

2021 ANNUAL REPORT

TRADING
GUARANTEERING
EDUCATING



4–5	Letter from the President
6–7	Key figures for 2021
9–11	Vision and mission statement of TGE
13–15	TGE Capital Group
17–19	Management
21–23	History and milestones
25–29	Legal environment
31–39	TGE offer
41–51	Markets for products traded on TGE
53–59	Communication with the market

Dear sirs,

I am pleased to present you the TGE's Annual Report for 2021. The Report presents both the results of the Polish Power Exchange (TGE) and the most important events both on the Exchange itself and in its regulatory and business environment that took place in 2021.

Last year was, for many reasons, an exceptional and challenging period for both TGE and, in fact, all stakeholders in the energy markets. In a broader sense, it was a year in which the effects of the threat of the COVID-19 pandemic on societies and economies were still visible. This, in a way already known, danger was joined by other, generally negative, phenomena, such as rising inflation, including in particular rising prices of energy carriers and energy itself. An important element generating uncertainty on the energy markets, especially in the context of the Polish energy mix, still predominantly based on coal fuels, has become the rising prices of CO₂ emissions allowances.

In the regulatory context, changes were taking place at both national and EU level. Another amendment to the Energy Law was passed. This time, the new solutions included the implementation of smart metering of end customers and, as a result, billing of these according to actual energy consumption, omitting the stage of forecasting consumption for future billing periods. Another significant legislative change is undoubtedly the amendment to the Capacity Market Act, adjusting its provisions to the requirement of maximum emissions of 550g CO₂/kWh by generating units receiving support under capacity mechanisms.

It seems, however, that the key legislative proposals for the future of the Polish energy sector will result, not for the first time, from the work conducted at European Union forums. I am referring particularly to the package of solutions published in the middle of the 2021 under a common name, i.e. "Fit for 55", which derives from the extremely ambitious goal of reducing greenhouse gas emissions (GHG) by 55% by 2030. The sheer size of the proposal (13 legislative proposals, covering a spectrum of issues such as the emissions trading scheme, renewable energy sources, energy efficiency, use of land and forests, alternative fuels and energy taxation) indicates that it will ultimately be one of the most significant, if not the most significant change in the regulatory environment for the energy sector in recent years.

With regard to the challenges in the year 2022, undoubtedly the biggest impact on the functioning of the energy sector (and indirectly the Commodity Exchange) will be the final constitution and commencement of operations by the National Energy Security Agency (NABE). This will be accompanied by the process of spin-off and transfer to this new entity of coal assets (coal- and lignite-fired power plants and lignite mines, excluding district heating assets) hitherto included in the largest national energy groups: PGE, ENEA and TAURON.

In the area of the operation of the TGE itself, the most important development in 2022 is likely to be the amendment to the Renewable Energy Sources Act, which will involve the introduction of the possibility of cross-border trading in Guarantees of Origin. The accession of the President of the Energy Regulatory Office to the Association of Issuing Bodies (AIB) – an association of European bodies issuing guarantees of origin – should in effect significantly increase the volume of Guarantees of Origin traded and registered in the Guarantees of Origin Register maintained by the TGE, as well as affect their prices. It will also undoubtedly be a test for us as an organisation, for which we must prepare carefully. However, it is also an opportunity to become visible in yet another aspect (beyond the electricity market coupling mechanism) on the wider European market and thus build TGE's position and brand as a reliable and dynamic partner in the changing business environment.

As a supplement – given the timing of the Report's publication – we cannot fail to notice the events beyond our eastern border that have been unfolding since February 2022. It is difficult to express the feelings that accompany us when we see images that we hoped never to see again in this part of the world. For us, these events also have a more tangible effect in the form of energy security risks of a truly global nature, which we will take into account in our plans not only for the current year, but also in the longer term.

Enjoy reading the Report.



**Agricultural Exchange Market**

Turnover volume:

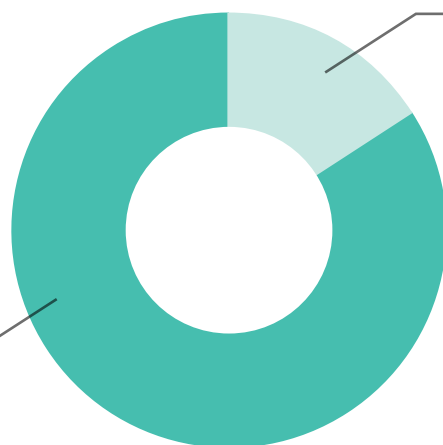
4 750 tonnes of cereals
(up **102,1%** y/y)**Guarantees of Origin**

Trading volume:

30,3 TWh
(up **65,5%** y/y)**5**
markets**21 years**
in business**Property Rights Market**Trading volume of Property Rights for
Electricity from RES:25,9 TWh
(decrease **4%** y/y)Trading volume of Property Rights for
Energy Efficiency:107 995 toe
(down **43,5%** y/y)

Electricity Market:

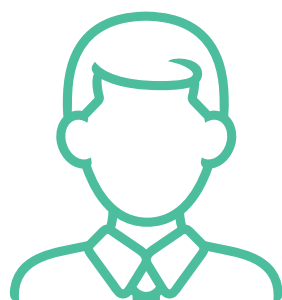
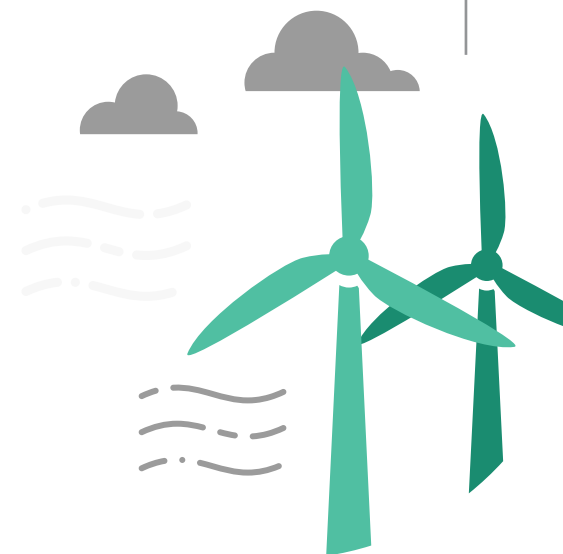
Trading volume:

225,2 TWh
(down **7,4%** y/y)

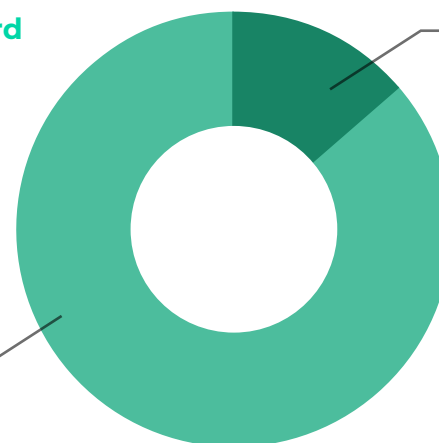
Forward market:

188,9 TWh
(down **9,3%** y/y)

Spot market:

36,2 TWh
(record turnover
ever, up **4%** y/y)**78**
members**Natural Gas Market – a record year!**

Trading volume:

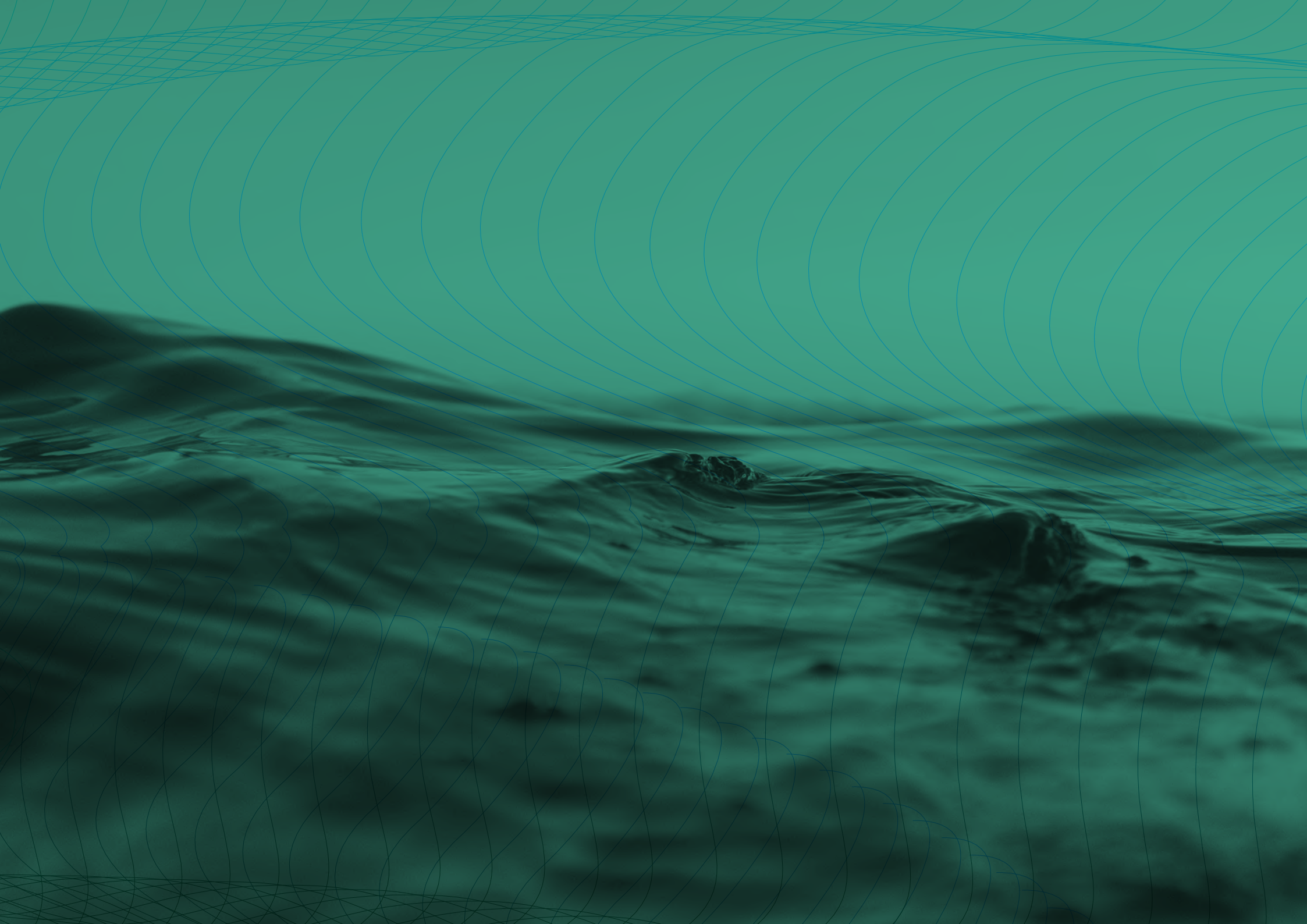
180,8 TWh
(up **19,6%** y/y)

Forward market:

152,2 TWh
(up **21,4%** y/y)

Spot market:

28,6 TWh
(up **10,8%** y/y)



VISION AND MISSION STATEMENT OF TGE

TGE is a leading entity in the organised trading of energy products not only in Poland, but also in Europe. It owes its position to more than 20 years of experience and the fact that it has operated during this time according to rigorous standards of transparency, integrity and competitiveness. The importance of the Exchange goes far beyond the provision of an offer for the trading of energy products that responds strictly to the needs of market participants and meets the requirements arising from the dynamically changing regulatory and legal environment. TGE is also an important stabilising factor in terms of energy security not only for Poland but also at the regional level across Central and Eastern Europe. It is to be expected that TGE's role will increase in this aspect, taking into account changes and developments in Poland's immediate neighbourhood.





