Management Board Report on the Activity of the ENEA Group in H1 2023

Poznań, date of publication: 13 September 2023

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ENEA Group in numbers

ENEA has 17.9 thousand employees

MINING	GENERATION	DISTRIBUTION	TRADING
19.7% share in the steam coal market in Poland	**6.3 GW** total installed capacity	**2.8 million** users of distribution services	**2.7 million** customers
432 million tons mining potential of 4 mining concession areas	**449 MW** installed RES capacity	**123.8 thousand km** distribution lines, including connections	**11.6 TWh** sales of electricity and gaseous fuel to retail customers in H1 2023
3.3 million tons net coal production in H1 2023	**10.5 TWh** net energy production in H1 2023	**10.1 TWh** electricity supplied in H1 2023	**33** Customer Service Offices (including 32 stationary offices and 1 mobile office)

1. Operating summary of H1 2023

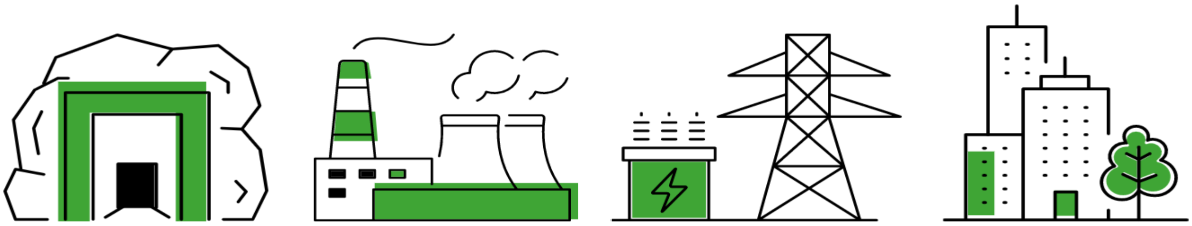
In H1 2023, the ENEA Group generated EBITDA of PLN 2,316.2 million (up by PLN 620.2 million y/y).

The Generation area posted EBITDA of PLN 1,067.4 million (up by PLN 394.6 million y/y). The higher EBITDA was largely driven by an increase in EBITDA in the RES Segment (mainly due to the lower base in the corresponding period of the previous year (as a result of the provision for onerous contracts recognized in H1 2022)) and higher electricity prices; at the same time, the cost of biomass increased and costs of a charge for the Price Difference Fund were recognized), and in the System Power Plants Segment (mainly due to the lower base in the corresponding period of the previous year (as a result of the provision for onerous contracts recognized in H1 2022) and an increase in the unit generation margin along with the repurchase and Balancing Market margin, while a new cost item was also added, namely costs of the charge for the Price Difference Fund. At the same time, there was an decrease in EBITDA in the Heat Segment (mainly an increase in fixed costs and addition of costs of the charge for the Price Difference Fund).

The Mining area generated EBITDA of PLN 523.1 million (down by PLN 83.2 million y/y). The decrease in EBITDA was caused primarily by a decline in the coal sales volume and an increase in operating expenses (an increase in the unit mining cost). Despite the decline in the production and sales volumes, higher revenue from sales of coal was recorded due to the higher realized sales price.

The Distribution area posted EBITDA of PLN 859.4 million (up by PLN 225.5 million y/y). The improvement in EBITDA was driven by the higher margin realized on the concession business, with a simultaneous increase in operating expenses.

The Trading area posted EBITDA of PLN 71.1 million (up by PLN 247.3 million y/y). The higher EBITDA was caused primarily by the use of provisions related to onerous contracts and lower provisions for expected losses and potential claims. At the same time, despite the recognition of compensation revenues, there was a decline in margins in the retail market.



- The ENEA Group incurred CAPEX of PLN 1,467 million.
- Production of commercial coal was 3.3 million tons.
- Sales of commercial coal were 3.1 million tons.
- The Group generated 10.5 TWh of electricity.
- Sales of heat in the Generation Segment was 3.7 PJ.
- Sales of distribution services to end users were 10.1 TWh.
- The sales volume of electricity and gaseous fuel to retail customers was 11.6 TWh.

+	-
Higher revenue from sales of electricity	Higher costs of purchase of electricity and gas
Compensation revenues	Higher costs of consumption of materials and supplies
Higher revenue from sales of distribution services	Contribution to the Price Difference Fund
Change in provisions related to onerous contracts	Higher employee benefit costs
Higher result on other operating activities	Higher costs of transmission services
Higher revenue from sales of heat	Drop in revenue from sales of coal
	Lower revenue from sales of gas
	Higher costs of third-party services

1.1. Key events in 2023

First quarter

- On 4 January 2023, the Company received Mr. Rafał Włodarski's resignation from the position of an ENEA S.A. Supervisory Board Member, including the function of the Company's Supervisory Board Chairman, effective as of 4 January 2023.
- On 27 January 2023, ENEA S.A signed a financing agreement with a consortium of banks consisting of Polska Kasa Oszczędności Bank Polski S.A., Bank Gospodarstwa Krajowego, Bank Polska Kasa Opieki S.A., Alior Bank S.A. and Bank of China (Europe) S.A. Poland Branch. Under this agreement, the Company obtained financing in the total amount of PLN 2,500,000,000, including a term facility up to the amount of PLN 1,500,000,000 ("Facility A") and a revolving facility up to the amount of PLN 1,000,000,000 ("Facility B"). In accordance with the provisions of the agreement, the Company may allocate the funds made available under Facility A for the financing and refinancing of capital expenditures of the Issuer's Group incurred in connection with the construction, expansion, upgrade or maintenance of the distribution network and the acquisition, development, expansion, financing, construction, upgrade, maintenance or commissioning of any renewable energy sources. In turn, the funds made available under Facility B may be used by the Company to finance its day-to-day operations and working capital of the Issuer's Group, except for the financing of the construction, acquisition or expansion of hard coal-fired power plants, other business related to hard coal, including hard coal mining and trading, and to refinance any financial debt or expenditures incurred for such purpose.
- On 13 March 2023, an Extraordinary General Meeting of ENEA S.A. was held, which on the same day appointed Ms. Aleksandra Agatowska to the Company's Supervisory Board of the 11th term of office, and elected Mr. Łukasz Ciołko as Chairman of the ENEA S.A. Supervisory Board.

