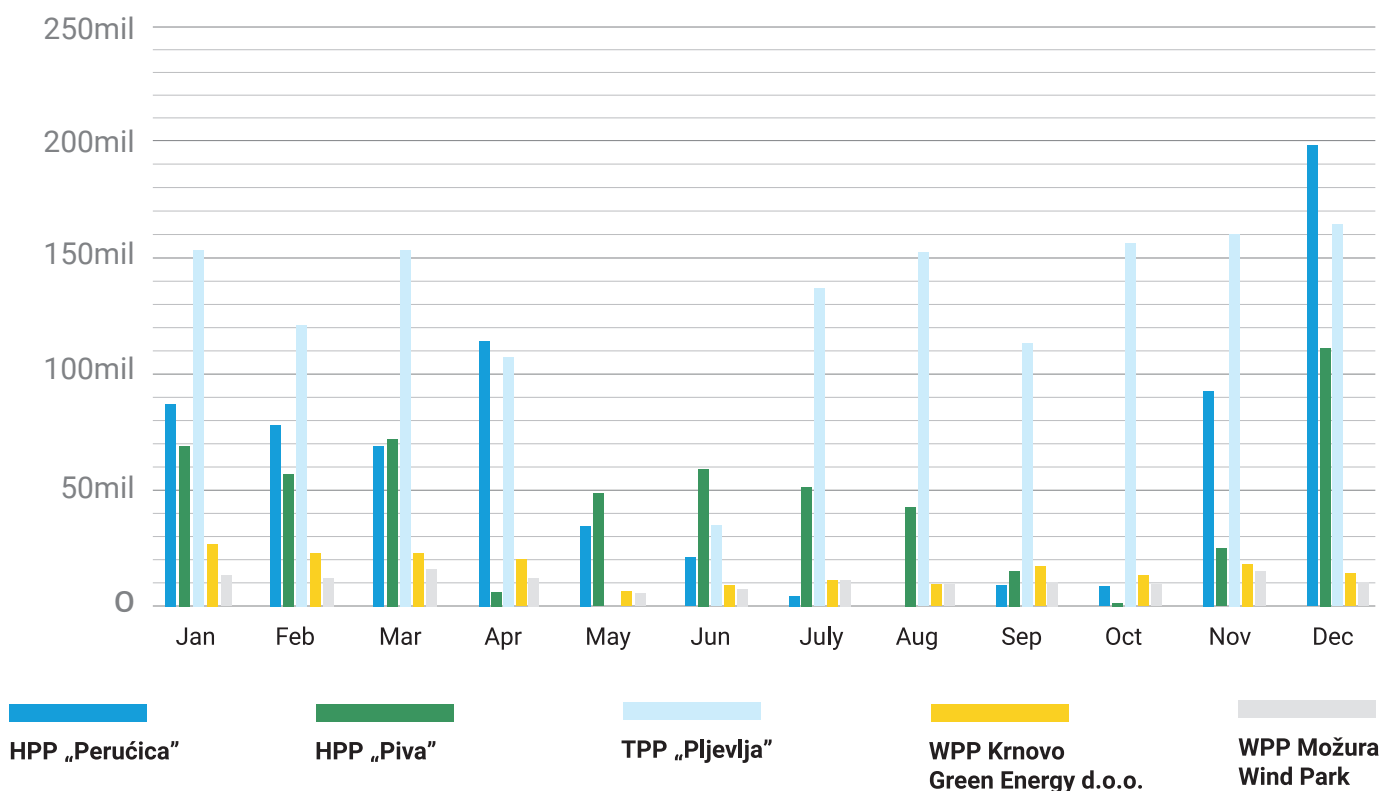
In 2022, 3,051.232 GWh of electricity was injected into the transmission system from generation facilities, of which 1,274.439 GWh was generated

by hydropower plants, 1,454.139 GWh by thermal power plants and 322.653 GWh by wind power plants.

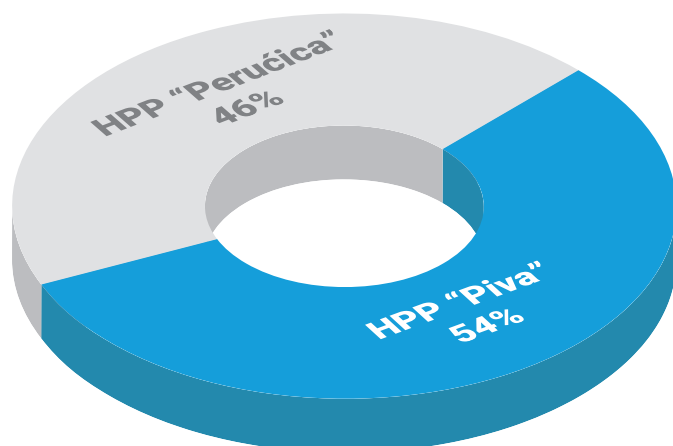
Electricity generation (GWh)			
POWER PLANTS	2021	2022	Difference
HPP „Perućica“	989,013	715,670	-28%
HPP „Piva“	838,476	558,769	-33%
TPP „Pljevlja“	1.332,613	1.454,139	9%
WPP Krnovo Green Energy d.o.o.	192,186	190,768	-1%
WPP Možura Wind Park	128,278	131.885	3%
Total:	3.480,57	3.051,23	-12%

Electricity generation by generation facilities connected to the transmission system of Montenegro by months in 2022 is shown in the following diagram:

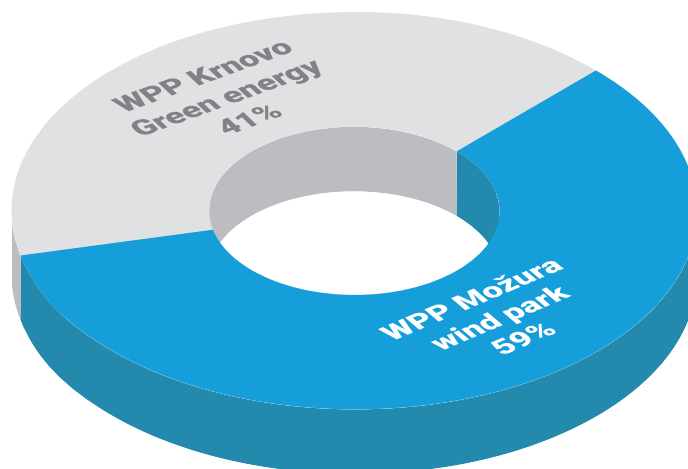
## Electricity generation by power plants in 2022



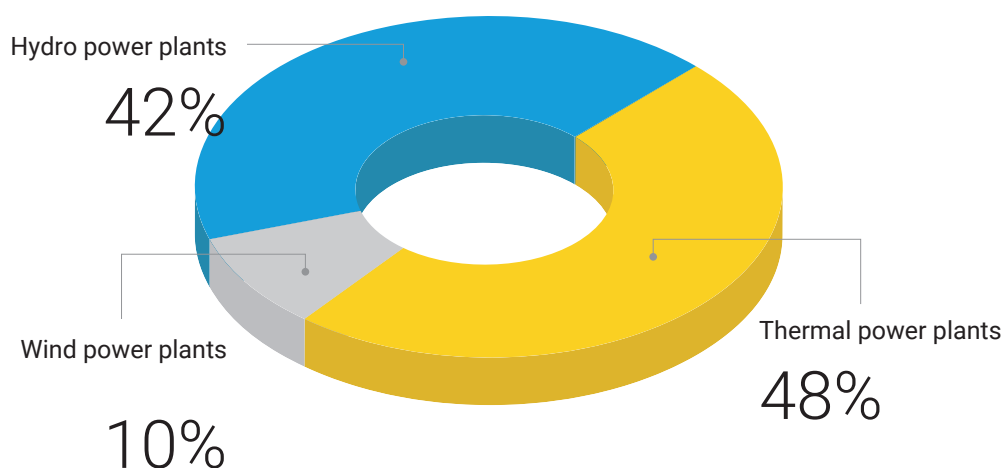
## Hydro power plants



## Wind power plants



## Share by generation type



## Electricity exchange by borders

Below is a diagram of the Montenegrin electric power system with the exchange of electricity by borders (GWh) in 2022.