Mission

- Support the state's energy security policy by ensuring access to electricity and natural gas markets at acceptable reference prices in cooperation with transmission system operators who ensure their uninterrupted supply.
- Ensure that commodity and financial markets operate within a transparent framework of price setting and transaction procedures.
- Providing transparent markets and ensuring the safety of trading by overseeing standards in line with European Union requirements, publishing market information and providing clearing services.
- Maintaining its position as the market of choice for natural gas and electricity transactions in Poland.

Vision

- Maintaining its position as the leading exchange in the CEE region in terms of liquidity and trading offer, due to staff's knowledge and competence, state-of-the-art technology and the high quality of services.
- Acting as a market maker and creator of the internal market for electricity, natural gas and liquid fuels in cooperation with transmission system operators.
- Supporting the development of the Polish economy by offering a variety of products for the commodity and financial markets linked to its key sectors.
- Actively participate in building the European internal market for electricity and natural gas.



TGE CAPITAL GROUP

The strength of TGE and its ability to continuously adapt to the changing regulatory and market environment is due in large extent to the fact that the Exchange is part of a capital group bringing together the essential capital and commodity market institutions in Poland. The TGE has been part of the Warsaw Stock Exchange Group (WSE CG) since 2012. The Warsaw Stock Exchange (Giełda Papierów Wartościowych w Warszawie S.A.) is the sole owner of TGE. Revenues from commodity markets operated by TGE and the activities of other entities in the TGE Group accounted for 36.8% of the WSE CG's revenues in 2021.

The TGE Group is active in commodity trading, clearing and settlement services. The structure of the TGE Group includes two subsidiaries:

- **Izba Rozliczeniowa Giełd Towarowych S.A.** is authorised by the Polish Financial Supervision Authority to operate a Clearing House and a Settlement House, under which it can act as an Exchange Clearing House and settle transactions concluded on commodity market.
- **InfoEngine S.A.** provides services of a Market Operator for participants of the electricity market on the basis of legal regulations constituting the provisions of the Network Code of the Transmission System Operation developed by Polskie Sieci Elektroenergetyczne S.A. – the electricity transmission system operator (TSO). These provisions define the role of the Market Operator in the area of the provision of the Trading Operator service and the Entity Responsible for Trade Balancing.

Capital Group TGE



TGE (Exchange Trade)

- Trading in energy commodities (natural gas, electricity, property rights, CO₂ emission allowances) and for agri-food products (wheat, rye, rapeseed, corn)
- Maintaining of Certificates of Origin and Guarantees of Origin Registers
- Communication activities



IRGiT (Clearing)

- Clearing and settlement of transactions
- Risk management
- Guaranteeing transaction security



InfoEngine (Support)

- Energy services operator
- Entity responsible for trade balancing
- Advisory services for trading companies, consumers and public institutions, RES operators



MANAGEMENT



Piotr Zawistowski,
President of the Management Board

Graduate of the University of Economics and the Wrocław School of Banking.

Mr Zawistowski has more than 20 years of professional experience in the energy industry and specialises in strategic planning and management and the identification of global markets.

Associated with the TAURON Group from 2008 to 2017, where he served as President of the Management Board of TAURON Obsługa Klienta Sp. z o.o. from May 2014 to December 2015, and from December 2015 to March 2017. Vice President of the Management Board for Customer and Trading of TAURON Polska Energia S.A. He assumed the position of President of the Management Board of the Polish Power Exchange in October 2017.

Mr Zawistowski has held top positions in key institutions and entities related to the energy sector, including serving as Chairman of the Management Board of the Association of Energy Trading, being a member of the Management Board of the Polish Electricity Committee and sitting on the Supervisory Board of TGE. Piotr Zawistowski's long-standing experience and in-depth knowledge of the mechanisms of the energy markets' functioning not only on a national scale are confirmed by his membership (as of January 2020) of the Board of the Association of European Energy Exchanges, an organisation bringing together 27 energy exchanges and market operators from across Europe.



Piotr Listwoń,
Vice-President of the Management
Board for Operational Activities

Graduate of the Faculty of Strategic Management of the School of Management (POU/Oxford Brookes University), where he also obtained an MBA.

Mr Listwoń has many years of experience in the trading and clearing of commodity futures markets, financial instruments and international transactions carried out as part of the European electricity market coupling mechanism.

Professionally involved with the TGE Group since 2008. At the beginning of his career, Piotr Listwoń was involved in the operational start-up of the Commodity Exchange Clearing House S.A., where he held the position of Director of the Clearing and Settlement Department and Director of International Cooperation Development from 2013 to 2018.

Since April 2018, Mr Listwoń has been Vice President of the Management Board of the TGE, responsible for the operational area of the Exchange and the development of the product offering. At the same time, became a member of the Supervisory Board of the Warsaw Stock Exchange Foundation. In addition, in December 2020, took up the position of Chairman of the Supervisory Board of InfoEngine, a company within the TGE Capital Group. In January 2021, Mr Listwoń joined the Board of Directors of the Association of Power Exchanges (APEX), an international association of 46 commodity and financial power exchanges from around the world.



Adam Młodkowski,
Vice-President of the Management
Board for Financial Activities

Graduate of the Faculty of Economics and Sociology, University of Łódź, with a degree in Finance and Banking.

For many years of his professional career, Mr Młodkowski was associated with the banking sector, including the Pekao S.A. Group and PKO Bank Polski S.A. Between 2003 and 2009, he was a Member of the Management Board, and later Vice President and President of the Management Board of Bankowy Fundusz Leasingowy S.A. From 2016 to 2017, Adam Młodkowski worked for the Polska Grupa Zbrojeniowa S.A. In 2018, he was advisor to the President of the Management Board of SGB Bank, responsible for the branch network reorganisation project, and then Managing Director of the Sales Division at Pocztylion-Arka PTE S.A. From January to September 2020, Mr Młodkowski was an independent Member of the Supervisory Board of KDPW_CCP. Since April 2021, he has been Chairman of the Supervisory Board of the Izba Rozliczeniowa Giełd Towarowych S.A.

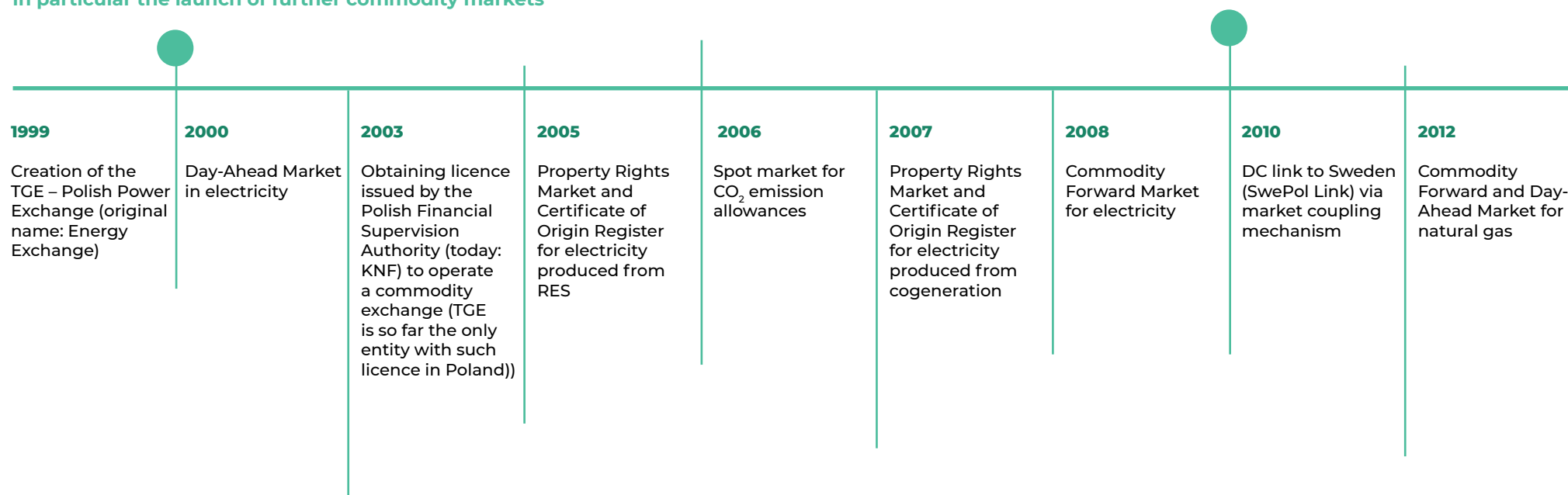
He took up his position as Vice President at the GE in September 2020, being responsible for the financial area.



HISTORY AND MILESTONES

The history of the Polish Power Exchange is inseparably linked to the dynamic economic and social changes that took place in Poland in the 1990s, on the wave of the transformation of a centrally planned economy into a liberal system based on the western European models. One of the elements of these changes was the liberalisation of energy markets involving the implementation of mechanisms that foster competitiveness, transparency and ensure equal conditions for all stakeholders. The TGE was and is a key and necessary element of these solutions.

Below are the key events and milestones in the development of TGE, in particular the launch of further commodity markets



The expansion of TGE was parallel to the development of energy markets both on the country and the European level. The continuous adaptation and extension of the offer available to market participants, increasing trading volumes on individual markets, active participation in regional and European initiatives integrating energy markets testify to the strength of TGE and its ability to take a creative and dynamic approach to reading the needs of energy markets stakeholders.

2021

Interim Coupling within SDAC, energy trading on TGE using interconnectors with Germany, the Czech Republic and Slovakia

Memorandum of Understanding (MoU) with the Hellenic Energy Exchange Group and the Romanian Commodities Exchange (Bursa Romana de Marfuri)

Memorandum of Understanding on inter-regional cooperation in the development of an integrated gas market in South-Eastern and Eastern Europe SEEGAS

TGE named as Best Sustainable Commodities Exchange Central Europe; title awarded by CFI.co (second time for TGE)

2014

Stock Exchange Information Platform
Natural Gas Intraday Market
Register of Guarantees of Origin

2015

Obtaining the status of Nominated Energy Market Operator (NEMO) in Poland
Transaction data reporting platform via RRM (in accordance with the REMIT Regulation)

2017

Implementation of new systems (brokerage applications): X-Stream Trading and SAPRI Trade

2018

Day-Ahead and Intraday Market for nitrogenous natural gas (L_w)

2019

Cross-Border SIDC market in the XBID model
Quotations of CO₂ emission allowances on the Market for Financial Instruments

2020

Agricultural Exchange Market
Organised Trading Facility (OTF)



LEGAL ENVIRONMENT

TGE operates in a dynamically changing legal and regulatory environment, which in turn is practically constantly adapted to evolving ever faster social and technological conditions. The ability to continuously adjust the offer for market participants and the conditions for participation in exchange trading, as well as a wide range of additional services, prove that the Exchange will be a reliable partner for market participants, ensuring the maintenance of transparent and competitive principles of exchange commodity trading in all conditions and circumstances, regardless of the dynamics of changes.