Second quarter

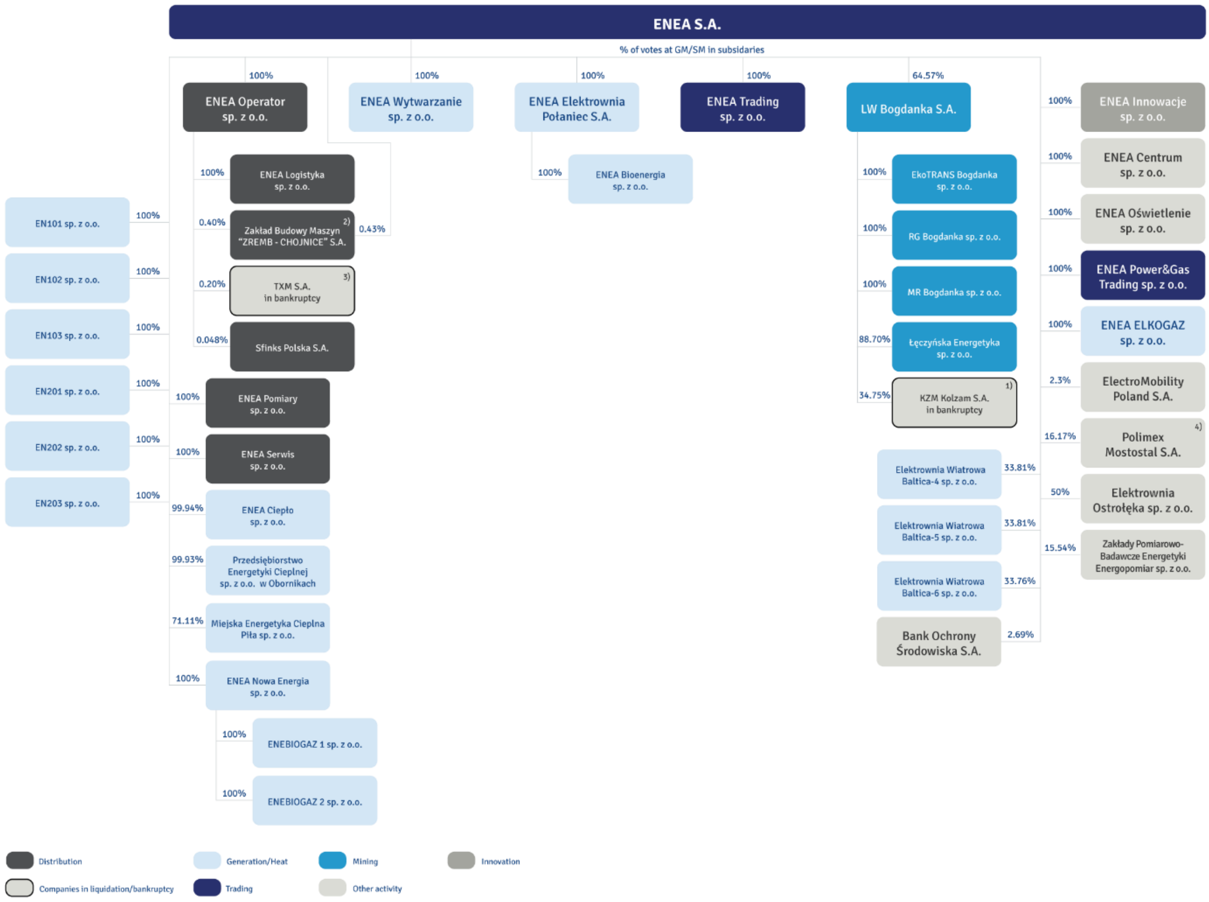
- On 14 April 2023, an increase was registered in the share capital of Polimex Mostostal S.A. by PLN 1,500,000, that is from PLN 480,737,604 to PLN 482,237,604, by floating 750,000 series S ordinary bearer shares with a par value of PLN 2 each. ENEA S.A.'s stake in the company's share capital diminished from 16.15% to 16.10%.
- On 18 April 2023, the ENEA S.A. Management Board adopted a resolution on the proposed distribution of the Issuer's net profit for the financial year 2022. According to the resolution, the Company's Management Board proposed to allocate the Issuer's net profit for the financial year covering the period from 1 January 2022 to 31 December 2022, in the amount of PLN 2,448,024,226.61, to increase the Company's reserve capital to carry out its scheduled investments. The Supervisory Board issued a positive opinion on the Management Board's proposal, following which the Ordinary General Meeting adopted a resolution consistent with the Management Board's recommendation.
- On 18 April 2023, Fitch Ratings ("Agency") changed the Company's rating outlook from negative to stable and affirmed the Company's long-term foreign- and local-currency issuer default ratings at BBB.

1.2. Events after the reporting period

- On 4 July 2023, the Company received Mr. Piotr Zborowski's resignation from the position of an ENEA S.A. Supervisory Board Member, effective as of 4 July 2023. The reason for the resignation was not specified.
- On 6 July 2023, the Issuer's Supervisory Board adopted a resolution to appoint Mr. Jakub Kowaleczko, effective as of 17 July 2023, to the position of ENEA S.A. Management Board Member for Commercial Matters for the joint term of office commenced on the day following the date of holding the Ordinary General Meeting of ENEA S.A. which approved the financial statements for 2021.
- On 14 July 2023, ENEA S.A. received from the State Treasury, represented by the Minister of State Assets, a proposal for a non-binding document summarizing the transaction terms for the acquisition by the State Treasury of all shares in ENEA Wytwarzanie sp. z o.o. and shares in ENEA Elektrownia Połaniec S.A. held by ENEA S.A., along with their subsidiaries, in order to establish the National Energy Security Agency (NABE).
- On 31 July 2023, the Company received Ms. Aleksandra Agatowska's resignation from the position of an ENEA S.A. Supervisory Board Member, effective as of 31 July 2023. The reason for the resignation was not specified.
- On 10 August 2023, ENEA S.A. and the State Treasury, represented by the Minister of State Assets, signed documents summarizing the transaction terms for the acquisition by the State Treasury of all shares in ENEA Wytwarzanie sp. z o.o. and shares in ENEA Elektrownia Połaniec S.A. held by ENEA S.A., along with subsidiaries, in order to establish NABE.
- On 21 August 2023, ENEA S.A. received from the State Treasury, represented by the Minister of State Assets, a proposal to purchase a block of 21,962,189 shares in LWB held by ENEA S.A. for a price of PLN 45 per share.
- On 13 September 2023, with regard to the completion of analyses of the report on the estimation of the market value of the equity stake in Lubelski Węgiel Bogdanka S.A. received on 11 September 2023 in connection with the negotiation process concerning LWB shares, the need to recognize an impairment loss on property, plant and equipment in the mining segment was identified. The impairment loss has been estimated at PLN 749 million, which is reflected in the financial data presented in this Report. Detailed disclosures are provided in Note 29 of "Condensed Interim Consolidated Financial Statements of the ENEA Group for the period from 1 January to 30 June 2023".

