Implementation of the Energa Group's Strategy in 2021 and development prospects for 2022

The overarching objective of the Company is to grow the value of the company, guaranteeing a return on capital employed for shareholders. Furthermore, the Company performs functions associated with assurance of energy security of Poland. Because of the high proportion of regulated activities in its business structure, the Group maintains the status of a company with a balanced risk profile.

Distribution Business Line

The Energa Group's Distribution Business Line is consistently seeking to become a leading distribution system operator ("DSO") by improving its grid performance and reliability, and providing top quality customer service. In 2022, the planned investment budget of the Distribution Business Line is at a level superior to that of 2021 (+4%). Additionally, the value of the investment plan of Energa Operator SA shall be increased by the capital expenditure on commercial customer connections starting from 2022, in accordance with Article 7 Section 9 of the Energy Law, to be refinanced by external entities.

The capital expenditures of Energa Operator SA account for 99.9% of total investment expenditures of the Distribution Business Line.

Energa Operator SA's key investment areas in 2022 include:

- further connecting new customers and new sources and the associated construction of new grids,
- expanding and rebuilding the grid to ensure the possibility to handle the increased demand for capacity, in particular within the HV grid,
- rebuilding/modernising the distribution grid, at all voltage levels, to improve continuity of customer supply (SAIDI/SAIFI) and comply with the required quality parameters for electricity supply and to reduce grid losses, such as:
    - replacement of overhead MV naked power lines running through forest and wooded land with cable lines and/or insulated overhead cables,
    - MV grid automation,
    - replacement of non cross-linked (emergency) MV cables,
    - replacement of LV cables with insulated cables with terminals,
    - construction of new MV power line connections,
    - replacement of HV/MV transformers;
- connection of public charging stations and charging infrastructure for the public road transport,
- grid connection of energy storage facilities,
- purchase and assembly of smart metering infrastructure to be implemented under the amendments to the Energy Law, Journal of Laws of 2021, item 1093, in accordance with Article 11t, and to the Capacity Market Act introducing the requirement for all customers, except for public housing tenants, to take readings of energy consumption every hour and make settlements of the power fee based on such readings starting from January 2021. Moreover, Article 4.2a of the Act on Renewable Energy Sources obligates the DSOs to take hourly readings of energy withdrawn from and fed into the grid for all producers and prosumers. Since 1 April 2022, these customers must be billed according to measured hourly profiles,
- adjusting grids of Energa Operator SA to the requirements defined in COMMISSION REGULATION (EU) 2017/2196 of 24 November 2017 which established the Grid Code relating to the network code on electricity emergency and restoration, the so-called NC ER code. The purpose of these investments is to achieve operating capabilities for the designated facilities over a period of 24 hours in the event of loss of the primary source of power supply and to assure the required functionality defined in the National Power System Restoration Plan.

In addition to the listed investment projects, in 2022 Energa Operator is planning to pursue further development of the ICT networks and systems supporting the implementation of key business processes within the company and to continue expansion and modernisation of the corporate car fleet, in particular as regards heavy technical equipment for carrying out work on the grid.

In 2021, the process of TETRA network optimisation and development was continued. The work focused on the optimisation of grid coverage along the reconstruction lines and where critical power generation facilities for which the implementation of the NC ER code is required are located. Base stations were constructed and deployed in Biały Bór, Nakiel, Nasielsk, Linowno and Turek. Based on network operation analyses, a number of optimisations was also performed for base stations and key dispatcher facilities to improve effective operation the TETRA grid. Further base stations are to be launched in 2022, which will mark the completion of key steps aimed at optimising the TETRA signal coverage within the Energa Operator's area of

operations, with particular regard to critical power generation facilities for which the implementation of the NC ER code is required.

Since 2016, the Distribution Business Line of the Energa Group has supported and pursued the strategy adopted by the European Union consisting in decarbonising power generation and transmission and reducing emissions in the transport sector, especially in municipal areas. The primary step in that direction is construction by Energa Operator SA of 279 stations for charging electric vehicles in 8 cities: Gdańsk, Gdynia, Koszalin, Elbląg, Olsztyn, Płock, Toruń and Włocławek. In 2021, all charging stations were completed. Out of these, 273 were transferred to the Public Charging Station Operator by the end of 2021. The remaining six are yet to be inspected by the Office of Technical Inspection (UDT). The equipment in question is characterised by high power consumption in a relatively short time. It has been observed that with a larger pool of equipment and more EV users, the DSO will have to face a number of challenges in preparing its grid for the fast-growing electromobility market. The situation will become even more complicated when returning of electricity from cars to grid (V2G) emerges as a new charging standard. In 2022, all 279 charging stations, in accordance with the revised provisions of the Act on Electromobility and Alternative Fuels, will have to be sold.