Commodity Exchanges Act, Financial Instruments Trading Act

The key legal acts constituting the institutional basis for the operation of TGE are the Commodity Exchange Act and the Financial Instruments Trading Act.

The Commodity Exchange Act regulates the operation of commodity exchanges and sets out the rules for trading in exchange commodities. The Act is also the regulatory foundation in terms of the organisational structure of commodity exchanges and exchange clearing houses, also in terms of supervision of these institutions. It is on the basis of the provisions of the Commodity Exchange Act that TGE (as the only entity in Poland to date) has been granted a licence to operate a commodity exchange. The Commodity Exchange Act is also the direct basis for trading on TGE's Agricultural and Food Commodity Market.

The Act on Trading in Financial Instruments defines the regulatory framework of TGE's markets for trading in financial instruments (CO₂ emission allowances), and also formed the basis for TGE's authorisation of the OTF platform in 2020. The OTF platform (Organised Trading Platform) enables and organises trading of:

- futures contracts whose underlying instrument is a property right to certificates of origin for energy produced from RES, which are financial instruments,
- futures contracts whose underlying instrument is electricity or gas for physical delivery, which are not a financial instrument and which are traded on a wholesale basis.

Energy Law Act

The Energy Law Act is the fundamental piece of legislation with regard to the operation of the electricity and natural gas markets on TGE. Starting from 2010, successive amendments to this Act introduced increasingly higher levels of the so-called exchange obligation, i.e. an obligation for electricity producers to sell a certain amount of electricity via a commodity exchange. At present, this obligation concerns basically whole volume of generated electricity (with some exceptions). A similar solution was applied regarding natural gas, but in this case the upper limit of the obligation imposed on the trading company is set at 55% of the high-methane natural gas put into the transmission network in a given year.

The amendment to the Energy Law, adopted by the Polish Parliament in May 2021, clarified the provisions on ensuring that a nominated energy market operator (NEMO, which is, among others, TGE) complies with the provisions of the CACM Regulation and assessing the NEMO's compliance with the designation criteria set out in this Regulation. These amendments should be viewed positively as tightening the system of supervision and control over the activities of NEMOs, especially those that are not commodity exchanges within the meaning of national legislation. The same amendment introduced the possibility of reselling surplus electricity purchased by the transmission system operator to cover network losses in connection with the updating of the forecast of demand for that electricity, provided that this is done only through transparent and non-discriminatory procedures made available by a commodity exchange, a regulated market, an organised trading platform or as part of a single market coupling. This change should be perceived as the expression of legislator's confidence in the competitiveness and transparency of trading mechanisms organised by commodity exchanges, including TGE.

Law on Renewable Energy Sources, Law on Energy Efficiency, Law on Promotion of Electricity from High Efficiency Cogeneration

These Acts set out the regulatory foundations for the functioning of the markets for property rights to certificates of origin for electricity and energy efficiency, as well as the Certificates of Origin Register and the Guarantees of Origin Register, operated by TGE. The aforementioned mechanisms and instruments are important elements of both supporting the development of renewable energy generation and increasing awareness of more efficient energy use. TGE, by providing access to transparent transaction procedures, delivers stakeholders the opportunity to trade safely on the market for property rights and guarantees of origin, thus contributing to the transformation of the national economy towards decarbonisation.

The Renewable Energy Sources Act was amended several times in 2021, but these were not changes that directly affected the functioning of the Property Rights Market and the Guarantees of Origin Register at TGE. They concerned, inter alia, changes to the definition of the so-called small RES installation, modifications to the rules for granting support under the so-called FiT system (feed-in tariff, guaranteed sale price for electricity generated in RES) and under the so-called prosumer settlement.

In turn, the amendment of the Energy Efficiency Act was related to the need to implement the provisions of Directive 2018/2002, which in turn amended Directive 2012/27/EU on energy efficiency. In particular, the new provisions relate to the introduction of additional measures (in addition to energy efficiency certificates) to achieve the national final energy savings target. In addition, the aforementioned amendment broadened the catalogue of entities covered by the energy efficiency certificate system to include companies trading liquid fuels.

Legal environment – EU law

The solutions gradually introduced over the years by the EU legislator are the foundations and underpinnings for the development of competitive energy markets in Europe and, consequently, are also crucial for the operation of energy exchanges. Progressive liberalisation resulting from the implementation of successive energy sector regulation packages has led to a clear separation of activities related to the operation of transmission, distribution, storage, trading, regasification and liquefaction infrastructure from activities related to energy trading and generation or natural gas extraction. These solutions, supported by the prohibition of cross-subsidisation, strict and extensive supervision and control over enterprises operating in the conditions of natural monopoly (TSOs, DSOs), enabled access to energy infrastructure to any interested entity, which directly translated into a sharp increase in competitiveness on energy markets, measured, for example, by the number of enterprises operating on them. In addition, the final customer has been provided with instruments increasing his/her power of influence and negotiating position on energy markets: the right to choose a supplier, consumer protection, protection of the so-called sensitive customers.

Central to the proper functioning of competitive energy markets is the strong position of national regulators, which also stems from regulations adopted at EU level.

From the point of view of the functioning of TGE, the most important EU regulations directly affecting the functioning of the Exchange would be:

- REMIT Regulation (concerning the transparency and integrity of energy markets),
- CACM Regulation (setting the rules for functioning of TGE as a NEMO within the framework of cross-border energy markets) and
- Regulation 1031/2010 setting out the rules and conditions for the auctioning of CO₂ emission allowances.

European Green Deal

In July 2021, the European Commission adopted a package of legislative proposals, collectively referred to as the European Green Deal. The aim of the proposed solutions is to align EU action on climate, energy, land use, transport and taxation in such a way as to ensure achievement of a 55% reduction in greenhouse gas emissions by 2030 compared to 1990 levels. The package contains legal propositions for many sectors of the economy, but from the point of view of TGE's activities, the key changes will be those concerning the emissions trading scheme (e.g. extending the scheme to further sectors and sealing the current solutions), as well as the proposed changes to the Renewables Directive and the Energy Efficiency Directive.

In the long term as not insignificant for the functioning of energy exchanges are the plans relating to the gradual shift away from fossil gases to their renewable equivalents: biomethane and hydrogen. Legislative proposals in this area were presented by the European Commission in December 2021. The draft regulation and directive provide for the implementation of mechanisms enabling the functioning of the hydrogen market and creating favourable conditions for investment in appropriate infrastructure. On the other hand, the solutions concerning biomethane (or low-carbon gases more broadly) are to facilitate access of such fuels to the existing gas infrastructure in Member States.





TGE OFFER

The primary objective of the Exchange's operation is to provide in one place stakeholders of the energy and agricultural markets with a comprehensive offer for trading in energy and agricultural commodities. Thanks to TGE, market participants are provided with the opportunity to trade in a transparent, competitive manner and to ensure the fulfilment of the commitments made on the Exchange with regard to the delivery of the commodity and the settlement of its value.

Aiming to continually improve trading security standards, TGE implements mechanisms to mitigate risks that must be taken into account by market participants conducting exchange trading. These measures are the result of constant consultations with both market participants and the authorities supervising exchange operations.

One such mechanism is the **static and dynamic spreads**, which aim to limit price fluctuations in orders and fluctuations in trading prices for instruments traded on the OTF platform in electricity and natural gas. Static spreads represent a range of prices within which market participants can place orders during the session and thus protect against the emergence of non-market price signals and possible financial losses resulting from them. Dynamic spreads, on the other hand, limit the daily fluctuation of trading prices relative to the reference price, which indirectly translates into required level of collateral determined by the IRGiT (Clearing House).

Concerning adequate liquidity in the electricity and natural gas markets, which is a crucial factor for market participants' decision-making, the Exchange introduced a **"Maker-Taker"** programme in both of the aforementioned markets. This initiative was part of a broader spectrum of measures already taken in 2019 and aimed at improving liquidity in the exchange markets, collectively called the Liquidity Improvement Programme. The core element of the 'Maker-Taker' programme is to narrow down the differences between the best bid and best ask sell orders (so-called market spreads), by significantly reducing transaction fees for trade initiators in trading futures instruments.

Electricity Market

As part of the Electricity Market, the TGE organizes trade on the spot markets (Intraday Market and Day-Ahead Market) and on the forward market, within the OTF platform (Organised Trading Platform).

The Day-Ahead Market

In operation since 2000. Prices on that market are the main reference point for bilateral contracts (OTC – **over the counter**) concluded between energy market participants in Poland. The main addressees of the solutions offered by the Exchange on the DAM are entities, which actively, but at the same time taking care of safety, close their portfolios of purchase/sale of electricity on a up-to-date basis in individual hours of the day. Trading takes place 1 or 2 days prior to the delivery of the commodity (electricity).

Within this market, hourly and block contracts (base, peak, off-peak) are offered.

6 price indexes, indicating the day or time of day of delivery:

TGeBase

arithmetic average of the weighted average hourly prices of a given delivery day, calculated on the basis of all hourly, block and weekend contracts

TGePeak

arithmetic average of the weighted average hourly prices of the peak period of a given delivery day (7 a.m. to 10 p.m.), calculated on the basis of all hourly, block and weekend PEAK contracts

TGeOffPeak

arithmetic average of the weighted average hourly prices of the off-peak period of a given delivery day (00.00 to 7.00 and 22.00 to 24.00), calculated on the basis of all hourly, block and weekend OFFPEAK contracts

TGe24

arithmetic average of the hourly prices for a given delivery day determined in the single rate at 10.30 a.m.

TGe15

arithmetic average of the hourly prices for the peak period of a given delivery day (7 a.m. to 10 p.m.) determined in the single rate at 10.30 a.m.

TGe9

arithmetic average of hourly prices for the off-peak period of a given delivery day (00.00 to 7.00 and 22.00 to 24.00) determined in the single rate at 10.30 a.m.

It is worth noting that the TGe24 index is the underlying instrument for contracts on the financial instruments market (so-called futures).

Intraday Market

Since the end of 2019, TGE operates the IDM as the SIDC European Intraday Electricity Market under the XBID model, covering 21 countries within the European Union. This is a practical implementation of the idea of providing opportunities for cross-border electricity trading between market participants operating in different EU countries.

Trading within this market takes place in a continuous trading system, 24 hours a day, covering instruments with next-day delivery. Transactions are concluded in euro, but settlements between the Exchange and domestic market participants (carried out by the IRGiT) are carried out in Polish currency.