# Investments

The 2022 Investment Plan provided for 53 projects and programmes (including the project of purchase of the infrastructure required power supply of the highway) amounting to €39,215 thousand. Observing by individual investments, the largest budget was planned for the purchase of infrastructure for the needs of highway power supply in the amount of 15 million euros, while 12 projects and programmes had a budget for 2022 greater than 500 thousand euros. Investments that were implemented or partially implemented refer to:

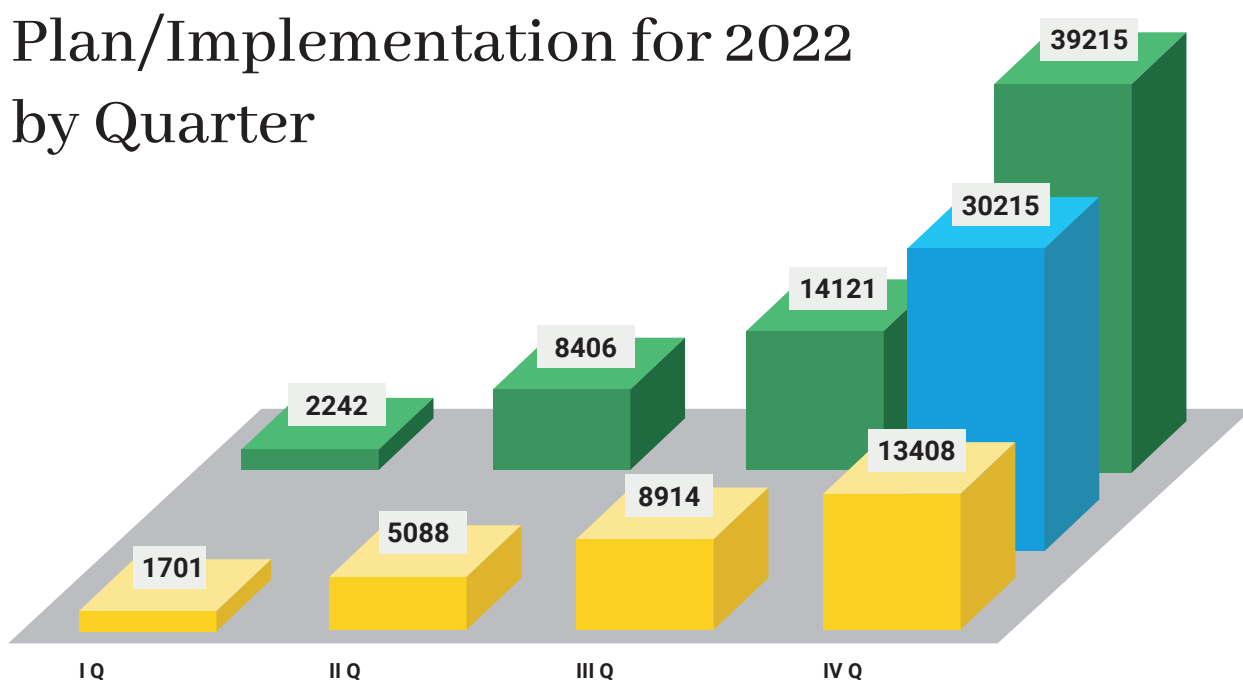
- ▶ associated infrastructure that includes the construction of SS 400/110/35 kV Lastva, 400 kV OHL Lastva - Čevo and 400 kV OHL Čevo - Pljevlja;
- ▶ Trans-Balkan Corridor, which in 2022 included the construction of SS 400/110/35 kV Brezna,

construction of 400 kV OHL Pljevlja 2 - Bajina Bašta - Višegrad, reconstruction of the protection system in the transmission network and replacement of HV equipment in CGES substations;

- ▶ Luštica and associated projects that include the construction of SS 110/35 kV Luštica with connection to the 110 kV network, reconstruction of SS 110/35 kV Tivat, reconstruction of 110 kV OHL Lastva - Tivat and construction of 110 kV OHL Lastva - Kotor;
- ▶ other projects representing investments in modernisation and new projects;
- ▶ purchase of infrastructure for the needs of highway power supply.

Implementation vs the 2022 Plan by quarters is shown in the below diagram:

## Plan/Implementation for 2022 by Quarter



**Implemented**  
(kEUR) (investment)

**Implemented**  
(investment + purchase of infrastructure)

**Planned**  
(kEUR)

In 2022, CGES continued intensive activities on the construction of the transmission network.

With reference to the aforesaid, the previous year was characterised by the continuation of the project of connecting the electric power systems of Montenegro and Italy, as part of the wider Trans-Balkan interconnection project, which ranges from Romania to Italy. In this regard, the second of the three LOTs was completed in 2022, the implementation of which will complete the technical solution for connecting the electric power systems of Montenegro and Italy (LOT 1 – Construction of SS 400/110/35 kV was completed in 2020, completion of LOT 3 – Construction of 400 kV OHL Čevo - Pljevlja is expected in 2023). In 2022, the construction of 400 kV OHL Lastva - Čevo was completed, all in accordance with the Project Coordination Agreement between the State of Montenegro, CGES and Terna, the transmission network operator in Italy, which results in significantly more reliable operation of the submarine interconnection and the overall transmission system because two completely independent 400 kV overhead lines Lastva - Trebinje and Lastva - Podgorica 2 were commissioned (the construction of the OHL from Lastva to Čevo and the intersection of 400 kV OHL Podgorica 2 - Trebinje, where the connection of 400 kV OHL Lastva - Čevo was made, two independent 400 kV OHLs Lastva - Podgorica 2 and Lastva - Trebinje were commissioned according to the “in-out” principle). The implementation of the project for the construction of the 400 kV OHL Lastva - Čevo included the construction of two overhead lines, 2x400 OHL kV and 1x400 kV OHL. The length of this overhead line is as much as 35 km, and the value of the investment is approximately 106 million euros. CGES continued the construction of the overhead line towards Pljevlja, so that the 400 kV overhead line from Lastva to Bukovica (Municipality of Šavnik) was completed, about 104 km long, which created the conditions for the electric power connection of the Lastva and Brezna substations, which ultimately increases security and stability of the electricity transmission system and contributes to a significant reduction in the loss of electricity in the transmission system. Namely, the temporary connection 110 kV Lastva - Brezna, which will be in operation until the completion of LOT 3, is a complex and combined line consisting of an underground and an overhead part, just over 100 km long. It consists of sections of the 110 kV overhead line Lastva - Kotor, 400 kV Lastva - Pljevlja and a temporary 110 kV cable connection that connects the

two mentioned lines. This connection enabled more reliable operation of the system, with a reduction in losses by about 3 GWh per year, which, calculating with current electricity prices, enables savings of slightly more than half a million euros per year. In addition, the wind power plant at Krnovo, which until now was connected by one connection to Nikšić, will get a more reliable connection with a low probability of outage. Moreover, the direction towards Nikšić and Podgorica, where the energy has been going until now, and which was quite loaded with such a configuration, will also be significantly relieved. In the end, a new perspective opens towards a green transition, the connection of renewable sources and the reduction of CO<sub>2</sub> emissions. In order to achieve a real energy transition, CGES has a clear initiative in the direction of constructing other interconnections, and in these terms it signs international memorandums of understanding for the construction of interconnections, all in accordance with European regulations that encourage the increase of cross-border capacities, and legal obligations that include system control within the ENTSO-E network. The implementation of investments in the “associated infrastructure” group will provide the following benefits:

- ▶ fulfilment of N-1 security criterion in case of transit of 500-1000 MW through the submarine cable;
- ▶ reliable supply of consumption in the coast of Montenegro;
- ▶ improvement of voltage-reactive conditions;
- ▶ connection of the interconnection between Montenegro and Italy with a submarine cable;
- ▶ load shedding of transmission capacities towards the coast;
- ▶ reduction of losses in the transmission network (through greater utilisation of the 400 kV network);
- ▶ enabling bidirectional power supply of SS Brezna and SS Žabljak.