In 2022, Energa Operator will continue the implementation of the Sales Support System, a billing system with CRM features, which already covers 100% of LV customers. Three migration windows for MV customers are scheduled for this year. Pre-planned functionalities supporting non-standard offtake points will be developed. Additionally, changes will be introduced in the system to allow the DSOs to adjust to the changing legislative requirements, for instance with respect to collective prosumer service, publication of prosumer data with respect to the new aggregate hourly data balancing requirement, or providing services to energy cooperatives. This development is also associated with adjustment of IT systems of Energa Operator to the Central System of Energy Market Information (CSIRE) to be implemented by TSO. CSIRE will serve as a platform for the exchange of data on offtake points, customers, contracts, as well as metering and billing data among DSOs, Sellers, Producers and trade balancing providers on the retail energy market in Poland.

The rise in micro-installations was fuelled by the governmental programme Mój Prąd 2021 (My Electricity 2021), which provided co-financing for the prosumer generation, resulting in an exponential growth of prosumers and installed capacity of micro-installations, especially in rural and suburban areas. Aside from the PV micro-installations, the next edition of the Mój Prąd programme scheduled for 2022 envisages co-financing of energy management systems, energy, heat and cooling storage facilities, as well as purchase and installation of vehicle chargers. In connection with the above, Energa Operator in 2022 will face the challenge of maintaining safe operation of the power supply grid at low voltage in spite of the rising prosumer generating capacity.

The year 2022 will see the implementation of strategic market developments, such as collective prosumer service and publication of prosumer data on an aggregate hourly balancing basis, services for energy cooperatives and electricity storage facilities, or preparation of plans to introduce electricity supply and offtake limitations in accordance with the new Regulation of the Council of Ministers.

Considerable growth in interest in construction and connection of new RES facilities continues. Historically, as at 31 December 2021, the connection process (without micro-installations) to the grid of Energa Operator covered 1,324 producers with a total capacity of more than 4,365 MW.

Connecting RES sources to the grid will continue to be one of the key challenges facing Energa Operator in 2022 and beyond.

The year 2022 will be another year of application of the new model of qualitative regulation for the years 2018-2025 introduced in 2019 by the President of the Energy Regulatory Office (ERO) and described in the document entitled "Qualitative Regulation in the years 2018-2025 for Distribution System Operators", version dated 29 May 2019. The new quality regulation has introduced far-reaching changes, for instance in terms of division and calculation of supply reliability ratios, return on capital employed, level of operating expenses reflected in the tariff, and quality regulation. The President of ERO defined very ambitious objectives for improvement of key performance indicators the delivery of which (primarily, area power supply reliability regulatory indicators: CTP and CP as well as connection time indicators CRP) will have direct impact on the regulated revenue of Energa Operator SA as regards return on equity – the level of performance in 2022 will be reflected in the 2024 tariff.

The year 2022 will also see continued efforts undertaken to bring the infrastructure of Energa Operator, necessary for the restoration of the National Power System, in line with the requirements of Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration. Energa Operator is obliged to complete those tasks by the end of 2022.

In 2021, construction of the following transformer stations (TS) (110 kV/MV) or 110 kV switching stations was completed: Mątowy, Różyna, Zakrzewo (Olsztyn branch), Glinojeck, Windyki (Płock branch), Parnowo, Rowy (Koszalin branch), Fitowo (Toruń branch), Karsin (Gdańsk branch).

Under the provisions of the Energy Law (Article 16), the President of ERO found that the update of the Development Plan of Energa Operator SA in the field of meeting the present and future demand for electricity in the years 2020-2025 had been consulted. When informing on this consultation, the President of ERO determined the amount of reasonable expenditure for the calculation of the distribution tariff during the term of the 2020-2025 Development Plan.

The ambition of the Distribution Business Line is to lead the implementation of innovative solutions and to cooperate in that respect with other European countries. Energa Operator implements innovative solutions in such areas as smart grid, smart metering, advanced network asset management and cable diagnostics systems as well as smart energy storage and vendor and customer support system. The DSO's activities additionally involve cooperation with another DSO on international research and development projects. The goal of the projects is to devise mechanisms for the development and integration of the future energy market and to set up the conditions for new services on the market on the DSO's side. These include mainly grid flexibility and flexibility services as well as supporting customers in playing an active role on the energy market, in particular designing new solutions for energy communities.

In the area of research and development, it is important to build relationships with universities and scientific institutes. Cooperation with local research institutions, i.e. the Gdańsk University of Technology, the Gdańsk Branch of the Institute of Power Engineering, and the Institute of Fluid-Flow Machinery at the Polish Academy of Sciences is being developed in the framework of the activities.

In 2022, a new training building is to be erected on the training grounds of Energa Operator in Bąkowo. It will comprise roofed space with LV overhead lines and cable connectors, as well as two training rooms and staff facilities.

As part of the investment plan for 2022, a new investment sub-group has been appointed: "Adaptation of the LV network in view of quality parameters related to an increased share of prosumers". A total of 63.29 km of LV overhead lines and 0.86 km of LV cable lines will be upgraded.