Launched in 2018, the XBID (Cross Border IntraDay Coupling) model is based on a common IT system (centrally managed by Deutsche Boerse AG), with one Shared Order Book (SOB), a Capacity Management Module (CMM) and a Technical and Financial Settlement Module (SM – Shipping Module).

Natural Gas Market

As in the case of the Electricity Market, trading on the Natural Gas Market is carried out on the spot markets (Intraday Market and Day-Ahead Market) and on the forward market, within the OTF platform (Organised Trading Platform).

The Day-Ahead Market

It has been in operation since the end of 2012. It is a natural, second component of the spot market, allowing the product portfolio to be tailored to demand on the day of delivery.

Trading takes place daily, in a continuous trading system. Block contracts (base and weekend contracts) are available. Market fluctuations are described by the following indexes:

- **TGEgasDA** – average, volume-weighted price of transactions on the DAMg for GAS_BASE instrument for a given delivery day,
- **TGEsgtDA** – volume-weighted average price of transactions on DAMg for SGT_BASE instrument for a given delivery day,
- **TGEglwDA** – volume-weighted average transaction price on the DAMg for the GLW_BASE instrument for a given delivery day.

Intraday Market

Launched in mid-2014. Trading is conducted on the day of delivery, in a continuous trading system, taking place daily, on hourly instruments. Price volatility is represented by the TGEgasID index.



Property Rights Market

Property Rights related to electricity generation from renewable energy sources and energy efficiency are a support instrument for entities generating electricity from RES sources and implementing or financing projects aiming at more efficient use of energy. These rights are traded on a separate exchange market, which is an important part of the TGE offer. On the one hand, generators of energy from RES and entities implementing energy efficiency projects have a chance to profitably monetise their Property Rights and secure the settlement of transactions, while on the other hand, energy companies have the opportunity to competitively acquire Property Rights in order to fulfil the statutory obligations imposed on them with regard to their redemption.

On this market, Property Rights arising from following certificates are traded.



PMOZE, PMOZE_A
GREEN CERTIFICATES

electricity generated from
renewable energy sources



PMOZE-BIO
BLUE CERTIFICATES

electricity generated from renewable energy
sources in agricultural biogas plants



PMBG
BROWN CERTIFICATES

agricultural biogas and feeding it into the
distribution network

Energy efficiency certificates obtained by entities that have implemented energy efficiency measures aimed at saving consumed energy (PMEF, PMEF-XXXX, PMEF_F), the so-called 'white certificates'.

OTF

The option to trade on an OTF (Organised Trading Platform) was introduced on the Exchange in May 2020, as a result of the alignment of the Exchange's regulation and trading with the MIFID2 Directive. Transactions on the OTF are carried out within the following markets: Forward Product Market with electricity supply (RTPE), Forward Product Market with gas supply (RTPG) and Forward Property Rights Market (RTPM), on which traded products are financial instruments.

The OTF complements TGE's offer for market participants in respect of long-term contracting in order to secure prices and the supply of electricity and natural gas in the future, as well as the fulfilment of statutory obligation to sell electricity and natural gas on Commodity Exchange.

Registers

As part of its portfolio for energy market participants, TGE maintains the Certificates of Origin Register and the Guarantees of Origin Register.

Register of Certificates of Origin

It is an integral part of the support systems of electricity generators from renewable energy sources and those which implement energy efficiency projects. Thanks to the centralisation provided by the TGE for the registration of property rights resulting from certificates of origin and efficiency, interested entities can be sure that they benefit from a reliable and transparent system of trading in these rights.

Certificates of origin (issued by the President of the Energy Regulatory Office in electronic form) are submitted into the Certificate of Origin Register maintained by the TGE. Each registered certificate gives rise to property rights (PRs), which are traded on the Property Rights Market (PRM).

The Register of Certificates of Origin has the following particular functions:

- identification of the holders of property rights deriving from certificates of origin or energy efficiency,
- identification of the property rights arising from certificates of origin or energy efficiency and the corresponding volumes of electricity,
- registration of certificates of origin and energy efficiency and the resulting property rights,
- recording of transactions concluded on the Property Rights Market and the holding of property rights resulting from certificates of origin and energy efficiency,
- issuing documents confirming the holding of property rights in the Register, which are then used by the Energy Regulatory Office in the process of redemption of certificates of origin and energy efficiency.

At the end of 2021, membership status in the Certificate of Origin Register was held by 4130 entities.

Register of Guarantees of Origin

Guarantees of origin of electricity are an instrument to disclose and certify to the final customer that a certain amount of electricity injected into the distribution network or transmission network has been produced from renewable energy sources or through a high-efficiency combined heat and power (CHP) process.

Guarantees of Origin do not incorporate property rights and are not an exchange commodity. By operating since 2014 Register of Guarantees of Origin, the TGE nevertheless allows interested entities (renewable energy producers, trading companies, brokers, end users) to trade in these guarantees under transparent conditions and to transfer them to end users.

At the end of 2021, 1100 entities had a membership status of the Guarantees of Origin Register.

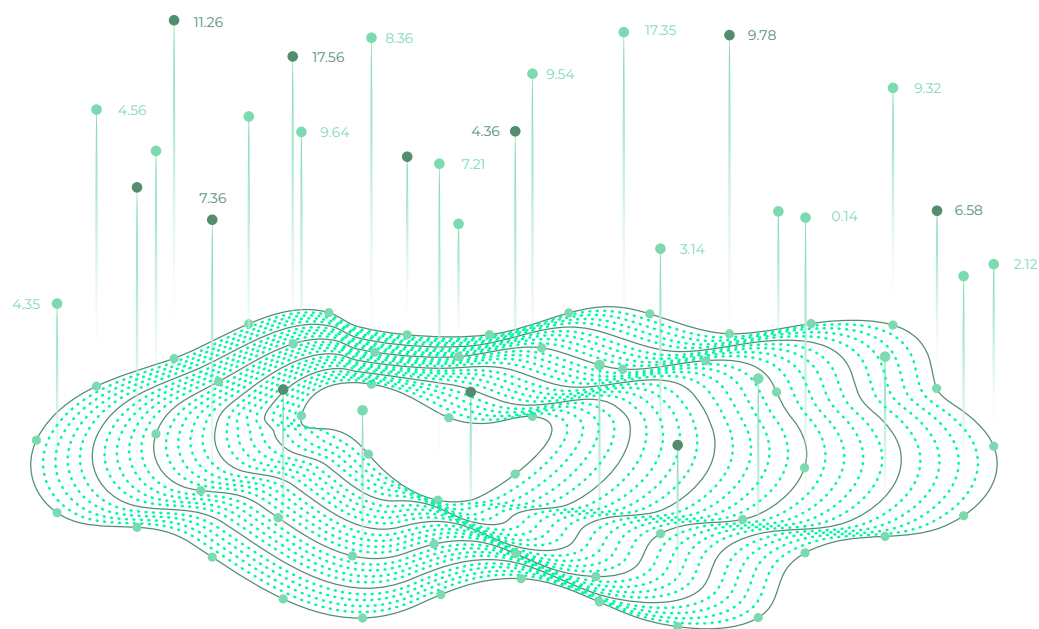
Agricultural Exchange Market

The launch of the Agricultural Exchange Market took place within the framework of the Food Platform project, implemented by TGE together with the National Agricultural Support Centre (KOWR). Being a separate segment of the Exchange Commodity Market, it enables trading in selected, marked by type, agricultural and food commodities. In doing so, the Exchange defines quality standards for these products and ensures that they are met, by using the Authorised Warehouse System.

The Exchange Agricultural Market is a spot market – transactions concluded therein are subject to immediate settlement with the physical delivery of the commodity. TGE defines the rules for participation in the market, the conditions for concluding transactions and the manner of their execution, therefore ensures that market participants trade on a transparent and non-discriminatory basis.

The trade on the Exchange Agricultural Market is performed in two parallel systems:

- single-price auction, in which all exchange transactions in a given instrument are concluded during a given session at the same price, determined by the Exchange according to a specified algorithm; single-price sessions are carried out weekly for standardised contracts, the object of which is a commodity stored using the Authorised Warehouse System,
- ad hoc auctions (organised, at the request of a bidder) for the sale of goods displayed by a trader with its own Authorised Warehouse.



Information services

As part of its efforts to provide a complete and universal offer for market participants, TGE also provides a range of instruments for information services. The uniqueness of TGE's offer lies in the use of mechanisms that provide a diverse range of access to market data, whereby each market participant can choose the instrument that best suits its needs.

GPI – the Exchange Information Platform

The establishment of the GPI (as the implementation of the initiative of the President of Energy Regulatory Office) was aimed at providing market participants with a single, universally accessible source of information relating to the electricity market. On the one hand, GPI is a place where data on the energy system in Poland is published in a transparent and orderly manner; on the other hand, GPI also enables the fulfilment of the obligation to publish the so-called "inside information", pursuant to Article 4 of Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (the so-called REMIT Regulation), concerning the availability of generation capacities and, ultimately, the availability of end users facilities, i.e. all information which may affect the level of prices on wholesale energy markets and the commercial decisions made by market participants.

The Exchange Information Platform consists of three main components:

- Urgent Market Messages,
- Electricity system data,
- TGE markets.

AIR Platform

The 'Analysis Information Reports' (AIR) platform is a source of comprehensive market information provided in processed form, both in the form of standard products and customised products that meet the specific needs of a given market participant (the 'Tailor-made Reports' service).

RRM TGE

TGE also provides market participants with the opportunity to fulfil other obligations under the REMIT Regulation, in particular those related to the reporting to the Agency for the Cooperation of Regulatory Authorities (ACER) of data on orders and transactions concluded on wholesale energy markets. Such reporting can only be carried out by entities that obtain Registered Reporting Mechanism (RRM) status with ACER.

TGE's RRM offers the following functionalities to market participants to ensure compliance with the obligations under Article 8 of the REMIT Regulation:

- reporting on orders and transactions concluded through organised trading facilities,
- reporting of OTC transactions,
- reporting of transmission and basic data.





MARKETS FOR PRODUCTS TRADED ON TGCE

2021 was marked by significant trading volumes on the Exchange, particularly in electricity (close to record levels) and natural gas in particular (for the sixth consecutive year a record was set for the volume of natural gas traded on TGE). Perhaps the most important aspect, however, was that these significant increases in the exchange prices reflected the dynamically changing situation in which the economies of the European Union countries are functioning.

Electricity

The Polish electricity market is the largest market in terms of volumes in Central and Eastern Europe and indisputably a significant market in the entire European Union. In 2021, the volume of gross electricity generated in Poland was 173.6 TWh, an increase of 14% compared to the previous year. At the same time, gross domestic electricity consumption was 174.4 TWh, up 5.4% compared to 2020.¹

The importance of the Polish electricity market on a European scale is due to the extensive cross-border connections and interconnections with the neighbouring German, Czech, Slovakian, Ukrainian, Lithuanian and Scandinavian electricity systems.

Volumes

In 2021, the volume of electricity traded on all TGE markets was 225.1 TWh, down 7.4% compared to the record year 2020, but still close to highest levels (243.2 TWh in 2020). At the same time, electricity trading on TGE accounted for almost 140% of net domestic electricity consumption, making the domestic market one of the most liquid in the region and the European Union.