The Trans-Balkan Corridor is a set of elements of the electricity transmission network at 400 kV voltage level, which should allow a better mutual energy connection between Montenegro, Bosnia and Herzegovina and Serbia, but also their connection with the proximate surroundings. The Trans-Balkan Corridor is aimed at improving conditions for elec-

tricity transmission from the direction of north towards the south part of the region and in that way allow further integration of the electricity market, as one of the priorities of the European energy policy. In these terms, in 2022, the projects Replacement of HV equipment and Reconstruction of the protection system in the transmission network were completed, through which the replacement of HV equipment and protection systems was carried out in 15 substations of the transmission system (reconstruction of the protection system and replacement of HV equipment in SS Pljevlja 1 will be implemented within a separate project). These projects are predominantly financed from the EU grant and their successful implementation created the prerequisites for the transition to remote control of modernised plants from the NDC. In addition, a reduction in the duration of the voltage-free break due to unreliable operation of protection and improvement of the operational readiness of the EPS of Montenegro was provided.

The year 2022 was also marked by the successful implementation of the project Construction of SS 110/35 kV Žabljak, where the execution of works began. Namely, this project will increase the capacity in transformation and provide a more secure and reliable power supply to the Žabljak area by constructing SS 110/35 kV and connecting it to SS Pljevlja via 110 kV OHL Pljevlja - Žabljak, which currently operates at 35 kV voltage level. The implementation of the project is expected in 2023, and the benefits will be reflected in the improvement of voltage-reactive conditions, reduction of losses, increase of system reliability, reduction of the level of energy not supplied. In 2022, the tender for the selection of a contractor for the reconstruction and extension of SS 110/35 kV Pljevlja 1 was completed. SS Pljevlja 1 has been in operation since 1961, and its reconstruction and replacement of equipment will enable increased reliability of power supply and remote control from the control panel. The implementation of the project will reduce maintenance costs, and the connection of 110 kV OHL Žabljak will increase the security of power supply to distribution consumers of the municipalities of Pljevlja and Žabljak.

In addition, in 2022, tender documentation was prepared for the selection of contractors for the group of investments "Luštica and associated projects", the implementation of which will increase the capacity to connect new consumers and tourist complexes of the associated consumption, while increasing the security and reliability of electricity supply to consumers in the entire region. Also, bidirectional power

supply of SS Kotor will be implemented, that is, the N-1 security principle will be provided at the mentioned hub. In 2022, in the technical part, all prerequisites for purchasing the infrastructure for the permanent supply of the highway with electricity were fulfilled. Of particular importance is the start of the implementation of the project Installation of a 250 MVar variable shunt reactor in SS Lastva, through the implementation of which CGES will make an adequate contribution to solving the regional problem of high voltages in the Western Balkans region.

It is important to note that despite the consequences left by the coronavirus, the Russian-Ukrainian war, cyberattacks on information systems in Montenegro and the fluctuation of prices in the sense of a drastic increase, the implementation of the largest number of activities that were planned for completion in 2022 was recorded.

Below are images that recorded phases of the implementation of the projects Replacement of HV equipment and reconstruction of the protection system and Construction of SS Žabljak.



Construction of SS Žabljak





Reconstruction of the protection system in the transmission network



Replacement of HV equipment



## Further development

In accordance with its business plan, Crnogorski elektroprenosni sistem will invest approx. 190 million euros in the construction and maintenance of the electricity transmission network in the next 5 years. In order to provide secure, reliable and high-quality electricity supply, a series of reconstructions are planned in terms of strengthening the existing network, but also constructing new facilities that will enable the connection of new users, primarily power plants with renewable energy sources. In the previous period, there was a great interest of investors in the construction of dominantly solar and wind power plants of significant installed capacity, while sources of the aforementioned type were also recognised in the planning documents. Bearing in mind such inputs, the transmission system operator plans to implement investments with such defined implementation dynamics that will prevent a situation where the transmission network would become a bottleneck for system functioning. All the existing elements that there are indications that they will reach overload are included in the long-term plan of CGES. An important segment of the strategic development of the transmission system in the next ten-year period remains the construction of interconnections towards neighbouring systems, primarily with Bosnia and Herzegovina (BiH), Serbia, Kosovo and Albania, which ensures a high level of security of power supply to consumers in the entire territory of Montenegro in the observed period. The project of connecting BiH and Serbia with new 400 kV interconnections is part of the construction of the so-called Trans-Balkan Corridor, which aims to increase the capacity of the Western-Balkan interconnection, in the direction east-west and north-south, and which also enables the integration of renewable sources, primarily in Montenegro, and the distribution of energy to neighbouring countries. CGES also invests in smart grid projects, i.e. smart networks whose goal is the optimal operation of the transmission system. In this regard, a number of projects have already been implemented, and projects whose implementation will provide remote monitoring, control and regulation of new facilities by including them in the new NDC SCADA/EMS system, extend the system for remote access and SGM applications, as well as the old NDC SCADA to new facilities that will be built in the coming years, and completely transition to IP communication instead

of the existing, outdated, wired communication within the AMR system, are ongoing. In addition, it is planned to install sensors to control the temperature of wires and additional load, and to implement a system for integral operation planning and EPS reliability assessment.

Finally, it is concluded that CGES is constantly working to maintain and construct a network with multiple goals, the most important of which are:

- ▶ elimination of observed insecurities in the past period,
- ▶ contribution to the security of the national system,
- ▶ contribution to the security of uninterrupted electricity trade in the region,
- ▶ minimisation of capital investments in the transmission network,
- ▶ enabling the connection of renewable electricity sources and increasing socio-economic benefit,
- ▶ connecting the European electricity market,
- ▶ strategic directions of improvement and development in order to protect the environment.









# Normative and Regulatory Framework

In order to continuously improve the normative and regulatory framework, in 2022, CGES continued with activities arising from the obligation to harmonise national legislation with the *acquis communautaire*. In this regard, in 2022, through the working bodies of ENTSO-E, CGES actively contributed to the development of adapted EU regulations that were adopted by the Ministerial Council of the Energy Community in December, and whose transposition into the national legislation is expected in the coming period.

Bearing in mind the amendments to the Energy Law from 2020, in the reporting year, CGES continued with the activities of harmonisation of the Transmission Grid Code, which passed the adoption procedure and was published in the Official Gazette of Montenegro no. 149/22. In addition, at the end of the year, CGES finalised the Methodology for Determining the Electricity Transmission System Connection Charge. The necessity of working on the aforementioned acts was reflected in their adaptation with new legal solutions.

When it comes to the Company business operations, CGES is an economic entity whose revenues are determined by the Agency. Namely, the regulatory allowed revenue of CGES, in accordance with the regulatory-normative framework, consists of operating costs, depreciation and return on the regulatory asset base.