2. Organization and activity of the ENEA Group

2.1. Structure of the ENEA Group – as at 30 June 2023



[1)] Ruling on discontinuation of the bankruptcy proceedings/the company does not conduct business activity.
[2)] As a result of a debt-for-share swap, ENEA S.A. became a shareholder of Zakład Budowy Maszyn "ZREMB – CHOJNICE" S.A. holding a 0.43% stake in the company's share capital.
[3)] On 7 November 2022, the District Court for the Capital City of Warsaw, 18th Commercial Division for Bankruptcy, declared TXM S.A. bankrupt.
[4)] On 14 April 2023, an increase in the share capital of Polimex Mostostal S.A. was registered. ENEA S.A.'s stake in the company's share capital diminished from 16.15% to 16.10%. On 28 April 2023, as a result of the exercise of call option 8 (acquisition of shares), ENEA S.A.'s stake in the company's share capital increased from 16.10% to 16.17%. On 12 July 2023, 500,000 ordinary shares were registered by KDPW and admitted to trading and the share capital of Polimex Mostostal S.A. was increased. ENEA S.A.'s stake in the company's share capital decreased from 16.17% to 16.14%. On 14 July 2023, as a result of the exercise of call option 9 (acquisition of shares), ENEA S.A.'s stake in the company's share capital increased from 16.14% to 16.19%.

There are 8 leading entities in the ENEA Group, namely ENEA S.A. (trading in electricity), ENEA Operator sp. z o.o. (distribution of electricity), ENEA Wytwarzanie sp. z o.o., ENEA Elektrownia Połaniec S.A. and ENEA Nowa Energia sp. z o.o. (generation and sales of electricity), ENEA Power&Gas Trading sp. z o.o., ENEA Trading sp. z o.o. (wholesale of electricity) and LW Bogdanka S.A. (coal mining). Other companies carry out ancillary activity in relation to the operations of those listed above. The Group's structure includes also minority interests held by ENEA S.A. and the subsidiaries of ENEA S.A. and LW Bogdanka S.A.[1)]

2.2. Changes in the ENEA Group's structure

Asset restructuring

Following key organizational changes introduced in the previous years, in H1 2023 the ENEA Group did not carry out any major asset restructuring activities other than the initiatives associated with the planned changes.

Capital divestments

In H1 2023, no significant capital divestment activities were carried out.

[1)] Hereinafter, the names of the companies may be presented without the abbreviation of their legal form. Whenever the terms "Company" or "Issuer" are mentioned, this means ENEA S.A.

Changes in the organization

In H1 2023, the ENEA Group continued its endeavors aimed at pursuing the ENEA Group Development Strategy.

Capital investments

A detailed description of processes related to capital investments is included in the condensed interim consolidated financial statements for the period from 1 January to 30 June 2023.

Events during the reporting period up to the date of the report

- On 3 January 2023, the Extraordinary General Meeting of ENEA Połaniec Serwis sp. z o.o. (target company) was held and adopted a resolution on the target company's merger with ENEA Elektrownia Połaniec S.A. (acquiring company). The merger was effected under a simplified procedure, that is in accordance with Article 516 of the Commercial Company Code. On 16 January 2023, the companies merged.
- On 4 January 2023, ENEA S.A. founded a limited liability company by the name of EN202 sp. z o.o. with its registered office in Poznań, with the share capital of PLN 70,000.00, divided into 100 shares with a par value of PLN 700.00 each, which was fully covered by cash, while all shares were subscribed for by ENEA S.A. The company was entered in the National Court Register on 5 January 2023. The company was established to carry out a photovoltaic project.
- On 4 January 2023, ENEA S.A. founded a limited liability company by the name of EN101 sp. z o.o. with its registered office in Poznań, with the share capital of PLN 70,000.00, divided into 100 shares with a par value of PLN 700.00 each, which was fully covered by cash, while all shares were subscribed for by ENEA S.A. The company was entered in the National Court Register on 9 January 2023. The company was established to carry out a photovoltaic project.
- On 13 January 2023, the court of registration competent for ENEA Trading sp. z o.o. issued a demerger decision and made an appropriate entry in the Register of Commercial Undertakings. As a consequence of the entry, ENEA Trading sp. z o.o.'s share capital decreased from PLN 100,000,000.00 to PLN 61,205,000.00.
- On 1 February 2023, 500,000 series S ordinary bearer shares of Polimex Mostostal S.A. were registered with the Central Securities Depository of Poland (KDPW) and admitted to trading by the Warsaw Stock Exchange, with a par value of PLN 2.00 each, resulting in an increase in the company's share capital by PLN 1,000,000.00, from PLN 479,737,604.00 to PLN 480,737,604.00. As a result of the increase in the share capital of Polimex Mostostal S.A., ENEA S.A.'s stake in the company's share capital diminished from 16.26% to 16.23%.
- On 28 February 2023, ENEA Innowacje sp. z o.o. sold 1 share in ENEBIOGAZ 1 sp. z o.o. with a par value of PLN 50.00 for the price of PLN 50.00 and 1 share in ENEBIOGAZ 2 sp. z o.o. with a par value of PLN 50.00 for the price of PLN 50.00 to ENEA Nowa Energia sp. z o.o., which became the sole shareholder of ENEBIOGAZ 1 sp. z o.o. and ENEBIOGAZ 2 sp. z o.o.
- On 15 March 2023, the Extraordinary General Meeting of ENEA ELKOGAZ sp. z o.o. with its registered office in Warsaw adopted a resolution to increase the share capital of ENEA ELKOGAZ sp. z o.o. by PLN 10,000,000.00, that is from PLN 19,000,000.00 to PLN 29,000,000.00, by creating 100,000 new shares with a par value of PLN 100.00 each and a total par value of PLN 10,000,000.00, which were subscribed for by ENEA S.A. and paid up in full with cash. The share capital increase was entered in the National Court Register on 3 April 2023.
- In March 2023, the sale of 187,500 shares held by ENEA S.A. in the share capital of Polimex Mostostal S.A. was finalized; as a result, the stake held by ENEA S.A. in the Company's share capital fell from 16.23% to 16.15%. On 14 April 2023, an increase was registered in the share capital of Polimex Mostostal S.A. by PLN 1,500,000.00, that is from PLN 480,737,604.00 to PLN 482,237,604.00, by floating 750,000 series S ordinary bearer shares with a par value of PLN 2.00 each. ENEA S.A.'s stake in the company's share capital diminished from 16.15% to 16.10%. On 28 April 2023, as a result of the exercise of call option 8 (acquisition of shares), ENEA S.A.'s stake in the company's share capital increased from 16.10% to 16.17% and the number of shares held increased by 187,500, that is from 38,812,524 shares to 39,000,024 shares.
- On 3 April 2023, the court of registration competent for ENEA Power&Gas Trading sp. z o.o. issued a demerger decision and made an appropriate entry in the Register of Commercial Undertakings. As a consequence of the entry, ENEA Power&Gas Trading sp. z o.o.'s share capital increased from PLN 3,200,000.00 to PLN 61,392,500.00.
- On 27 April 2023, the Extraordinary General Meeting of Elektrownia Ostrołęka sp. z o.o. decided to increase the company's share capital by PLN 100.00 to PLN 912,482,200.00 by creating 2 new shares with a par value of PLN 50.00 each and an issue price of PLN 202,657,409.15 per share. The company's existing shareholders, namely ENEA S.A. and ENERGA S.A., acquired 1 new share with a par value of PLN 50.00 each. Specifically, on 27 April 2023, ENEA S.A. acquired its 1 new share, covering it with a cash contribution of PLN 202,657,409.15. Then, effective as of 28 April 2023, ENEA S.A. and Elektrownia Ostrołęka sp. z o.o. executed an agreement on a set-off of receivables whereunder ENEA S.A.'s receivables from Elektrownia Ostrołęka sp. z o.o. on account of the PLN 170,000,000 million loan granted under the loan agreement of December 2019 (as amended) plus interest, for a total value of PLN 202,657,409.15, were set off with the receivables of Elektrownia Ostrołęka sp. z o.o. from ENEA S.A. on account of the liability incurred to cover 1 share in the company with a cash contribution of PLN 202,657,409.15 in the increased share capital of Elektrownia Ostrołęka. In accordance with the set-off agreement, the receivables were mutually cancelled in full, and thus the loan