On the other hand, the level of trading on the electricity spot markets was significant: overall, it increased by 4% compared to 2020, with a volume of 36.2 TWh, while trading on the Intraday Market (2.3 TWh) exceeded 2020 volumes by 11.3%, and the increase on the Day-Ahead Market was 3.5% compared to 2020, with a volume of 33.9 TWh. It is noteworthy that by exceeding 2020 levels, spot market volumes set a new record in the Exchange's history. As already pointed out in the 2020 Report, undoubtedly the operation of the RDB within the cross-border SIDC European Intraday Electricity Market under the XBID model contributes to such increases.

By contrast, turnover on the forward market (OTF) was 188.9 TWh, down 9.3% year-on-year.

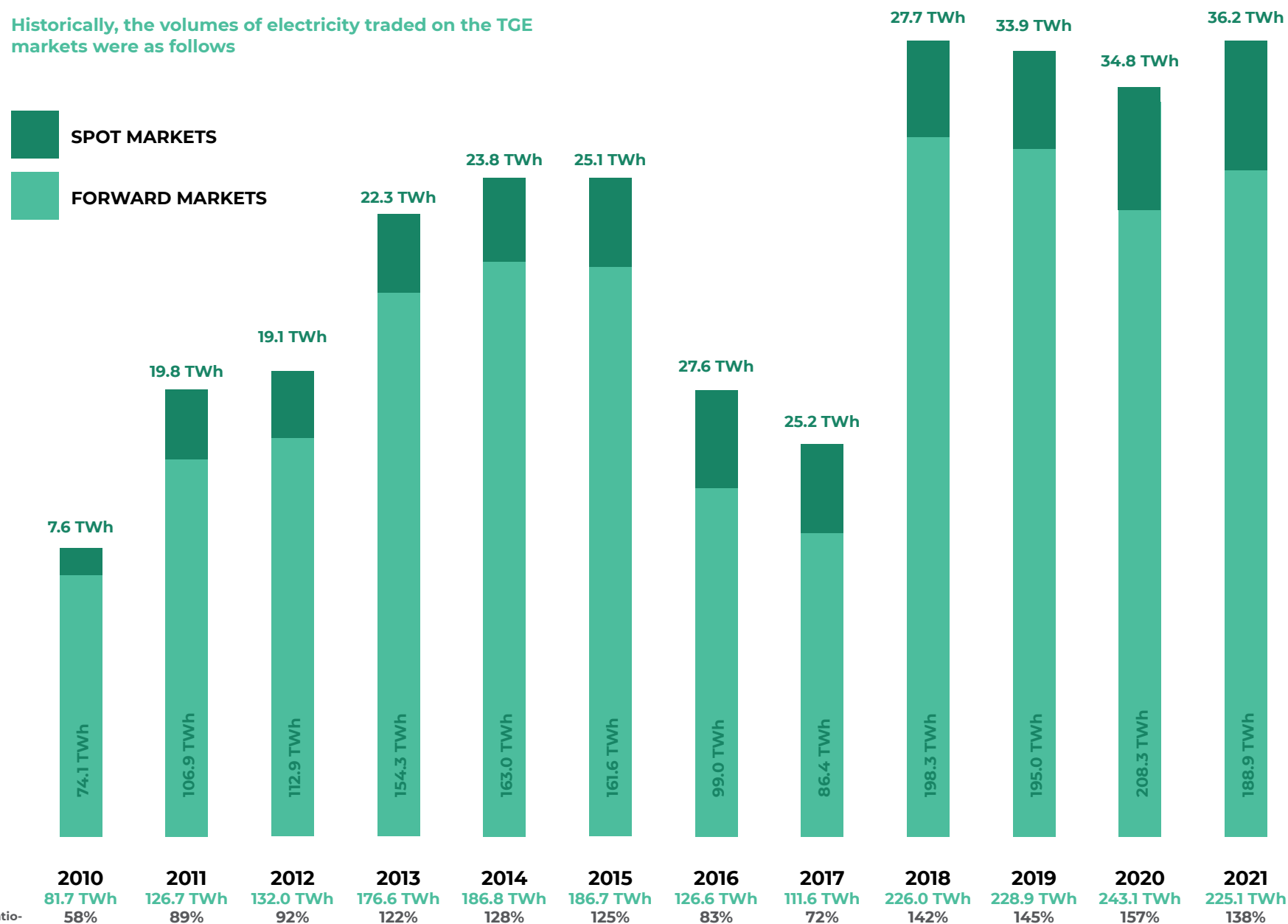
Prices

In 2021, there were significant increases in the average prices at which electricity was contracted in both the spot and forward markets.

The weighted average BASE price on the Day-Ahead Market was 401.17 PLN/MWh in 2021, an increase of 191.06 PLN/MWh compared to 2020. On the forward market, on the other hand, the weighted average price of the annual contract with base load delivery in 2022 (BASE_Y-22) was 384.16 PLN/MWh in 2021, an increase of 152.29 PLN/MWh compared to the price quoted for the BASE_Y-21 contract in 2020.

¹ Source: ERO, <https://ure.gov.pl/pl/energia-elektryczna/charakterystyka-rynku/10372,2021.html>

Historically, the volumes of electricity traded on the TGE markets were as follows



share in net national consumption

Natural gas

Comparable to the electricity market, the domestic natural gas market is characterised by the highest consumption at the regional level which inevitably means that Poland is a significant player at the level of the European Union as a whole, with the prospect of further growth in the near future. In 2021, the gross domestic consumption of natural gas was at the level of 234.5 TWh.

2021 was another year in which a fundamental change was gradually taking place in terms of the directions of natural gas supply to the Polish economy. Investments and projects continued to be implemented with the aim of, on the one hand, ending the long-standing dependence on a single supplier and, on the other hand, building the infrastructural and competence foundations for the creation of a regional gas hub in Poland, operating not only latitudinally but also longitudinally. These activities are critical for building energy security at national, regional and EU level. TGE, providing regional market participants with transparent and competitive rules for natural gas trading, has the ambition to be a significant player in this new reality.

Record volumes

The volume of natural gas traded on TGE reached in 2021 the level of 180.8 TWh, an impressive increase of 19.6% compared to 2020 and also the best result in the history of TGE. Significantly, such a result also means that natural gas trading volumes have been increasing on the Exchange uninterruptedly every year, since 2016. At the same time, it is worth noting that both the spot markets (28.6 GWh, an increase of 10.8% year-on-year) and the forward market (152.2 GWh, with an increase of 21.4% year-on-year in 2020) had record turnover in 2021. Breaking down the spot markets: volumes on the Day-Ahead Market for gas amounted to 21.8 GWh (up 9.5%) and on the Intraday Market for gas to 6.8 GWh (up 15.2%).

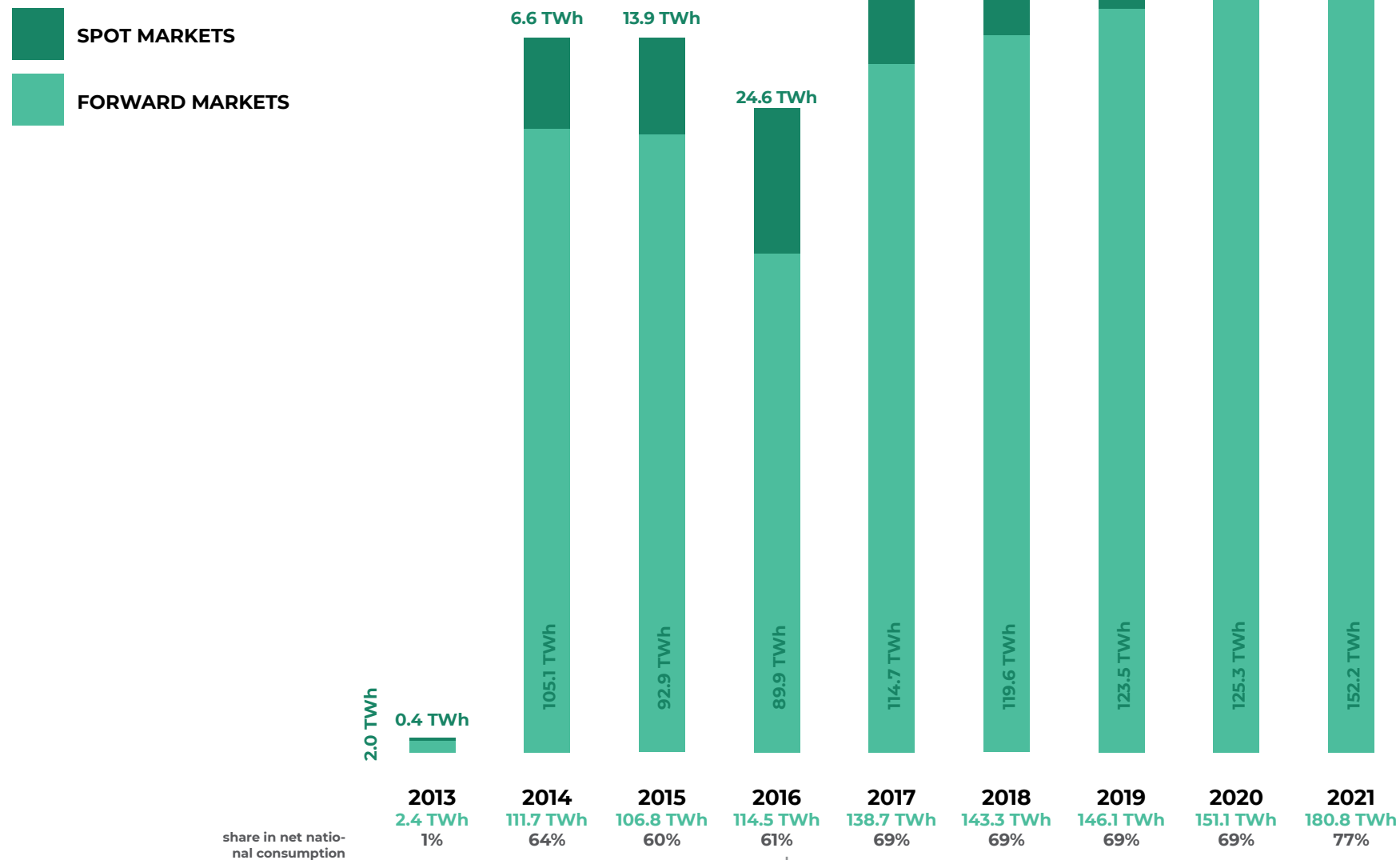
Relating the above volumes to gross domestic consumption of natural gas (as a reminder: 234.5 TWh), it should be noted that the volume of natural gas traded on the Exchange in 2021 also represents a record 77% of domestic consumption.

Prices

As with electricity prices, natural gas prices on the Exchange were also characterised by significant upward trends in 2021.

The weighted average price on the gas spot markets was in 2021 at 226.29 PLN/MWh, an increase of 169.15 PLN/MWh relative to 2020. On the other hand, on the forward market, the weighted average price of the contract with delivery in 2022 (GAS_BASE_Y-22) was at 176.34 PLN/MWh in 2021, 107.19 PLN/MWh higher than the corresponding price quoted for the GAS_BASE_Y-21 contract in 2020.