**Return on assets** is the part of revenues generated based on invested capital and is calculated as the product of the rate of return on capital and the regulatory asset base. The rate of return on capital is set for the regulatory period as a three-year weighted average cost of capital, which includes the cost of equity and the cost of borrowed capital, weighted according to their share in the total capital of the operator. The regulatory asset base is the value of assets in relation to which the return on assets for the

regulatory year is calculated and consists of fixed assets, investments and working capital.

**Depreciation** for regulatory purposes is set based on the value of fixed assets, the useful life of fixed assets and the application of the proportional depreciation method. The useful life of fixed assets is set based on the technical and economic useful life of different groups of fixed assets, which was used in the last evaluation accepted by the Agency.

**Operating costs for energy activities** are recognised if they are techno-economically justified and in the function of performing the transmission activity. For the purposes of setting revenues and in order to create conditions for increasing efficiency, operating costs are divided into:

1. controllable operating costs (personnel costs, fringe benefits and other personal expenses, material costs, costs of production services, intangible costs other than taxes, contributions and entertainment costs, other expenses);
2. partially controllable operating costs (cost of electricity procured to cover justified transmission system losses);
3. non-controllable operating costs (costs related to real estate taxes, fees and charges in accordance with the law, costs for the provision of ancillary and balancing services, costs incurred based on international agreements, environmental protection costs, costs related to remuneration for the operation of the market operator, other non-controllable operating costs in accordance with the law).

The Agency's decision on determining regulatory allowed revenue and prices for CGES established the regulatory allowed revenue for 2022, which is transposed into tariffs in the amount of €30.7 million.

In accordance with the legal authorities, in 2022, the Agency supervised the operations of CGES and conducted regular controls of investment plan implementation, as well as the realisation of energy and economic values based on which the regulatory allowed revenue was determined.

With the participation of the CGES through the public discussion procedure, in July 2022, the Agency adopted a new Methodology for Determining Regulatory Allowed Revenue and Prices for Use of Electricity Transmission System. In addition, in the same period, new Rules for Price and Fee Adjustments were adopted, which govern the conditions, method and procedure for determining the amount of price adjustments for the use of the transmission system based on deviations of realised energy and financial values compared to determined ones. Moreover, the Methodology for Determining Prices, Deadlines and Conditions for Provision of Ancillary Services and Electricity Transmission System Balancing Services was adopted.

The year 2022 was certainly marked by the procedure for determining regulatory allowed revenue and prices for the period 1 January 2023-31 December 2025, which, in accordance with the Energy Law, was initiated by the application of CGES of 31 August 2022.

At the meeting of the Board of the Agency held on 29 November 2022, the Decision on determining regulatory allowed revenue and prices for the use of the electricity transmission system for the period 1 January 2023 - 31 December 2025 was adopted. In accordance with the aforementioned Decision, the total regulatory allowed revenue of CGES for the period 1 January 2023 – 31 December 2025 was determined in the amount of €150.3 million, i.e. in the amount of €49.3 million for 2023, €49.5 million for 2024 and €51.5 million mln for the regulatory year 2025. Compared to the period 2020-2022, the regulatory allowed revenue for the period 2023-2025 is higher by €41.1 million or 37.6%.

This result represents a stable and solid basis for ensuring the economic and financial sustainability of the Company for the years to come.



# Financial Statements

## Profit & loss statement

**Revenues** amount to €120 million and they mainly refer to revenues from balancing services and system services (€48.7 million), revenues from cross-border capacity allocation (€40.9 million), transmission network use (€20.7 million), revenues from fees for transmission losses (€9.0 million) and other revenues (€1.3 million).

**Operating costs** were realised in the amount of €85.1 million and mainly refer to costs of balancing

and system services (€50.7 million), transmission losses (€19.3 million), personnel costs (€6.6 mln) and other costs including costs of material and third party costs (€8.6 million).

**EBITDA** (earnings before interest, taxes, depreciation, and amortization) amounts to €35.4 million with a margin of 29%.

P&L			
€ mil	2022	2021	2022 vs 2021
Transmission revenues	20.7	23.0	(2.4)
Transmission losses	9.0	9.8	(0.8)
Congestion revenues	40.9	18.6	22.2
Ancillary system balancing revenues	48.7	22.9	25.8
Other revenues	1.3	2.1	(0.8)
<b>Total revenues</b>	<b>120.5</b>	<b>76.5</b>	<b>44.0</b>
Personnel	6.6	6.6	(0.1)
Material	0.2	0.2	(0.0)
Third party	2.6	2.4	0.1
Ancillary system balancing costs	50.7	23.5	27.2
Other	5.9	6.0	(0.2)
Transmission losses	19.3	9.4	9.9
<b>Opex total</b>	<b>85.1</b>	<b>48.1</b>	<b>37.0</b>
<b>EBITDA</b>	<b>35.4</b>	<b>28.4</b>	<b>7.0</b>
Margin	29%	37%	-8%
<b>EBITDA Adjusted</b>	<b>47.6</b>	<b>28.5</b>	<b>18.4</b>
D&A	9.8	9.3	0.5
<b>EBIT</b>	<b>25.6</b>	<b>19.1</b>	<b>6.5</b>
Margin	21%	25%	-4%
<b>Net Financial expenses</b>	<b>0.5</b>	<b>0.3</b>	<b>0.2</b>
Financial revenues	0.3	0.6	(0.2)
Financial expenses EBRD	0.3	0.2	0.1
Financial expenses KfW	0.1	0.2	(0.0)
Financial expenses KfW loan - Luštica	0.0	0.1	(0.0)
Financial expenses Revolving facility	0.3	-	0.3
Financial expenses other debt	0.1	0.5	(0.4)
<b>EBT</b>	<b>25.0</b>	<b>18.7</b>	<b>6.3</b>
Taxes	4.8	1.9	2.9
<b>Net income</b>	<b>20.3</b>	<b>16.9</b>	<b>3.4</b>



### Revenues from transmission network use:

- **Revenues from distribution:** amount to €12.2 million and are lower vs 2021 (-€1.2 million);
- **Revenues from producers:** amount to €8.5 million and are lower vs 2021 (-€1.2 million) due to higher active energy.
- **due to higher active energy:** lower vs 2021 (-€0.8 million) due to lower revenues from fees to cover losses.

**Congestion revenues:** significantly higher vs 2021 (+€22.2 million), due to higher revenues on almost all interconnections, namely Italy (+€8.5 million), Bosnia and Herzegovina (+€5.7 million), Serbia (+€5.5 million), Kosovo (+€1.5 million) and Albania (+€0.9 million). Higher revenues are a consequence of the disruption of electricity prices on markets, and thus an increase in the marginal prices that traders pay for congestion for access to cross-border capacities.

**Revenues from balancing and system services:** significantly higher vs the previous year (+€25.8 million), mostly due to higher revenues for the engagement of secondary reserve, revenues from unplanned cross-border deviations of electricity using the new Fskar methodology (June 2021) and as a result of cross-border delivered secondary regulation

energy (INOM), as a consequence of the Multilateral agreement on SMM GCC - EMS, MEP-SO dated 17 November 2021.

**Operating costs:** higher vs the previous year, +€37.0 million (+76.9%), mainly due to differences in the following items:

- ▶ ancillary, system and balancing services (+€27.2 million);
- ▶ transmission network losses (+€9.9 million);
- ▶ costs of material, third party services and other (-€0.1 million);
- ▶ personnel costs (-€0.1 million).

**Depreciation:** in line with the previous year

**Net financial costs:** higher vs the end of 2021 (+€0.2 million).

**Income tax:** was calculated according to the progressive rate in accordance with the Law on Corporate Income Tax. The realisation is higher compared to the previous year (+€2.9 million) as a result of a significantly higher tax base.