agreement of 23 December 2019 (as amended) expired on 28 April 2023. The share capital increase is currently pending an entry in the National Court Register.

- On 6 May 2023, the 28 April 2023 entry regarding the deletion of Tłocznia Metali PRESSTA S.A. in liquidation bankruptcy from the National Court Register became effective.
- On 1 June 2023, the 24 May 2023 entry regarding the deletion of ENERGO-TOUR Sp. z o.o. in liquidation from the National Court Register became effective.
- On 28 June 2023, the Extraordinary General Meeting of ENEA Trading sp. z o.o adopted a resolution to increase the share capital of ENEA Trading sp. z o.o by PLN 1,000.00, that is from PLN 61,205,000.00 to PLN 61,206,000.00, by creating 1 new share with a par value of PLN 1,000.00, which was subscribed for by ENEA S.A. and paid up in full with cash. The share capital increase was registered on 12 July 2023.
- On 5 July 2023, the Extraordinary General Meeting of EN101 sp. z o.o. adopted a resolution to increase the share capital of EN101 sp. z o.o. by PLN 3,430,000.00, that is from PLN 70,000.00 to PLN 3,500,000.00, by creating 4,900 new shares with a par value of PLN 700.00 each and a total par value of PLN 3,430,000.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 5 July 2023, the Extraordinary General Meeting of EN102 sp. z o.o. adopted a resolution to increase the share capital of EN102 sp. z o.o. by PLN 3,530,800.00, that is from PLN 70,000.00 to PLN 3,600,800.00, by creating 5,044 new shares with a par value of PLN 700.00 each and a total par value of PLN 3,530,800.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 5 July 2023, the Extraordinary General Meeting of EN103 sp. z o.o. adopted a resolution to increase the share capital of EN103 sp. z o.o. by PLN 147,700.00, that is from PLN 70,000.00 to PLN 217,700.00, by creating 211 new shares with a par value of PLN 700.00 each and a total par value of PLN 147,700.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 5 July 2023, the Extraordinary General Meeting of EN201 sp. z o.o. adopted a resolution to increase the share capital of EN201 sp. z o.o. by PLN 2,508,800.00, that is from PLN 70,000.00 to PLN 2,578,800.00, by creating 3,584 new shares with a par value of PLN 700.00 each and a total par value of PLN 2,508,800.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 5 July 2023, the Extraordinary General Meeting of EN202 sp. z o.o. adopted a resolution to increase the share capital of EN202 sp. z o.o. by PLN 3,222,800.00, that is from PLN 70,000.00 to PLN 3,292,800.00, by creating 4,604 new shares with a par value of PLN 700.00 each and a total par value of PLN 3,222,800.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 5 July 2023, the Extraordinary General Meeting of EN203 sp. z o.o. adopted a resolution to increase the share capital of EN203 sp. z o.o. by PLN 534,800.00, that is from PLN 70,000.00 to PLN 604,800.00, by creating 764 new shares with a par value of PLN 700.00 each and a total par value of PLN 534,800.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 6 July 2023, the Extraordinary General Meeting of Przedsiębiorstwo Energetyki Cieplnej sp. z o.o. in Oborniki adopted a resolution to increase the share capital of Przedsiębiorstwo Energetyki Cieplnej sp. z o.o. in Oborniki by PLN 6,000,000.00, that is from PLN 6,582,500.00 to PLN 12,582,500.00, by creating 12,000 new shares with a par value of PLN 500.00 each and a total par value of PLN 6,000,000.00. ENEA S.A. subscribed for 11,992 shares with a total par value of PLN 5,996,000.00 and paid them up with cash in full. Registration of the share capital increase in the National Court Register is pending.
- On 12 July 2023, 500,000 series S ordinary bearer shares of Polimex Mostostal S.A. were registered with the Central Securities Depository of Poland (KDPW) and admitted to trading, with a par value of PLN 2.00 each, resulting in an increase in the company's share capital by PLN 1,000,000.00, from PLN 482,237,604.00 to PLN 483,237,604.00. ENEA S.A.'s stake in the company's share capital diminished from 16.17% to 16.14%. The company's share capital is divided into 241,618,802 ordinary shares with a par value of PLN 2.00 each. On 14 July 2023, as a result of the exercise of call option 9 (acquisition of shares), ENEA S.A.'s stake in the company's share capital increased from 16.14% to 16.19% and the number of shares held increased by 125,000, that is from 39,000,024 shares to 39,125,024 shares.
- On 26 July 2023, the Extraordinary General Meeting of ENEA ELKOGAZ sp. z o.o. with its registered office in Warsaw adopted a resolution to increase the share capital of ENEA ELKOGAZ sp. z o.o. by PLN 10,000,000.00, that is from PLN 29,000,000.00 to PLN 39,000,000.00, by creating 100,000 new shares with a par value of PLN 100.00 each and a total par value of PLN 10,000,000.00, which were subscribed for by ENEA S.A. and paid up in full with cash. Registration of the share capital increase in the National Court Register is pending.
- On 2 August 2023, the Extraordinary General Meeting of ENEA Innowacje sp. z o.o. with its registered office in Warsaw adopted a resolution to increase the share capital of ENEA Innowacje sp. z o.o. by PLN 12,000,000.00, that is from PLN 38,710,000.00 to PLN 50,710,000.00, by creating 120,000 new shares with a par value of PLN 100.00 each and a total par value of PLN 12,000,000.00, which were subscribed for by ENEA S.A. and paid up in full with cash. The share capital increase was registered on 28 August 2023.