Historically, volumes of natural gas traded on the TGE markets were as follows



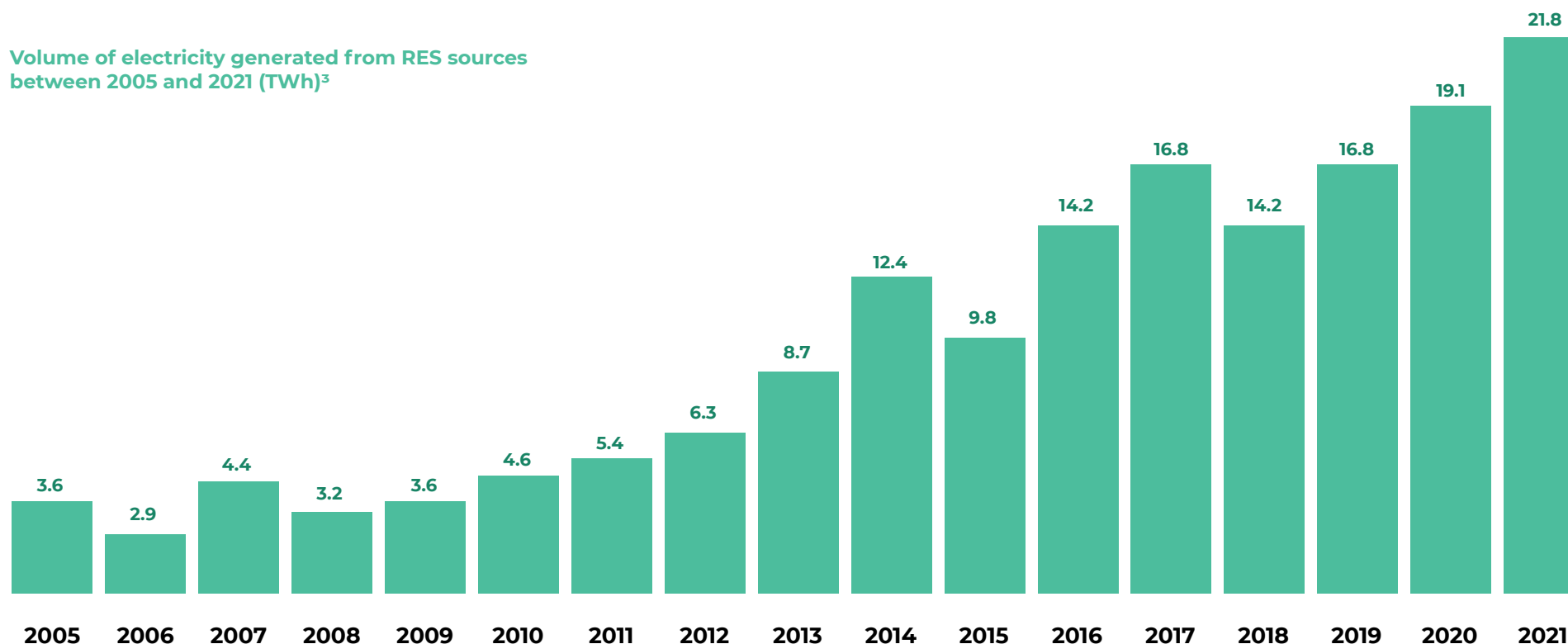
Property rights and Guarantees of Origin

The growing importance of both renewable sources in the domestic energy mix and the increasing attractiveness of energy efficiency projects means that the market for property rights related to RES certificates of origin and energy efficiency certificates is an important element of exchange trading on TGE. To an even greater extent, the increase in the installed capacity of RES generating installations and the consequent increase in the volume of RES energy generated in such installations translates into a dynamically increasing volume of trading in Guarantees of Origin.

In 2021, quantity of electricity generation from renewable sources in Poland increased by 16%, while the volume of installed RES capacity increased by 50% compared to 2020. The share of renewable sources in the total installed capacity was more than 30% at the end of 2021.²

The importance of the Property Rights Market for the Exchange's overall business activity is underlined by the fact that in 2021, revenues from property rights trading accounted for almost 6.2% of the WSE Group's commodity market revenues.

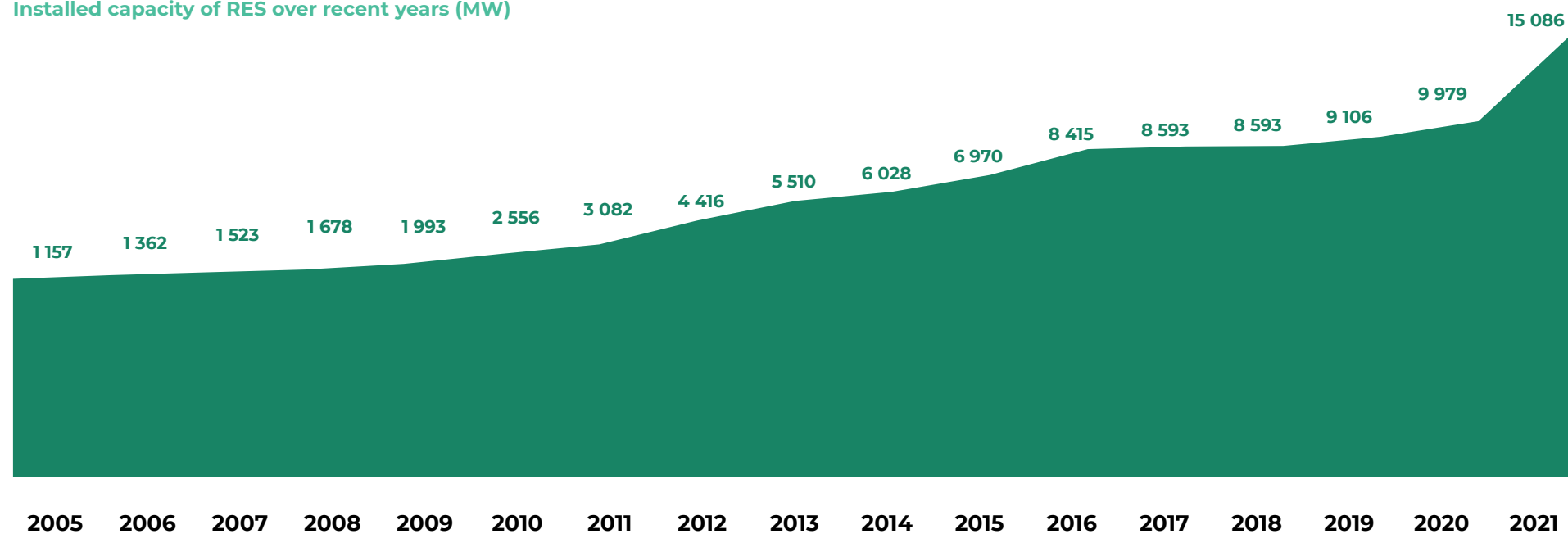
Volume of electricity generated from RES sources between 2005 and 2021 (TWh)³



² Source: PSE, https://www.pse.pl/dane-systemowe/funkcjonowanie-kse/raporty-roczne-z-funkcjonowania-kse-za-rok/raporty-za-rok-2021#t6_1

³ Source: PSE

Installed capacity of RES over recent years (MW)



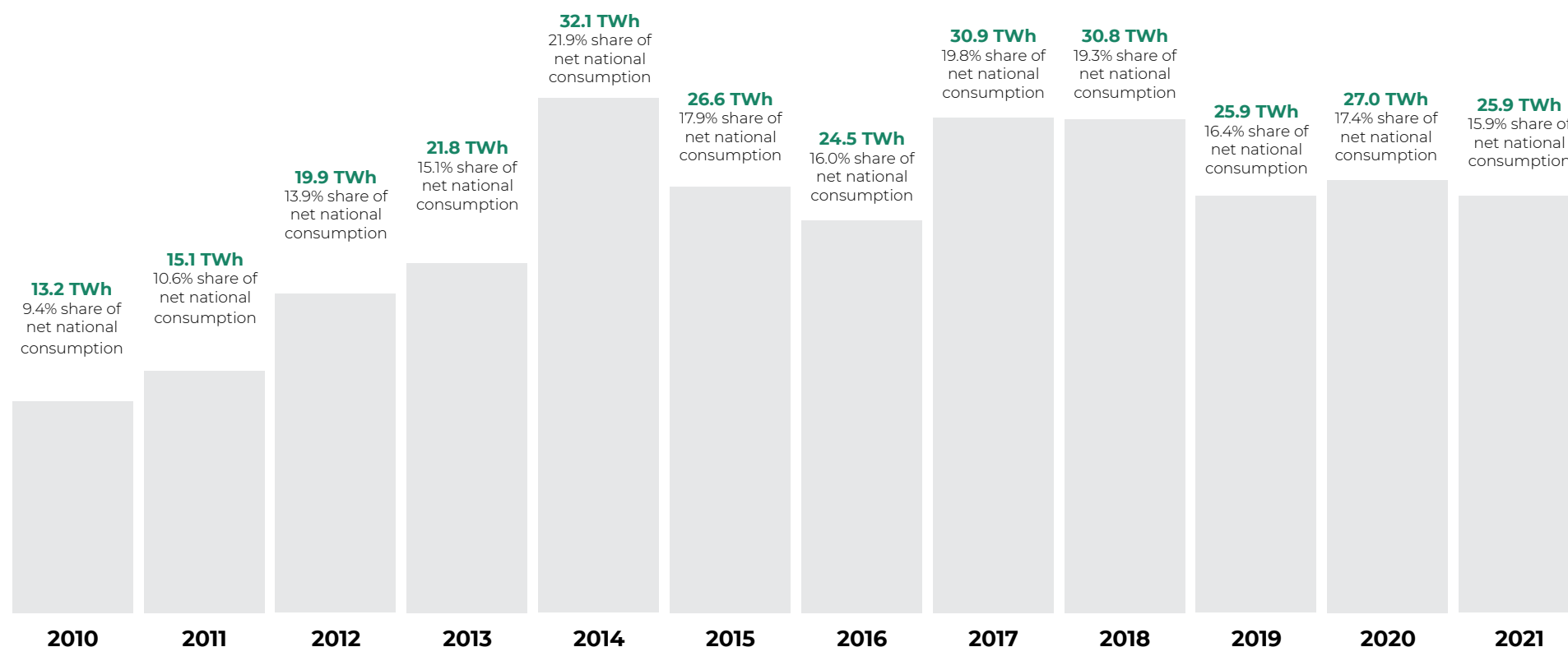
The dynamic growth of RES installed capacity and the accompanying natural increase in the volume of electricity generated in renewable energy sources will translate directly into an increase in Guarantees of Origin's traded amounts. This effect will be bolstered by the planned internationalisation of trade in Guarantees of Origin in the near future, associated with the planned amendment of the Act on Renewable Energy Sources and the accession of the President of the ERO to the Association of Issuing Bodies (AIB). This will inevitably result in further growth of the volume of Guarantees of Origin traded and registered in the Guarantees of Origin Register maintained by the TGE.