Despite numerous restrictions related to the SARS-CoV2 epidemic, in 2020 and 2021 Energa Operator Wykonawstwo Elektroenergetyczne Sp. z o.o. carried out uninterrupted activity related to performance of contracts for the construction and modernisation of Energa Operator electric grid. The company provides a strategic reserve of contracting resources for Energa Operator in the event of mass failures in the electric grid of Energa Operator, and also if some of the electrical engineers of the power emergency teams are unable to work as a result of an increased number of cases of isolation and quarantine.

Generation Business Line

Energa OZE SA pursues the development directions consistent with the Strategy of the ORLEN Group by 2030 announced in 2020, which assumes, among others, achievement of climate goals, and the Strategic Development Plan of the Energa Group for 2021-2030 adopted on 31 May 2021. The tasks to be completed in 2022 shall involve primarily the activities associated with commissioning of new RES capacities:

- Construction and handover to operation of PV Wielbark photovoltaic farm with a total capacity of 62 MW,
- Construction and handover to operation of PV Gryf photovoltaic farm with a capacity of 19.8 MW,
- Construction and handover to operation of five PV projects with a capacity of approx. 4.2 MW,
- A newly built, prototype hybrid energy storage has been commissioned at Bystra Wind Farm, completed as part of international co-operation with a Japanese partner. Further plans relating to the operation of the storage facility in the context of the energy market through the facility's participation in the Capacity Market have also been worked out, which shall constitute an additional source of income from the services provided. To that end, alteration of GPZ Bystra transformer/switching station, scheduled to start in 2022, is necessary,
- Energa OZE shall continue the work associated with the Offshore Wind Farms project, including specifically offshore wind farm servicing competences as well as R&D projects in that respect. Applications for permits to erect and exploit artificial islands, structures and equipment with the necessary accompanying infrastructure for offshore wind farms (the so-called PSzW) have been submitted jointly with and under the supervision of PKN ORLEN. More applications shall be submitted at a later date.
- As part of R&D work, Energa OZE shall continue the work on the floating PV installation, namely the preparations for construction of a 0.5 MW farm situated on the water reservoir next to the Łapino Hydro Power Plant.

In 2022, the Generation Business Line shall pursue a number of operational and organisational activities. Furthermore, it shall continue the activities initiated in the preceding years resulting from the projects pursued within the scope of integration with PKN ORLEN.

Sales Business Line

Energa Obrót SA is the leading entity in the Sales Business Line, engaged in the core activities relating to trading in electricity and customer service. Energa Obrót trades in electricity on the wholesale market and sells electricity and gas to individual, business and institutional customers. It offers innovative pro-environmental technologies and services associated, among others, with energy efficiency, provision of charging services for electric vehicles at its charging stations or assembly of PV installations. It sells electricity to 3.2 million clients, over 2.9 million of whom are G tariff clients. The company focuses its sales market activities on developing its services and offers. Energa Obrót attaches great importance to optimization of processes of client service, development of electronic channels and assurance of high quality services.

Companies within the Sales Business Line operate in the following business areas:

- electricity demand management services - those are predominantly demand side response (DSR) services provided at the request of the Transmission System Operator,
- delivery of professional telecommunication services associated with TETRA critical dispatcher communication network,
- comprehensive lighting service and lighting maintenance services.

According to the Strategic Development Plan of the Energa Group for 2021-2030, the objectives of the Sales Business Line include, first of all, effective digitalization and reduction of core business expenses.

The year 2021 saw an unprecedented scale of price increases not only of emission allowances but also of all energy inputs, i.e. gas, coal and crude oil. This translated into record quotations of electricity prices in the European energy markets, also in Poland. In the first half of 2021, electricity prices in Poland were determined primarily by the prices of emission allowances. Despite the adjustment in May 2021, they followed a strong growth trend from November 2020 supported by the absence of auctions at the start of the year, atmospheric factors, pro-growth forecasts for that market referring to EUA prices of EUR 100/t and the date for redeeming 2020 emission allowances scheduled at the end of June 2021. In the second half of 2021, the growth trend in the EUA market intensified, which was noticeable specifically in the last quarter. Stock levels at gas storage facilities across Europe, much lower than the year before (especially in Germany, which resulted in increased coal-fired generation and thus a higher demand for EUAs), along with strong competition from Asia (due to an increase in gas consumption by almost 20% y/y), limited supply of energy resources (gas and coal, in particular of Russian origin), delayed completion of Nord Stream 2 and its lengthy certification process, all combined with a higher demand (due to economies recovering from a pandemic slowdown), have caused considerable market turmoil, pushing prices of emission allowances to new record levels. The highest-ever EUA price of 90.75 EUR per tonne was observed on 8 December 2021, meaning an increase by almost 178% since the beginning of 2021.

In 2022, Energa Obrót SA shall continue to implement the adopted initiatives and focus on organic growth of the unit margin on its core product and on sale of additional products, in particular in the area of energy efficiency. The Company monitors market developments in the areas of its operation on an ongoing basis and dynamically adjusts its business model to the challenges it faces.