- On 23 August 2023, ENEA S.A. acquired a 100% stake in PRO-WIND sp. z o.o., the owner of the operational Tarnów photovoltaic farm with a capacity of 10 MW, and a 100% stake in PV TYKOCIN sp. z o.o., the owner of the operational Tykocin photovoltaic farm with a capacity of 2 MW. As part of the transaction involving the acquisition of the equity stake in PRO-WIND sp. z o.o., ENEA S.A. entered into a PLN 17.5 million loan agreement with PRO-WIND sp. z o.o. in August of this year.
- On 7 September 2023, ENEA Nowa Energia sp. z o.o. of the ENEA Group acquired a 100% stake in the share capital of FW Bejsce, the owner of a 19.8 MW wind project, from OX2 Holding Poland. The farm, located in Świętokrzyskie Voivodship, is currently under construction and will become operational in 2025. The acquisition deal covers the company along with a contract for the construction of the its plant. The total cost of the whole transaction up to the commissioning stage of the plant will reach EUR 57,420,000.

2.3. ENEA Group's business areas

Mining

- Production of bituminous coal
- Sales of bituminous coal
- Securing the Group's raw material base

Generation

- Electricity generation based on bituminous coal, biomass, gas, wind, water, biogas and photovoltaics
- Heat generation
- Heat transmission and distribution
- Electricity trading

Distribution

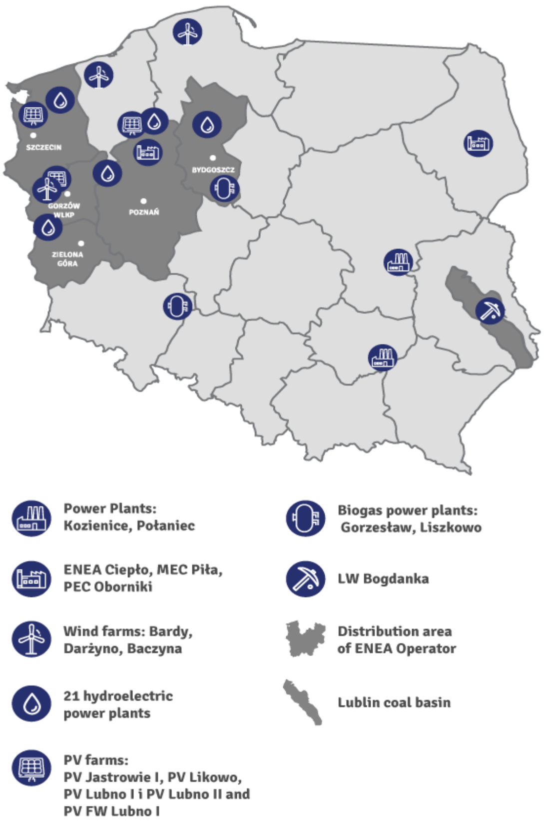
- Supply of electricity
- Planning and ensuring expansion of the distribution network, including by connecting new customers
- Operation, maintenance and repairs of the distribution grid
- Management of metering data

Wholesale trading

- Optimization of wholesale contracts portfolio for electricity and gaseous fuel
- Operations on product markets
- Ensuring access to wholesale markets

Retail trading

- Trading in electricity and gaseous fuel on the retail market
- Product and service offering adjusted to customers' needs
- Comprehensive customer service



2.3.1. Mining

In the ENEA Group, the subsidiary involved in the mining business is LW Bogdanka, which is a leader on the bituminous coal market in Poland, standing out in comparison with its peers in terms of financial results, mining efficiency and investment plans including access to new deposits. The bituminous coal sold by LW Bogdanka is used predominantly for the production of electricity, heat and cement. LW Bogdanka's customers are chiefly industrial companies, especially ones operating in the power sector, located in eastern and north-eastern Poland.

Description	H1 2022	H1 2023	% change	Q2 2022	Q2 2023	% change
Net production [thousand tons]	5,570	3,266	-41.4%	2,761	1,643	-40.5%
Sales of coal [thousand tons]	5,237	3,062	-41.5%	2,521	1,480	-41.3%
Inventories (at the end of the period) [thousand tons]	354	226	-36.2%	354	226	-36.2%
Excavation works [km]	18.40	16.66	-9.5%	9.78	8.11	-17.1%

2.3.2. Generation

2.3.2.1. Generation assets of the ENEA Group

Description	Installed electricity generation capacity [MW_e]	Achieved electricity generation capacity [MW_e]	Installed heat generation capacity [MW_t]	Installed capacity in RES [MW_e]
Kozienice Power Plant	4,071.8	4,007.0	125.4	-
Połaniec Power Plant	1,879.0	1,899.0	130.0	230.0
Wind farms in Bardy, Darżyno and Baczyna [Lubno I and Lubno II]	71.6	70.1	-	71.6
Photovoltaic power plants PV Jastrowie I, PV Likowo, PV Lubno I and PV Lubno II	6.0	6.0	-	6.0
Liszkowo and Gorzesław biogas plants	3.8	3.8	3.1	3.8
Hydro power plants	58.8	55.8	-	58.8
MEC Piła	20.4	18.4	130.9	0.0
PEC Oborniki	-	-	27.4	-
ENEA Ciepło (Białystok CHP Plant, "Zachód" Heat Plant)	203.5	156.6	684.1	78.5
Total	**6,314.9**	**6,216.7**	**1,100.9**	**448.7**

On 23 August 2023, ENEA S.A. entered into a share purchase agreement under which it acquired a 100% stake in the share capital of PRO-WIND sp. z o.o. with its registered office in Kielce, the owner of an operational photovoltaic farm with a capacity of 10 MW located in Tarnów, and a 100% stake in the share capital of PV TYKOCIN sp. z o.o. with its registered office in Kielce, the owner of an operational photovoltaic farm with a capacity of 2 MW located in Kapice Lipniki, Tykocin municipality. As a result of this transaction, the following capacities increased in the ENEA Group: installed electricity generation capacity to 6,326.9 MW_e, achieved electricity generation capacity to 6,228.7 MW_e and installed RES capacity to 460.7 MW_e.