Volume and prices

Certificates of origin for energy from renewable sources

The total volume of trading in property rights for RES electricity last year was 25.9 TWh, a decrease of 4.0% compared to 2020. The weighted average price at the PRM (Property Rights Market) sessions was 191.87 PLN/MWh for the PMOZE_A instrument in 2021, up 53.65 PLN/MWh compared to 2020.

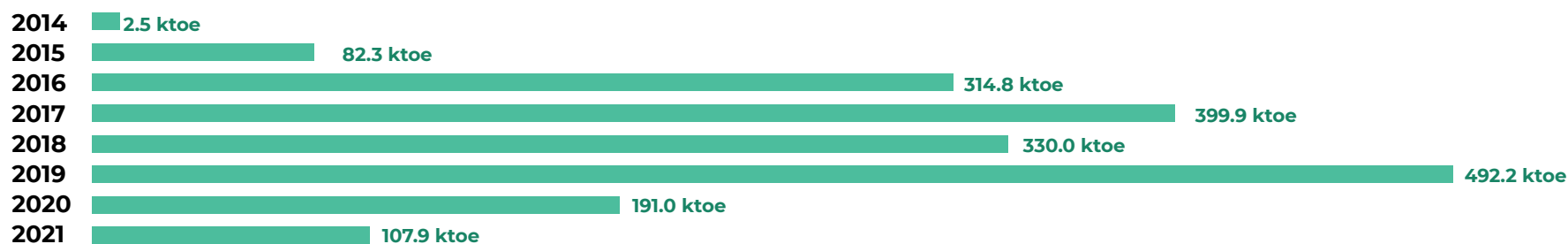
Analysing the levels of trading in property rights resulting from certificates of origin for electricity from RES, including agricultural biogas plants (PMOZE, PMOZE_A and PMOZE-BIO instruments) on both the spot (PRM) and forward (OTF) markets, the following volumes can be indicated for individual years



Energy efficiency certificates

The trading volume of energy efficiency property rights in 2021 was 107 995 toe, a decrease of 43.5% compared to 2020. The volume-weighted average price of the PMEF_F instrument was 2 375.08 PLN/toe in the previous year's sessions, 550.28 PLN/toe more than in 2020.

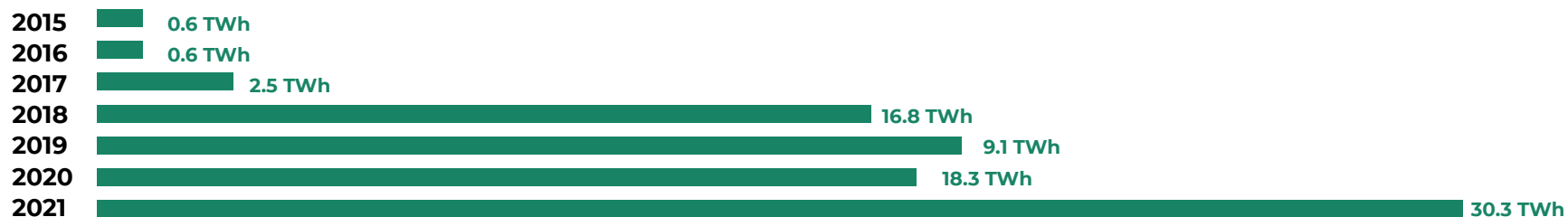
Historically, the dynamics of trading in property rights resulting from energy efficiency certificates are as follows



Guarantees of Origin

Trading in Guarantees of Origin for electricity generated from RES reached a volume of 30.3 GWh in 2021, the highest in the history of the Guarantees of Origin Register and an increase of 65.5%, compared to 2020. The weighted average price of Guarantee of Origin for electricity from RES was at the level of 1.57 PLN/MWh, which means an increase by 0.45 PLN/MWh compared to 2020.

Historically, the volume of trading in Guarantees of Origin recorded by the Guarantees of Origin Register was as follows



Agricultural Market

The implementation of the Agricultural Exchange Market (GRR; also known as the Market for Agricultural and Food Commodities: RTRS) at TGE is the implementation of one of the WSE CG's strategic initiatives. GRR currently offers trading in wheat, maize and rye, as well as rapeseed.

Key stakeholders in the GRR

Towarowa Giełda Energii (TGE)	Exchange Clearing House (operated by the IRGiT)	Authorised Warehouses
organises trading for admitted commodities and organises and supervises the Authorised Warehouses System (SMA)	organises and manages the transaction collateral system and conducts clearing and financial settlement of transactions concluded on the GRR	grain warehouses that are part of the Authorised Warehouses System (SMA), which are responsible for verifying and maintaining the quality of the goods marketed on the GRR and carry out the settlement in goods of transactions concluded, enabling the physical movement of goods
Brokerage houses / brokers	Appeal laboratories	Control and Authorisation Unit
professional market participants acting as intermediaries enabling the conclusion and settlement of exchange transactions for trading participants who do not have the status of Exchange Member	professional laboratories designated by TGE whose role is to carry out appeal tests at the request of trading participants in order to determine whether a particular lot admitted to trading on the Exchange meets quality standards	an entity selected by TGE to verify the fulfilment of technical and organisational requirements by the warehouses applying for the status of Authorised Warehouse or which already have such status

SMA

The Authorised Warehouses System (SMA) is based on Authorised Warehouses that meet specialised organisational and technical requirements defined by the Exchange, thus ensuring uniformity in the handling of goods traded on the GRR during their acceptance, storage and release from the warehouse. Participation in the SMA is voluntary, single requirement is an appropriate agreement with TGE. The Exchange, though supervises the activities of the SMA, is not liable towards trading participants for the commodities stored in Authorised Warehouses – individual Authorised Warehouses are responsible for any claims in this respect.

Participation in the GRR

Transactions on the GRR may be entered into by all entities that hold Exchange Member status or are customers of Exchange Members.

- Only entities meeting the requirements set out by the Exchange in the Exchange Commodity Market Rules may become Exchange Members; in addition, in order to be admitted to the GRR, it is necessary to become an Exchange Clearing House Member or to conclude an agreement with an Exchange Clearing House Member for the settlement of their transactions. Members of the Exchange are usually professional entities whose business is trading in financial and commodity instruments, such as brokerage houses, commodity brokerage houses or investment firms.
- Other entities that are unwilling or unable to become an Exchange Member have the option to trade on the GRR through an Exchange Member admitted to the GRR that provides brokerage services (brokerage house).

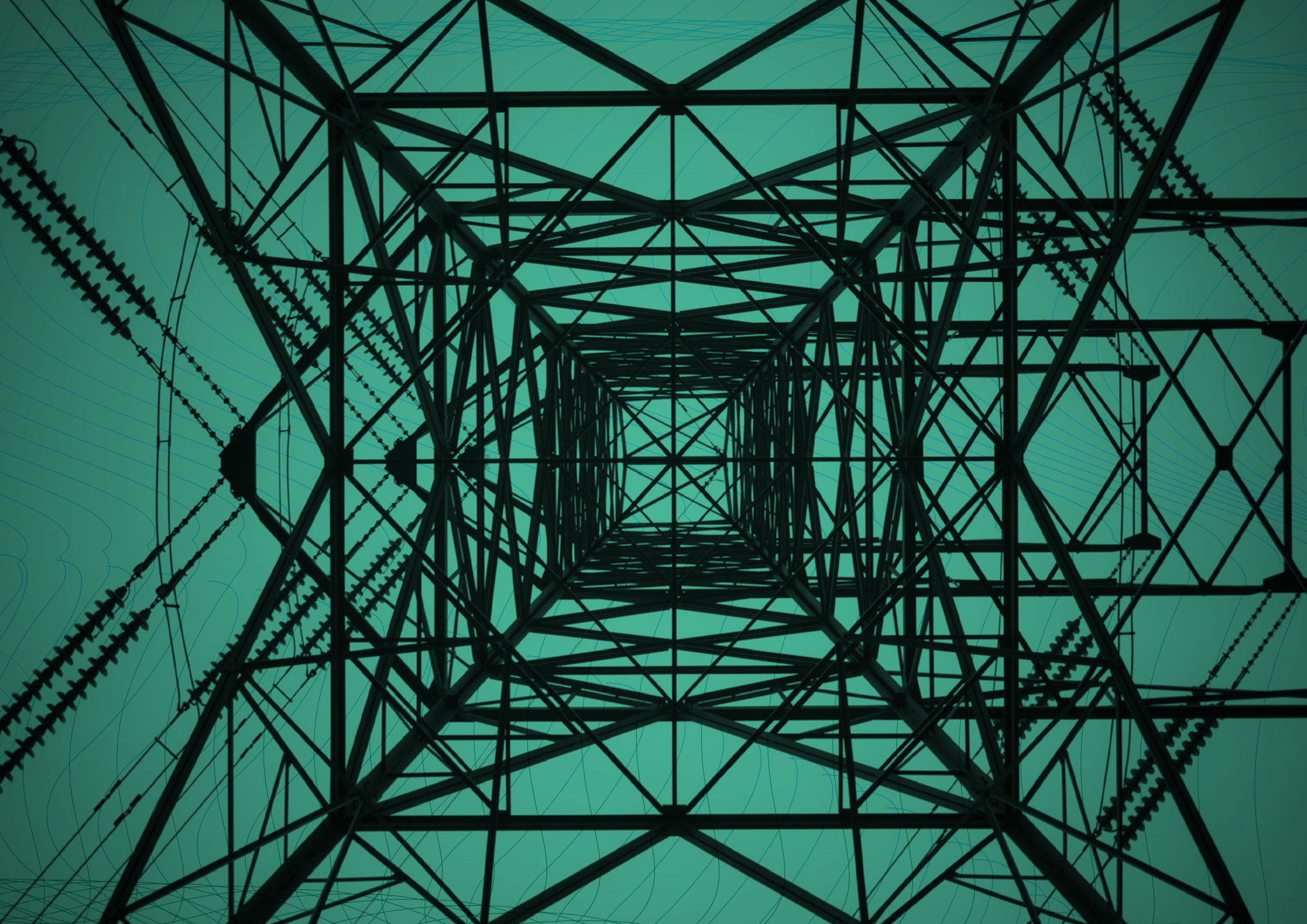
An important stakeholder in the GRR is also the Agricultural Market Council – a consultative and advisory body to the Management Board of TGE on matters relating to the operation of the GRR and the Authorised Warehouses System. More on the Agricultural Market Council in the next section of the Report.

Turnover on the GRR

In 2021, a volume of 4,750 tonnes of cereals was transacted at the Agricultural Exchange Market, an increase of 102.1% compared to 2020), of which 4,725 tonnes were for B-grade wheat. Transactions were only concluded in the first half of the year.

In Q1, Class B wheat contracts were concluded for a total volume of 4 475 tonnes, with a weighted average price of PLN 991.53/t. At the same time, Class B rye was transacted in the same period for a total volume of 25 tonnes, with a weighted average price of PLN 705.5/t.