**Net income:** the realised net income of the company amounted to €20.3 million and is significantly higher vs the previous year (+€3.4 million) as a result of a significant increase in revenues from cross-border capacity allocation.

## Balance sheet

Balance sheet			
€ mln	EoY 2021	EoY 2020	2021 vs. 2020
Assets	249.4	245.0	4.5
Working Capital	(26.1)	(20.9)	(5.2)
Funds	4.2	3.8	0.4
<b>Net Invested Capital</b>	<b>219.1</b>	<b>220.2</b>	<b>(1.1)</b>
Shareholders Equity	196.9	187.5	9.4
Paid in capital	155.1	155.1	-
Reserve	0.2	0.2	-
Carried forward results	42.1	32.7	9.4
Net income from previous period	32.7	20.3	12.5
Current net income	16.9	12.5	4.4
Dividends	(7.5)	-	(7.5)
Purchased own shares	(0.6)	(0.6)	-
Net Debt	22.2	32.8	(10.5)
Cash	25.5	22.4	3.2
Long term debt	47.8	55.1	(7.3)
EBRD Lastva-Plijevlja	34.1	37.7	(3.7)
KfW Lastva-Plijevlja	7.5	9.9	(2.4)
KfW (Luštica)	0.2	0.2	-
Revolving facility	-	-	-
Other debt	6.0	7.3	(1.3)
Short term debt	-	-	-
Dividends	-	-	-
<b>Total liabilities</b>	<b>219.1</b>	<b>220.2</b>	<b>(1.1)</b>

## Net financial debt

Compared to the end of 2021, the realisation in 2022 is lower by €15.7 million due to the repayment of EBRD and KfW loans (-€8.3 million), as well as repayments based on old loans (-€1.5 million), partially

compensated by investments in associated infrastructure (+€6.9 million), while the level of total cash is higher (+€12.9 million) compared to 2021 due to cash generation from operational activities.

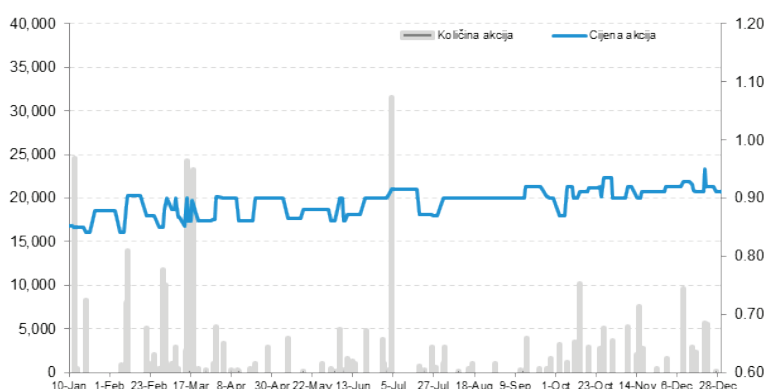
## Cash flow

Cash flow		
€ mil	2022	2021
<b>Initial balance</b>	<b>25.5</b>	<b>22.4</b>
EBIT	25.6	19.1
Taxes	(4.8)	(1.9)
Depreciation	9.8	9.3
Delta WC	(4.7)	5.2
Delta funds	2.7	0.4
Delta capex	(12.8)	(13.8)
<b>Total Operational</b>	<b>15.8</b>	<b>18.3</b>
Financial expenses	(0.5)	(0.3)
Variation of EBRD loan Lastva - Pljevlja	0.8	(3.7)
Variation of KfW loan Lastva - Pljevlja	(2.4)	(2.4)
Variation of KfW loan-Luštica	0.2	-
Infrastructure purchase	-	-
Revolving facility variation	-	-
Current Debt increase/amortization	(1.4)	(1.3)
<b>Total Financial</b>	<b>(3.3)</b>	<b>(7.7)</b>
Capital injection/reduction	(0.1)	-
Dividends	-	(7.5)
Purchased own shares	0.6	-
<b>Remittances/injection</b>	<b>0.5</b>	<b>(7.5)</b>
<b>Total</b>	<b>12.9</b>	<b>3.2</b>
<b>Final Balance</b>	<b>38.5</b>	<b>25.5</b>

## Stock exchange membership and CGES' shares

As of 7 May 2012, CGES' shares are quoted on the A list of the Montenegro Stock Exchange, which is a confirmation of the quality of the securities and, indirectly, a number of preconditions that the company meets in terms of corporate culture.

The curve below shows the trend of the company's shares, which indicates a slight increase in the price from €0.85 to €0.91 per share at the end of 2022.





\$ 14666.67011  
¥ 52556.31198  
€ 26036.24728



\$ 82744.31208  
¥ 87164.91400  
€ 80895.81851



\$ 70896.04541  
¥ 79258.62140  
€ 80682.01823



\$ 30148.01513  
¥ 31911.81389  
€ 34148.20220



\$ 70896.04541  
¥ 79258.62140  
€ 80682.01823



\$ 10884.96867  
¥ 70759.15022  
€ 88278.17512



# Information and Communication Technologies

## Optical telecommunication infrastructure – foundation of a modern network

The functioning of a modern transmission system operator today cannot be imagined without modern technologies in the field of telecommunications. CGES telecommunication system consists of passive optical cable network mostly realized with OPGW (Optical Ground Wire) technology, active multiplex SDH/PDH and IP/Ethernet equipment, as well as PBX system for business and operational telephony.

The telecommunication network connects all CGES facilities and serves for the transmission of the control, measurement, and monitoring data and exchange of voice and digital data.

The telecommunication network is also used to exchange real-time data on the operation of European countries' electricity systems, with the aim of ensuring the security of the electricity sector in Europe. The development of the CGES optical network is in line with the development of the networks of neighbouring transmission system operators.

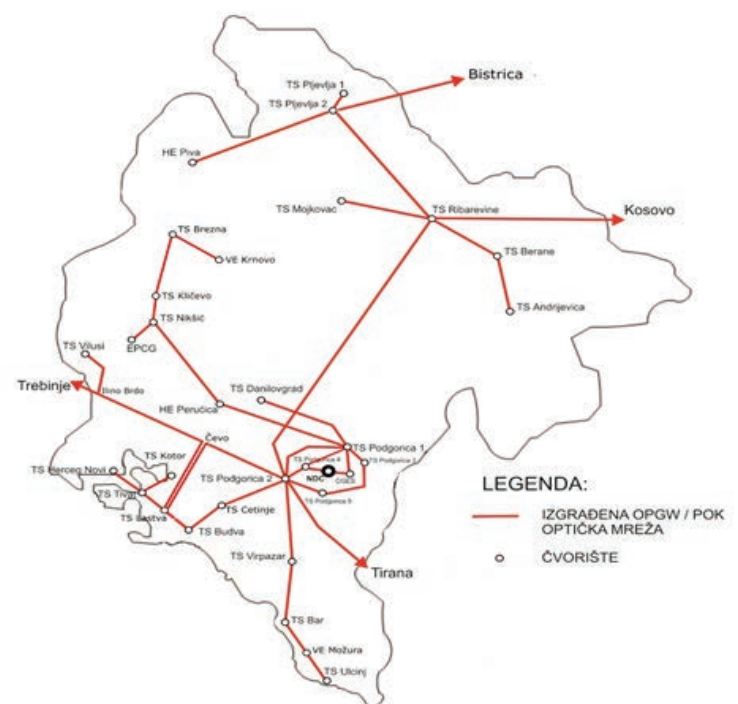
By this infrastructure, CGES is also connected to neighbouring systems, and through them to all TSOs in ENTSO-E, exchanging data in real time using the PCN and Electronic Highway network.