2.3.2.2. Generation – installed capacity

Kozienice Power Plant

Unit	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11
Installed capacity [MW]	230	230	230	230	230	230	230	230	560	560	1,112
Planned shutdown year	2025	2025	2025	2025	2027	2027	2027	2027	2041	2042	2048

The above data for U1-U8 have been prepared on the basis of the generation capacity replacement schedule, which is based on one of the two generation capacity replacement options considered in parallel and which assumes the installation of combined cycle power units (hereinafter: “CCPU”), while the data for other units have been prepared on the basis of the current working schedule of the units and the generation unit shutdowns anticipated in the schedule. In 2022, ENEA Wytwarzanie took steps to replace the entire generation capacity of the existing 200 MWe units with high-efficiency and low-emission combined-cycle units, in one of the two options under consideration, i.e. two CCPUs of 1100 MW each, or three CCPUs of 700 MW each. On 16 March 2022, ENEA S.A. established a special-purpose vehicle ENEA ELKOGAZ with its registered office in Warsaw, in which it is the sole shareholder. The newly established company will replace the generation capacity of 200 MW power units with gaseous fuel combustion technology. Detailed information about the process is provided in item 8.3.7.

Połaniec Power Plant

Unit	U1	U2	U3	U4	U5	U6	U7	GU (U9)
Installed capacity [MW]	200	242	242	242	242	242	239	230
Planned shutdown year	2023	2034	2034	2034	2034	2034	2034	2042

The above data were prepared on the basis of the current working schedule of the units and the scheduled shutdowns of the generation units. Currently, work is under way on the project entitled “Adaptation of ENEA Elektrownia Połaniec to Capacity Market requirements after 1 July 2025” and on the development of the modernization concept for Unit 1.

ENEA Nowa Energia

Areas	Description	Installed capacity [MW_e]
Water	21 barrages with accompanying facilities on which hydropower plants with an installed capacity of 132 kW to 24.8 MW are located on the following rivers: Brda, Wda, Gwda, Rega, Drawa, Myśla, Obra and Wełna	58.8
Wind farms	Bardy, Darżyno and Baczyna [Lubno I and Lubno II]	71.6
Photovoltaic farms	PV Jastrowie I, PV Likowo, PV Lubno I and PV Lubno II and PV FW Lubno I[1)]	6.0
Biogas	Liszkowo and Gorzesław biogas plants	3.8

[1)] PV Lubno I farm with a capacity of 3 MW – since 15 December 2022, the commissioning stage of the project is underway; once the concession has been obtained, the total installed capacity in the Photovoltaic Farm Area will be 9.0 MWe.

ENEA Ciepło

Unit	U1	U2	U3	U4[1)]	Water boilers	K1	K2	K3	K4	K5
Installed capacity [MW]	55	55	70	23.5	Installed capacity [MW]	0	0	0	0	0
Thermal capacity [MWt]	98.4	108	108	0	Thermal capacity [MWt]	33	35	35	40	40
Planned last year of production	2028	2045	2055	2061	Planned last year of production	-	-	-	-	-

[1)] Condensing turbine unit powered by discharges from the U1 unit

2.3.2.3. Data for the Generation Area

Description	H1 2022	H1 2023	% change	Q2 2022	Q2 2023	% change
Total (net) electricity generation [GWh	13,303	10,513	-21.0%	6,809	5,193	-23.7%
Net generation from conventional sources [GWh]	12,152	9,433	-22.4%	6,216	4,690	-24.5%
RES production [GWh]	1,151	1,080	-6.2%	593	503	-15.1%
Gross heat production [TJ]	4,305	4,030	-6.4%	1,485	1,407	-5.3%
ENEA Wytwarzanie						
Total (net) electricity generation [GWh]	8,551	6,861	-19.8%	4,444	3,397	-23.6%
Unit 11 in the Kozienice Power Plant						
Net electricity production [GWh]	2,840	2,321	-18.3%	1,416	1,195	-15.6%
Average monthly net load [MW]	771	729	-5.4%	793	769	-3.0%
Gross heat production [TJ]	355	320	-9.9%	90	116	28.9%
ENEA Nowa Energia						
Total (net) electricity generation [GWh]	169	153	-9.5%	67	61	-9.0%
hydro power plants	65	59	-9.2%	27	25	-7.4%
wind farms	98	88	-10.2%	37	32	-13.5%
biogas plants	4	3	-25.0%	2	1	-50.0%
PV farm	1	3	200.0%	1	2	100.0%
ENEA Elektrownia Połaniec						
Total (net) electricity generation [GWh]	4,347	3,252	-25.2%	2,209	1,646	-25.5%
Net generation from conventional sources [GWh]	3,476	2,428	-30.1%	1,737	1,251	-28.0%
RES production (biomass firing – Green Unit) [GWh]	757	722	-4.6%	396	328	-17.2%
RES production (biomass co-firing) [GWh]	114	101	-11.4%	76	67	-11.8%
Gross heat production [TJ]	1,219	1,161	-4.8%	580	561	-3.3%
ENEA Ciepło						
Total (net) electricity generation [GWh]	215	190	-11.6%	78	65	-16.7%
Net generation from conventional sources [GWh] excluding biomass firing	103	87	-15.5%	24	17	-29.2%
RES production – biomass firing [GWh]	112	104	-7.1%	54	48	-11.1%
Gross heat production [TJ] (in combination with the “Zachód” Heat Plant)	2,230	2,061	-7.6%	677	591	-12.7%
PEC Oborniki						
Gross heat production [TJ]	67	69	3%	18	20	11.1%
MEC Piła						
Total (net) electricity generation [GWh]	22	57	159.1%	11	25	127.3%
Gross heat production [TJ]	434	419	-3.5%	119	118	-0.8%

2.3.2.4. CO_2 emissions, allocation of free CO_2 emission allowances, costs of allowances

	CO_2 emissions [t]	Allocation of free CO_2 emission allowances [t]	Costs of allowances [PLN 000s]
Kozienice Power Plant			
H1 2022	7,655,309	3,079 [1)]	1,894,293
H1 2023	6,253,891	2,997 [2)]	2,697,883
MEC Piła			
H1 2022	27,496	6,923 [1)]	9,210
H1 2023	26,442	6,836 [2)]	8,478
Białystok – CHP plant			
H1 2022	161,104	44,415 [1)]	25,647
H1 2023	137,064	43,244 [2)]	42,454
Białystok – "Zachód" Heat Plant			
H1 2022	8,096	2,923 [1)]	1,557
H1 2023	9,401	2,923 [2)]	2,672
Połaniec Power Plant			
H1 2022	3,545,487	87,646 [1)]	816,783
H1 2023	2,488,608	85,334 [2)]	1,009,139
Łęczyńska Energetyka [3)]			
H1 2022	26,954	11,809 [1)]	6,211
H1 2023	23,917	11,809 [2)]	5,965
Total H1 2022	**11,424,446**	**156,795**	**2,753,701**
Total H1 2023	**8,939,323**	**153,143**	**3,766,591**

[1)] Gratuitous allowances granted for 2022.