On the other hand, Q2 contracts were concluded only for Class B wheat for a total volume of 250 tonnes, with a weighted average price of PLN 953.7/t.



COMMUNICATION WITH THE MARKET

TGE constantly pursues an active policy of cooperation with all stakeholders in the energy and agricultural markets. These activities are aimed at continuously improving the standards of services provided to trading participants and adapting the offer to the changing environment, taking into account the needs and expectations articulated by those who are most interested in such an offer. The initiatives undertaken in the field of education are also the vital aspect of the cooperation with market stakeholders. The objective of these initiatives is to increase awareness of the advantages of commodity trading through transparent and competitive exchange mechanisms

Market Council

The key body for dialogue with market participants and stakeholders is the Market Council, an advisory body to the TGE Management Board. The main areas of work of the Market Council are the development of the product offering and the optimisation of instruments available to exchange participants and other entities operating on the Exchange markets. The Market Council elaborates recommendations for the development of the exchange commodity market, as well as initiates projects and gives its opinion on changes in the abovementioned area. The functioning of the Market Council and the implementation of its tasks and works are to foster the barter of information between TGE and market participants on tools improving liquidity, rules for the functioning of market makers, quotation systems and their development, implementation of regulatory and legal changes concerning the functioning of markets operated by TGE.

The Market Council comprises representatives of the following bodies, institutions and entities:

- OGP Gaz-System S.A.,
- Polish Chamber of Broker Houses,
- Polish Chamber of Industrial Power Generators and Energy Consumers,
- The Chamber of the Natural Gas Industry,
- Polish Association of Commercial Heat and Power Plants,
- Association of Energy Trading,
- Polish Power Plants Association,
- Renewable Energy Association,
- Polish Wind Energy Association,
- Union of Private Employers in the Energy Sector (Lewiatan),
- EFET (European Federation of Energy Traders),
- Management Board of TGE,
- Izba Rozliczeniowa Giełd Towarowych S.A. (Clearing House).

The basis for the functioning of the Market Council in the past year was the "Framework Work Programme for 2021" developed and approved by the Council, which was almost fully implemented. However, it should be pointed out that the Market Council also took up issues identified by its participants on an ongoing, "ad hoc" basis.

Agricultural Market Council

An important development from the point of view of TGE's further expansion into new areas of exchange trading was the establishment of the Agricultural Market Council in 2021. It is also a consultative and advisory body to the TGE Management Board on matters relating to the development of the Agricultural Exchange Market, including the Authorised Warehouses System.

Natural members of the Agricultural Market Council are representatives of the agri-food sector, most important industry organisations related to the agricultural sector, scientific institutes, administrative bodies, in particular:

- Prof. Wacław Dąbrowski Institute of Agricultural and Food Biotechnology,
- Institute of Agricultural and Food Economics,
- Polish Chamber of Commerce of Grain Processors and Feed Manufacturers,
- National Federation of Cereal Producers,
- Lubuszenie Producers Group,
- National Association of Rape and Protein Crop Producers,
- Polish Association of Employers of the Grain and Milling Industry,
- Polish Association of Oil Producers,
- Ministry of Agriculture and Rural Development,
- National Agricultural Support Centre,
- WSE Capital Group.

The detailed scope of the Agricultural Market Council's activities includes the elaboration of recommendations for the development of the Agricultural Exchange Market and giving an opinion on changes concerning, inter alia, the following issues and matters:

- the quality of agri-food products, both those currently traded on TGE and those planned for introduction on the Agricultural Exchange Market,
- the timing and course of the quotation process,
- improving liquidity and market functioning rules,
- market expansions,
- regulatory and legal changes concerning the operation of the Agricultural Exchange Market and the Authorised Warehouses System operated by TGE,
- promotion of the Agricultural Exchange Market.

Working Teams

Working teams are an important part of the Exchange's operating strategy based on continuous improvement and adaptation of the TGE offering to the dynamically changing regulatory and technological environment..

Exchange Offer Development Team for the RES Sector

This Team was created as a result of TGE's cooperation with the Polish Wind Energy Association (PWEA) aimed at developing adequate solutions and recommendations for the dynamically developing renewable energy sector. Inaugurated in October 2021, the direct impetus for its creation were the conclusions resulting from the Jagiellonian Institute's Report published in July of the same year, entitled "Development directions of the exchange market for the RES sector", prepared on behalf of TGE and PWEA. The Team consists of specialists from the energy sector and representatives of financial institutions, i.e. people who actually shape solutions supporting further development of the RES sector. In the longer term, the final outcome of the Team's work should be the definition of boundary conditions and specific market instruments taking into account the effects of the transformation of energy markets towards decarbonisation and zero emissions, including its legal and business aspects.

Financial Instruments Market Team

The Team consists of a wide group of experts in the areas of: electricity and gas trading, market and portfolio risk management, operations of brokerage houses, regulations and compliance, as well as the exchange and clearing house.

Originally, the Team aimed to characterize the benefits and barriers related to the implementation of the new program of financial instruments on the basis of the analyses performed.

Its main task is to develop a market model and a standard of financial instruments.

TGE Update

TGE Update is another communication channel between the Exchange and energy market stakeholders. In 2021 two editions of this event were held, which gives an essentially modern dimension to the interchange of information between the Exchange and its members, responding to the constantly altering technological environment and adapting to the expectations of the Exchange market participants. The event is based on the use of modern multimedia technologies including a virtual studio, thus ensuring constant and attractive form of communication between the Exchange and its partners.

Forum of Trade

Between 1 and 3 September 2021 TGE (together with the IRGiT) organised the 13th Trading Forum. Annual event, the Trading Forum is one of the most important occasion for energy market participants, providing a platform for the interchange of experience between entities operating on the electricity, natural gas and property rights markets. In practical terms, it is a unique opportunity to talk to experts, as well as to participate in conferences and thematic debates. A not insignificant part of the event is the opportunity to acquire the latest information about the markets run by TGE. The important elements of last year's event were two panels: "The RES sector in the electricity market" and "Implementation of financial instruments in the electricity market". From the point of view of the so-called "The Exchange kitchen", it is also important to point out the series of meetings during which the most important operational issues for traders were discussed. Last year's Trading Forum also featured the Stock Exchange Year 2020 Summary Gala, an integral part of which was the presentation of awards in the form of Platinum Megawatts and Settlements to the most active companies and brokers in 2020. This time, the event was also of almost historic value – for the first time, awards were presented to companies involved in the development of the Agricultural Exchange Market.

Education

Educational activities addressed to broadly understood exchange trading stakeholders, i.e. market participants, TGE members, the media and the academic community, have been an important element of TGE's operation since the beginning of its existence, i.e. for over 20 years. The aim of the initiatives undertaken as part of this activity is not only to promote TGE as a transparent platform for trading in energy and agricultural products, where the reference price is set, but also an important aspect related to raising awareness of the benefits of commodity trading through the Exchange.

This is educational activity in the strict sense of the term, consisting of TGE's active participation in projects organised by other entities, such as the Energy Academy, organised by the L.A. Paga Foundation, and the Go4Poland programme, implemented in turn by the WSE Foundation.

Substantive Partnership

For years TGE supports, as a substantive partner, undertakings and events that are fundamental to the barter of experience and the creation of expansion courses in the energy sector, such as energy industry conferences.

Training and certification of brokers

In 2021 TGE conducted 6 training courses for TGE Broker candidates, ending with an exam, with a total of 57 participants. Noteworthy, the trainings were organised in both Polish and English. Due to the restrictions resulting from the effects caused by the COVID 19 pandemic, the conduct of the training courses was carried out by means of distance communication. Finally, a total of 54 TGE Broker certificates were issued, permitting them to represent an Exchange Member or OTF Member in transactions on the Exchange Commodity Market, the Organised Trading Platform and the Financial Instruments Market operated by TGE.

Training for Agricultural Exchange Market participants

In connection with the development of the Agricultural Exchange Market, which is to be one of the pillars of TGE's operation, measures are also being taken to ensure that the high standard of services provided within this segment of exchange trading is maintained. To this end, two training courses aimed at GRR participants have been organised in 2021:

- in May, for samplers applying to become certified experts for the sampling of cereal grains, legume plants and oilseeds,
- in June – for employees of quality control laboratories at grain collection points and mills.

'Platinum Megawatt' Competition and media cooperation

In 2021, TGE also organised the 'Platinum Megawatts' Media Competition for the seventh time. Aim of this initiative is the popularisation of high-quality journalism, respecting the principles of ethics and objectivity, while at the same time bringing often difficult issues in the energy industry closer to a wider audience in an accessible manner. The cooperation of companies such as TAURON Polska Energia S.A., Polskie Sieci Elektroenergetyczne S.A., GAZ-SYSTEM S.A., PGE Polska Grupa Energetyczna S.A., Respect Energy S.A. and Izba Rozliczeniowa Giełd Towarowych S.A. provided invaluable support for the Exchange in organising the event. The competition was held under the honorary patronage of the Minister of State Assets, the Minister of Climate and Environment and the President of the Energy Regulatory Office.

The award ceremony took place on 29 June 2021. On 30 November, in cooperation with TAURON Polska Energia S.A., a workshop for journalists was organised on distributed energy, i.e. modern solutions for the RES sector. The workshop programme included a tour of the hydroelectric power plant in Wrocław.

CSR/ESG

As an entity setting the highest standards in terms of transparency and integrity of trading on the energy markets, TGE also has the ambition to shape the best practices in terms of mechanisms ensuring responsible business conduct, taking into account social, employee and ethical requirements, as well as in terms of limiting the impact on the environment. The principles referred to in shorthand as ESG (Environment, Social, [corporate] Governance) are a fundamental element and criterion of conducting business activity not only by the TGE, but the entire WSE Group. The abovementioned principles underpinned the adoption of the "WSE Group ESG Strategy 2025" in December 2021, which sets out the ambitions and objectives in the area of sustainable development for 2022-2025 for all companies in the WSE Group, including TGE.

Within the pillars of the ESG Strategy indicated above, specific initiatives are being implemented:

- **E (Environment)** – the WSE CG Climate Policy, adopted in 2021, identifies key moves to reduce adverse climate change; it also sets out principles for managing environmental issues and responsibilities.
- **S (Social)** – the organisational culture is based on principles such as commitment, values and effective internal communication, as well as investing in the continuous development of employee competences; at the same time, the tasks of education, promotion and information related to the commodity market already described above are implemented. Furthermore, the importance of the ESG social pillar for TGE is confirmed by the adoption of the following internal documents:
 - Anti-mobbing policy,
 - Diversity policy for employees,
 - Diversity policy for the Management Board and Supervisory Board.
- **G (Governance)** – ensuring high standards of corporate governance and internal communication is fundamental to maintaining a high level of corporate governance. Therefore, governance systems and internal rules and regulations are continuously modified and improved, with a view to implementing the principles of sustainable development and shaping cooperation with external parties based on transparent guidelines. Elements of these activities include.

Towarowa Giełda Energii S.A.

Książęca str. 4
00-498 Warsaw
T. +48 22 341 99 12
tge@tge.pl

tge.pl | air.tge.pl | gpi.tge.pl