Also, the exchange of operational data was realized with domestic partners EPCG, CEDIS, WPP Krnovo, WPP Možura and ŽICG.

Implementation of modern digital technologies in the field of power system control and monitoring, as well as harmonisation with international practices and partners, increase the requirements in terms of

technology, digital flow and capacity of active telecommunication equipment.

In 2022, several investment projects were started that will greatly modernise the telecommunication system. It is an IP telephone system for operational and business users. In addition, the project of a new TC transmission system based on IP/MPLS technology was started. In this way, CGES follows modern trends in the field of telecommunications and electric power system control.



CGES' optical network as of 31 December 2022

The optical transmission network with its configuration and capacities, on the one hand, meets the existing needs in terms of transfer of information of CGES's complex technical and business system, and on the other hand, represents a potential commercial resource in the telecommunications market of Montenegro. CGES is an operator registered to provide optical fibre lease services, and currently leases 469 km of optics.

In 2021, an agreement was signed with the Broadcasting Centre on the provision of radio-redundancy services. This ensures that all CGES facilities have communication redundancy (optical or radio) in order to improve the availability of system control. Good cooperation with this state operator continued in 2022.

## Modern information systems

In 2022, in order to increase the efficiency of the Company, modernisation and digitalisation of corporate business processes, several capital projects in the field of information technology were implemented.

The implementation of the Document Management System (DMS), which was put into operation in the first half of 2022, stands out as important. The DMS includes electronic business documentation, distribution, archiving and implementation of certain business processes, i.e. workflows of files and doc-

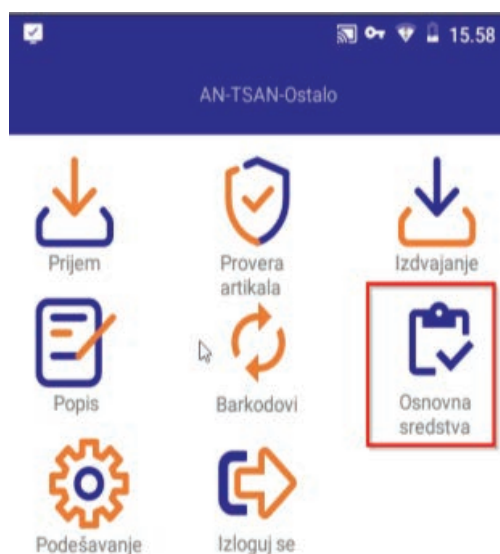
uments. The implemented Origami solution enables document data recording, electronic capture, storage, maintenance, processing, monitoring and distribution of documentation from the business system, management of general work procedures, as well as management of some "standardised" business procedures for certain types of documents. The DMS is in the constant process of upgrading the new functionalities of the implemented business processes, as well as the implementation of new business processes.

ID	Date	Status	Name	Author	Comments
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103-00-0050	13.02.2022.	Pročišćenje	Pročišćenje 103-00-0050	103-00-0050	Pročišćenje 103-00-0050

At the end of the year, the ERP (MSD 365 BC) system was upgraded with programme modules for: records of data for occupational safety and health and bar-code system for records of data on items in stock and fixed assets of CGES. The Silaris WMS solution, based on mobile PDA devices, enables carrying out warehouse operations for all types of incoming and outgoing documents and performing inventory of items in stock and inventory of fixed assets using bar-code technology.



The implementation of the new SCADA system required strengthening the security of this technical information system. Thus, in 2022, the procurement of a new Intrusion Prevention System (IPS) was implemented, which achieves greater security of the new SCADA system.



As a critical infrastructure operator, CGES is obliged to protect its critical infrastructure. In the era of digitalisation, a very important aspect is the information security of the IT system, which implies the preservation of confidentiality, integrity, availability and protection of data, including cyber security. Along with the implementation of many systems for the protection of IT systems, it is necessary to carry out constant education of all employees about the importance of data and system protection and the responsibility of all employees in that process. To this end, an Information Security Awareness platform was implemented, which will enable the implementation of information security education and raise

employees' awareness of its importance and significance. On the mentioned web platform, in accordance with the annual training plan, documents of the adopted Information Security Management System (ISMS), as well as new measures, techniques and tools of the ISMS system are available to all employees.

According to the request of ENTSO-E, an external audit of the established ISMS was carried out in accordance with the requirements of the security plan of OPDE-ATOM MVS. The result of the audit was positive (grade 10), which further motivated us to continue to improve the ISMS system and raise employee awareness of the importance of information security, all in order to create the necessary prerequisites for certification for the ISO 27001 standard.

Information security requires constant identification and classification of risks in order to determine critical vulnerable points in the information architecture in CGES. To this end, a mandatory annual risk assessment and analysis was carried out and a treatment plan for identified risks was defined for 2022.

In order to protect the company from risks that can be caused by natural disasters, human influence and cyberattacks, IT infrastructure for the needs of realising a Disaster Recovery Centre at the location of SS Ribarevine was implemented in 2022. All critical services of the business information system of CGES are replicated to the remote location of the DR Data Centre, so that the data of those systems are protected, confidential, complete and available. The implementation of the DR Data Centre for the business information system guarantees that business IT processes can run smoothly in all crisis situations, that is, continuity in the operation of the information system when there is an unplanned interruption.

Additional activities within the USEA/UCSI Cyber Security Working Group, Cyber Security Coordination Group of the Energy Community of Southeast Europe, ENTSO-E Information and Communication Technologies Committee (ICTC), ENTSO-E Steering Group ICT Strategy, ENTSO-E Steering Group ICT Security and ENTSO-E Steering Group Delivery continued.







# International Cooperation

Law on Cross-Border Exchange of Electricity and Gas stipulates that cross-border electricity transmission may be performed by a transmission system operator (TSO) that has an established system of international cooperation.

In these terms, CGES realises international cooperation to strengthen capacities and apply the best international practices in the field of energy.

During 2022, CGES' representatives contin-

ued their activities within their participation in international working bodies and organisations. The impact of the coronavirus pandemic on the development of international cooperation was less significant, therefore the planned international activities were realised through electronic communication channels as well as physical presence at individual meetings.

## Membership in ENTSO-E

Crnogorski elektroprenosni sistem AD Podgorica maintains continuous cooperation with the European transmission system operators - ENTSO-E (European Network of Transmission System Operators for Electricity), which today counts 39 members from 35 European countries. The aim of cooperation, declared in the Regulation 714/2009 of the European Parliament as of 13 July 2009, is the promotion of establishing and facilitating the functioning of regional and internal electricity market of the European Union, cross-border trade, as well as ensuring optimal control, coordinated operation and appropriate technical development of the European electricity transmission system.

In 2022, CGES' representatives participated in the work of the ENTSO-E Assembly, System Operations Committee (SOC) and Regional Group Continental Europe (RG CE), Group Network Models & Forecast Tools (NMFT), Sub-Group Coordinated System Operation (SG CSO), Expert Group International Grid Control Cooperation (IGCC), System Development Committee, Working Group Asset Implementation and Management (AIM), South East Cooperation

Initiative for Transmission System Planning (SECI TSP), Market Committee, Group Congestion Management and Market Integration (CMMI), Information and Communication Technologies Committee, StG ICT Strategy, Stg Delivery and StG ICT Security, as well as Electronic Highway, Legal and Regulatory Group (LRG) and Sub-Group System Protection & Dynamics.

Also in 2022, CGES participated in the ENTSO-E Energy Community Task Force, which contributed to the preparation of adapted EU regulations in the field of energy, which were adopted at the Ministerial Council of the Energy Community in December.