[2)] Gratuitous allowances granted for 2023.

[3)] Entity in the LW Bogdanka Group holding CO_2 emission allowances.

2.3.2.5. Fuel supply

The main fuel used in the Kozienice Power Plant and the Połaniec Power Plant to generate electricity is pulverized bituminous coal. The main fuels used in ENEA Ciepło – Białystok CHP Plant in H1 2023 included: coal and biomass – mainly in the form of steam wood chips, steam willow and poplar wood chips, residues from agricultural production and the agricultural processing industry.

Coal deliveries

	Kozienice Power Plant	Połaniec Power Plant	ENEA Ciepło
Main coal suppliers in H1 2023	LW Bogdanka (64%) several other suppliers (below 15% each)	PGG (approx. 42%) PGE (approx. 21%) LW Bogdanka (approx. 28%), other suppliers (approx. 9%)	LW Bogdanka (88%) PGG (12%)
Main operator effecting deliveries in H1 2023	PKP Cargo (approx. 59%) FPL (approx. 23%) Others: DB Cargo, CTL (approx. 18%)	Own transport (approx. 22%) PKP Cargo (approx. 61%) LW Bogdanka (approx. 17%)	LW Bogdanka (approx. 88%) PKP CARGO (approx. 12%)

Purchase of fuel

Fuel type	Generation Area			
	H1 2022		H1 2023	
	Quantity [thousand tons]	Cost [PLN million]	Quantity [thousand tons]	Cost [PLN million]
Bituminous coal	5,881	1,685	5,212	4,408
Biomass	1,053	455	1,064	670
(Heavy) fuel oil[1)]	8	26	6	17
(Light) fuel oil[2)]	3	16	4	21
Natural gas [thousand m^3][3)4)]	5,997	12	14,742	37
Total		**2,194**		**5,153**

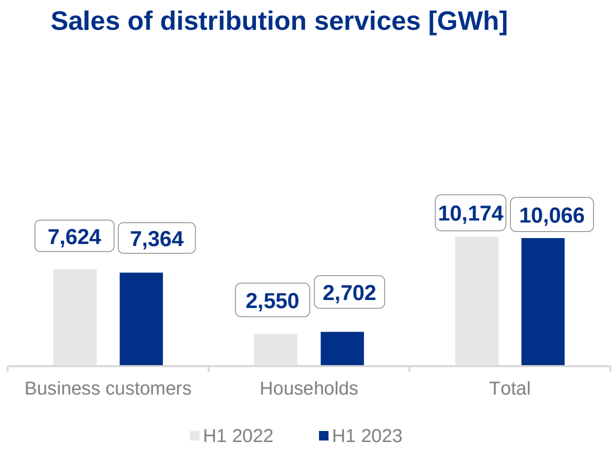
[1)] Light-up fuel in U1-10 of the Kozienice Power Plant and U1-7 of the Połaniec Power Plant.

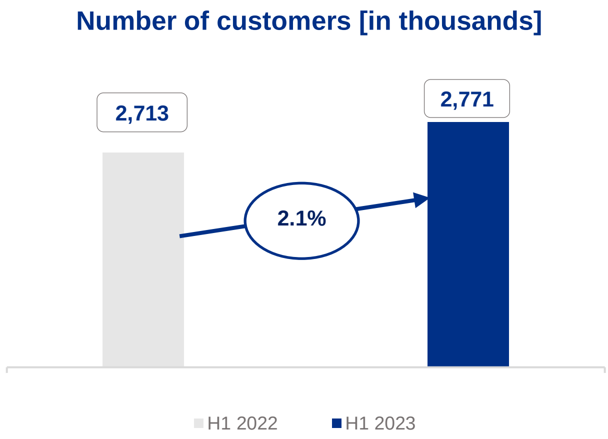
[2)] Light-up fuel in U11 of the Kozienice Power Plant, U9 of the Połaniec Power Plant, MEC Piła (boiler house of KO Staszyce, which may be gaseous fuel or oil-fired).

[3)] Used for generation of electricity and heat in MEC Piła.

[4)] Used for generation of heat in the "Zachód" Heat Plant; gas volume unit: thousand Nm^3.

2.3.3. Distribution





110.2 thousand km – length of distribution lines

13.6 thousand km – length of connections

39.6 thousand – number of substations

1,027.6 thousand – number of connections

The total regulatory asset base (RAB) included in the tariff calculation for 2022 (which also includes WRA_AMI) was PLN 9,954,930 thousand.

Connected RES sources in the operating area of ENEA Operator in 2016 – H1 2023

	Number of connected RES sources classified in connection groups II and III, cumulative [pcs.]	Number of connected micro-installations, based on the submitted reports and requests cumulative [pcs.]	Total capacity of connected RES sources classified in connection groups II and III, cumulative [MW]	Total capacity of connected micro-installations, based on the submitted reports and requests, cumulative [MW]
2016	350	2,479	1,220	17
2017	360	4,302	1,240	31
2018	400	6,910	1,280	50
2019	493	18,900	1,369	136
2020	593	61,990	1,614	435
2021	785	108,873	2,066	830
2022	1,207	150,283	2,751	1,257
H1 2023	1,513[1)]	162,177	3,264[1)]	1,415

1) The list does not include cogeneration sources, specifically Mondi (201.825 MW), CHP Szczecin (76 MW) and Veolia (63 MW) or RES connected under the C1x and C2x tariffs (8.913 MW).