## Membership in Med-TSO

The Association of the Mediterranean Transmission System Operators – Med-TSO is founded with the aim of promoting the formation of the Mediterranean energy market, ensuring its optimal functioning by defining common methodologies, rules and practices for optimizing the operation of existing infrastructure and facilitating development of a new one. CGES as a co-founder of Med – TSO association, which has 21 members from 19 MED coun-

tries, endeavours to contribute to implementation of declared objectives, making of decisions and work of this association.

In 2022, in addition to attending Med-TSO Assembly, CGES' representatives participated in monitoring and work of the Technical Committee for Regulation and Institutions, Knowledge Sharing Technical Committee, Technical Committee for Planning, Technical Committee for Operations and Technical Committee for Economic Studies and Scenarios.

### Participation in the Work of the Energy Community

The Energy Community is an international organisation dealing with energy policy. The Community was established by signing a Treaty in October 2005 in Athens. The Treaty entered into force in July 2006, connecting the European Union, on the one hand, and the countries of Southeast Europe and the Black Sea Region, on the other. The main goal of the Community is to expand the internal electricity market from the European Union to the countries of Southeast Europe and the Black Sea Region based on legally binding regulations.

Montenegro is one of the contracting parties of the Energy Community, and during 2021, CGES' representatives participated in the work of the Cybersecurity Coordination Group, Balkans Digital Highway Project, Utility Cyber Security Initiative, Albania, Italy, Montenegro, Serbia Working Group, South-Eastern Europe Task Force (SEE TF), Electricity Market Initiative (EMI), Supply Security-Electricity Subgroup, the Central and South-Eastern European Gas Connectivity Initiative (CESEC), and the Working Group for the Projects of Energy Community Interest (PECI) and Projects of Mutual Interest (PMIs) Electricity Working Group).

## Other international activities

### SMM Block Operation Group

CGES manages the ENTSO-E control area of Montenegro. The control area of Montenegro is part of the SMM Control Block, which also includes the control area of Serbia and Macedonia. Coordination of the SMM Block is performed by the transmission system operator of Serbia - EMS, cooperating with

CGES and Macedonian transmission system operator MEPSO. The Permanent Working Group in charge of analysing and improving the operational work within the SMM block transmission system has been established.

### TRINITY project

The TRINITY project aims to contribute to the interconnection of electricity markets in the region of Southeast Europe (SEE) and joining the Multi-Regional Coupling Market. CGES is part of a consortium implementing this scientific research project together with other transmission system operators, power exchanges, promoters of renewable energy sources and scientific research institutions from the European Union and Southeast Europe.

### CROSSBOW project

As a part of a consortium which is composed, among others, of eight neighbouring TSOs (TRANS, ADMIE, ESO, EMS, NOSBiH, HOPS, CGES and MEPSO) CGES participated in the implementation of the CROSSBOW, which is one of the most significant innovation projects of the European Union in the smart grids sector (smart grids). The CROSSBOW project supports research, innovation and technological development in the field of energy, the aim of promoting sustainable electricity networks, which contain greater share of renewable energy sources in the total generation, and allow for the possibility of establishing close to the real-time pan European electricity balancing markets.



# Internal Audit

As part of the governance and internal control system, CGES' internal audit provides independent and objective assurance and advisory services to contribute to the improvement of operations.

In 2022, CGES' internal audit carried out the following activities:

## ► Implementation of the Internal Audit Plan 2022:

By planning the work, the Internal Auditor achieves the realisation of goals, the determination of priorities and the provision of efficient and effective use of resources, as well as:

1. adequate assessment of future resource needs;
2. a standard in relation to which actual performance can be measured;
3. acceptance of work performed by internal audit by the management;
4. continuous record of factors that were taken into account when determining the plan, as well as the decisions made.

In accordance with the above, the Internal Audit Plan 2022 was adopted in December 2021.

The Internal Audit Plan 2022 envisaged as follows:

1. 3 audits to be conducted;
2. provision of risk management advisory services and
3. finalizing the audit of protection and safety process, started but not completed in 2022.

In 2022, the following audits were conducted:

1. power facility operation and control;
2. human resource management along with
3. finalizing the audit of protection and safety process.

In addition, risk management advisory service was provided.

The audit of the quality system management process was not carried out during 2022. The audit objective was to give assurance to the Board of Directors that CGES had established internal controls ensuring that the quality system management took place in an adequate and effective manner. Since CGES initiated certification-related activities in accordance with ISO standards during 2022, the audit no longer made sense and its implementation was postponed.

## ► New Internal Audit Charter was adopted:

According to the International Standard for the Professional Practice of Internal Auditing 1000, the purpose, authority, and responsibility of the internal audit activity must be formally defined in an Internal Audit Charter, consistent with the Internal Audit Mission and Mandatory Guidance of the International Professional Practices Framework.

According to the same standard, the Internal Auditor must periodically review the Internal Audit Charter and submit it to the Company's Board for approval. The new Internal Auditor Charter in relation to the Internal Audit Charter as of February 2020, precisely defines as follows:

- Purpose and Mission of Internal Audit;
- Scope and Subject of Internal Audit Activity;

- ▶ Independence and Objectivity;
- ▶ Responsibilities of Internal Auditor;
- ▶ Responsibilities of the Company's Board of Directors with regard to the internal audit;
- ▶ Responsibilities of Executive Director with regard to the internal audit;
- ▶ Internal Auditor Authority;
- ▶ Internal Audit Planning;
- ▶ Reporting to the Board of Directors;
- ▶ Reporting on the individual audit results;
- ▶ Monitoring the implementation of accepted internal audit recommendations;
- ▶ Quality Assurance for Internal Audit;
- ▶ Professional Development;
- ▶ Cooperation with the Audit Committee, the Central Harmonisation Directorate of the ministry responsible for finance affairs.

### ▶ **Monitoring implementation of internal audit recommendations was provided:**

The internal auditor monitored the implementation of accepted recommendations and informed the Board of Directors in January and July 2022 about their status.

In the audits conducted during 2022, 40 recommendations were accepted. Of the total number of recommendations, 2 have been implemented, while 38 have a completion date in 2023 or are in progress. Also, as regards the recommendations from the previous reporting period, completion deadline of which was the end of 2022, out of a total of 19 recommendations, 8 have been implemented, 1 has been partially implemented, while 10 of them are being implemented and/or are expected to be implemented in the coming period.

### ▶ **Continuing Professional Development of the Internal Auditor 2023 was adopted and professional development of the Internal Auditor was provided:**

Following the International Standard for Professional Practice of Internal Auditing 1230 - Continuing Professional Development, Article 34 paragraph 1 item 4 of the Law on Governance and Internal Controls in Public Sector (Official Gazette of Montenegro, no. 75/2018) and Internal Audit Charter, Internal Auditor Continuing Professional Development Plan 2023 was adopted. In this way, the Internal Auditor was given the opportunity to improve her knowledge, skills and other abilities through continuing professional development.

In 2022, the Internal Auditor attended several trainings organized by the Central Harmonization Directorate of the Ministry of Finance and, one online training course organized by the CEF (Centre of Excellence in Finance) from Ljubljana, as well as one training arranged by the Chamber of Commerce of Montenegro.

### ▶ **The Internal Audit Activity Self-Assessment was conducted**

To achieve the internal audit's strategic goal of "improving the internal audit activity", the Internal Audit Strategic Plan 2021 - 2023, provided for conducting an internal assessment of the quality of the internal audit activity.

In order to implement this activity, the Internal Audit Quality Assurance and Improvement Program was previously adopted.

After conducting a self-assessment of the quality of CGES internal audit activity, the general conclusion is that the internal audit activity has "general conformance" with the International Standard for Professional Practice of Internal Auditing, as well as that the efficiency and effectiveness of CGES internal audit is "satisfactory".

In the end, since the internal audit activity of CGES was partially harmonised or not harmonised with a certain number of Standards, an Action Plan for the Improvement of Internal Audit Activity was adopted.

## ► Risk Management Training Course was held:

Internal Audit Plan 2022 provides for advisory engagement in the area of risk management. The advisory engagement related to holding a risk management training course and developing an internal document (procedure) for risk management. In this regard, the Internal Auditor held a workshop in November 2022 with the aim of promoting the risk management framework, with a focus on:

- the regulation governing the risk management area,
- method of risk identification,
- risk assessment,
- responding to risks and
- risk monitoring and reporting.

As a result of this advisory engagement, a proposal of CGES Risk Management Procedure was prepared.

## ► The Internal Audit Plan 2023 was adopted:

In accordance with Article 24 of the Law on Governance and Internal Control in Public Sector, the CGES Internal Auditor prepared and proposed to the Board of Directors the Internal Audit Plan 2023, which was adopted at the first meeting of the Board of Directors held in December 2022.







# Independent Auditor's Report



## Independent Auditor's Report

To the Shareholders of Crnogorski elektroprenosni sistem a.d., Podgorica

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### Our opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Crnogorski elektroprenosni sistem a.d., Podgorica (the "Company") as at 31 December 2022, and the Company's financial performance and cash flows for the year then ended in accordance with the Law on Accounting in Montenegro.

### What we have audited

The Company's financial statements comprise:

- the statement of financial position as at 31 December 2022;
- the statement of comprehensive income for the year then ended;
- the statement of changes in equity for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

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### Basis for opinion

We conducted our audit in accordance with the Law on Auditing in Montenegro. Our responsibilities under this law are further described in the Auditor's responsibilities for the audit of the financial statements section of our report.

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

### Independence

We are independent of the Company in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code) and the ethical requirements of the Law on auditing in Montenegro that are relevant to our audit of the financial statements in Montenegro. We have fulfilled our other ethical responsibilities in accordance with the IESBA Code and the ethical requirements of the Law on auditing in Montenegro.



## Our audit approach

### Overview

<b>Materiality</b>	<ul style="list-style-type: none"> <li>Overall Company materiality: EUR 2,369 thousand, which represents 0.75% of the Company's total assets.</li> </ul>
<b>Key audit matters</b>	<ul style="list-style-type: none"> <li>Revenue recognition – sale of imbalance power</li> <li>Long-term provisions</li> </ul>

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the Company, the accounting processes and controls, and the industry in which the Company operates.

### Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Company materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, if any, both individually and in aggregate on the financial statements as a whole.

<b>Overall materiality</b>	EUR 2,369 thousand
<b>How we determined it</b>	0.75% of total assets
<b>Rationale for the materiality benchmark applied</b>	We chose the benchmark described above as the basis for determining materiality because, in our view, this is the benchmark against which the Company's financial position is commonly measured by users. This is in line with the Company's main objective - to ensure stable transmission of electricity in the country as a result of extensive investments in expansion and modernization of the power grid network





### Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
<p><b>Revenue recognition - sale of imbalance power</b></p> <p>Refer to note 2.18 (Summary of accounting policies – Revenue recognition) and note 23 (Revenue from sale).</p> <p>The Company has recognised revenue of EUR 119,208 thousand, including revenue from sale of imbalance power and Fskar methodology of EUR 46,885 thousand, fully compensating incurred costs for purchase of imbalance power on local and international level, for the year ended 31 December 2022.</p> <p>The most significant revenue streams are revenue from auction based allocated capacity and grid network usage revenue, which generally are invoiced on a monthly basis.</p> <p>The income of imbalance power (employment and reservation of secondary and tertiary reserve capacities as well as compensation programs) is generated through a nationwide imbalance settlement procedure on local and international level, resulting in a final imbalance settlement comprised and determined subsequent to performance of these services by the Company.</p> <p>Due to the above, the revenue recognized for sale of imbalance power and revenues based on Fskar methodology in the financial statements involves significant management's estimates and judgement.</p> <p>As a result of these complexities, we have selected revenue recognition as a key audit matter.</p>	<p>Our audit procedures included the following:</p> <ul style="list-style-type: none"> <li>- obtaining an understanding over the revenue and receivables process for material revenue streams, including sale of imbalanced power and revenues based on Fskar methodology,</li> <li>- assessing the design and implementation and testing the operating effectiveness of the key controls in place,</li> <li>- verification of the tariffs applied for all material revenue streams by comparing them to both contractual and regulatory terms,</li> <li>- testing a sample of invoices issued to customers and checking them against supporting evidence (eg. contracts with customers) and cash received,</li> <li>- assessing the recognition of revenue in the correct financial period by examining the reasonableness of management's estimates through comparison of both prior and current year estimated income to actually generated revenue,</li> <li>- evaluating the financial statement disclosures related to revenue.</li> </ul>



### Long-term provisions

Long-term provisions are disclosed in Note 13 to the financial statements and a description of the accounting policy in Note 2.12.

The calculation of provisions requires significant management judgement because of the inherent complexity in estimating future costs, factual circumstances, legal or constructive obligations and risk of a financial impact.

Risks and uncertainties from such legal or constructive obligations need to be carefully assessed and analysed by the management.

For those reasons we have selected long-term provisions as a key audit matter.

We critically assessed management's annual review of long term provisions recorded as at 31 December 2022. Testing involved understanding of the legal or constructive obligations that are base for the calculation of long-term provisions.

Of particular note, we performed the following procedures:

- assessing the design and implementation of the procedures related to the process of recognising and evaluating provisions, obtaining detailed listing of long-term provisions prepared by the Company's and analysing the reasonableness of the amounts recognised in the financial statements,
- assessed and tested assumptions that have the most impact on calculation of provision,
- verified the mathematical accuracy of the underlying calculations,
- verified the completeness of data by cross referencing with other financial and non-financial data,
- obtaining third party evidence where appropriate,
- assessing of disclosure in the financial statements per each category of long-term provision,
- tested the sensitivity analysis prepared by management for the change in key assumptions. We have an internally developed range of acceptable assumptions. While our range is, itself, subjective for the purpose of valuing of long-term provisions, assessment prepared by management fell at the lower end of the range. We discussed with the management the rationale for the assumptions that they used and we agreed that the explanation was reasonable. We tested mathematical accuracy of calculations and concluded that the results were not materially different and were within a tolerable range.



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### Reporting on other information including the Management Report

Management is responsible for the other information. The other information comprises the Annual Management Report (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.

With respect to the Annual Management Report we also performed procedures required by the Law on Accounting in Montenegro. Those procedures include considering whether the Annual Management Report includes the disclosures required by the Article 11 of the Law on Accounting.

Based on the work undertaken in the course of our audit, in our opinion:

- the Management Report has been prepared in accordance with the requirements of the Law on Accounting in Montenegro; and
- the information given in the Management Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

In addition, considering the knowledge and understanding of the Company and its environment obtained during the audit, we are required to report if we have identified material misstatements in the Annual Management Report. We have nothing to report in this regard.

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### Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Law on Accounting in Montenegro, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company'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 management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company'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 the Law on Auditing in Montenegro 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 the Law on Auditing in Montenegro, 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 Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's 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 Company'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 Company 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 fair presentation.

We communicate with those charged with governance 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.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The licensed auditor on the audit resulting in this independent auditor's report is Biljana Bogovac.



Refer to the original signed  
Montenegrin version

Biljana Bogovac  
Licensed auditor

Podgorica, 28 March 2023

Refer to the original signed  
Montenegrin version

PricewaterhouseCoopers d.o.o., Podgorica



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