Number and length of connections

Description	H1 2022		H1 2023	
	Number	Length [km]	Number	Length [km]
Overhead	317,528	6,987	331,398	6,989
Cable	678,522	6,265	696,165	6,603
Total	**996,050**	**13,252**	**1,027,563**	**13,592**

Number of electrical substations

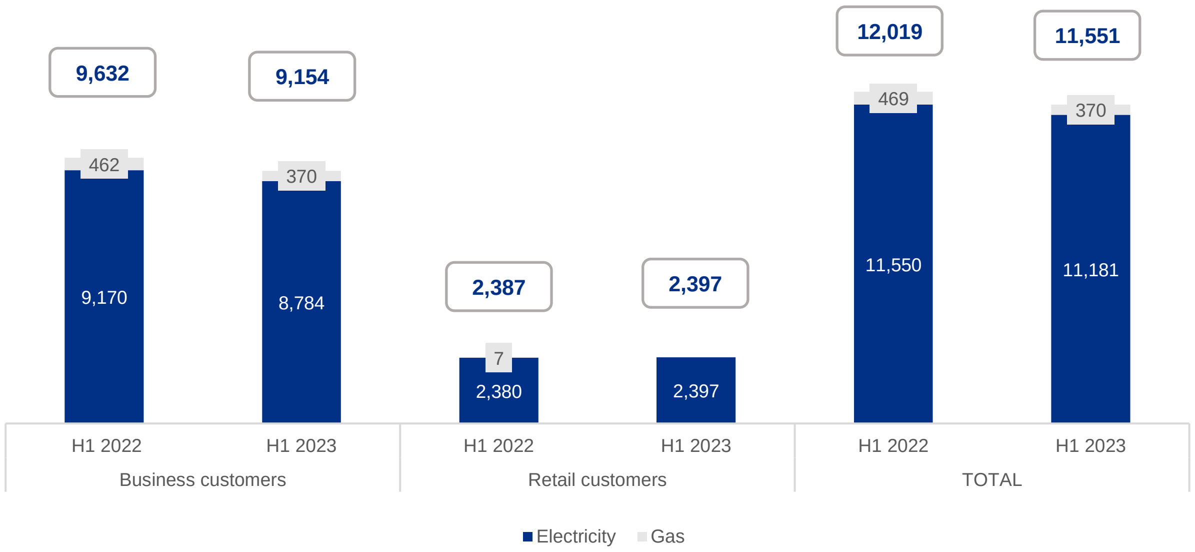
Description	H1 2022	H1 2023
	Number	Number
110 kV	249	255
MV	38,776	39,388
Total	**39,025**	**39,643**

2.3.4. Trading

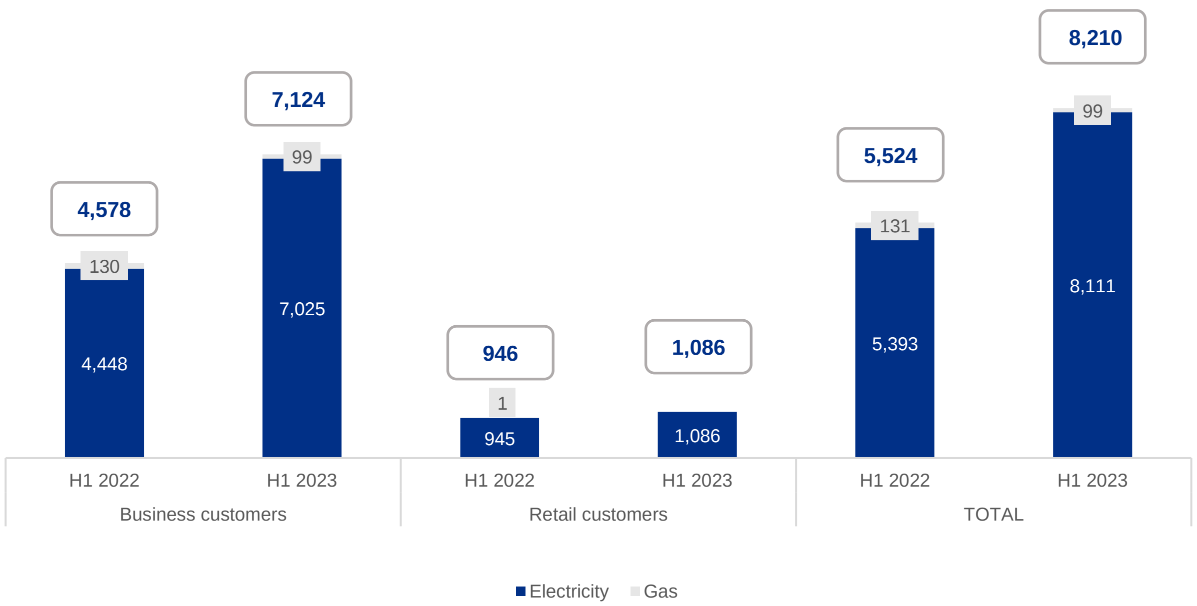
Sales of electricity and gaseous fuel to retail customers carried out by ENEA S.A.

In H1 2023, as compared to H1 2022, the total sales volume of electricity and gaseous fuel decreased by 468 GWh, or 3.9%. The decrease was caused by a change to the customer portfolio. In the business customer segment, the sales volume of electricity decreased by 386 GWh, or 4.2%, with a concurrent decrease in the sales volume of gaseous fuel by 92 GWh, or 19.9%. In turn, in the retail customer segment, an increase was recorded in the sales volume of electricity by 17 GWh, or 0.7%. Total revenue from sales of electricity and gaseous fuel increased in H1 2023 by PLN 2,686 million, or 48.6%, as compared to the corresponding period in 2022, reflecting the rapid electricity and gaseous fuel price increases on the wholesale market. This increase affected for the most part revenues in the business customer segment.

Sales of electricity and gaseous fuel to retail customers of ENEA S.A. [GWh]



Sales of electricity and gaseous fuel to ENEA S.A.'s retail customers [PLN million]



2.4. Development strategy

Due to abundant changes of a fundamental nature in the industry environment, in 2021 the ENEA Group's Strategy was updated in order to address challenges and circumstances affecting businesses operating in the power sector. On 15 December 2021, the Company accepted for implementation the "ENEA Group Development Strategy until 2030 with an outlook to 2040", which will enable ambitious, responsible and effective transition of the ENEA Group. The war in Ukraine, which broke out on 24 February 2022 with a full-scale invasion by the Russian Federation, itself an escalation of the war between these two countries lasting since 2014 in southern and eastern Ukraine, exerted a major impact on both the ENEA Group and the whole of Poland, the EU and the world. As a consequence, problems and crises emerged related to the insufficient supply of fossil fuels, specifically natural gas, coal and agricultural biomass, previously imported from Belarus, Ukraine and Russia.

Accordingly, on 18 May 2022, the European Commission published the REPowerEU plan with a view to diminishing even faster the EU's dependence on fossil fuels imported from Russia and accelerating the transition. The measures included in REPowerEU may provide a response to these ambitions through saving energy, diversifying energy supplies and accelerating the rollout of renewable energy to replace fossil fuels in homes, industry and power generation. Because the current international situation affects many aspects of energy policy and forces changes in the approach to ensuring energy security by pursuing greater diversification and independence, it is necessary to modify the provisions of "Poland's Energy Policy until 2040". In accordance with the assumptions made for the update of "Poland's Energy Policy until 2040", the Policy should also take into account the fourth pillar, namely energy sovereignty a special component of which consists of ensuring a rapid departure from a situation of dependence of the country's economy on imported fossil fuels (coal, crude oil and natural gas) and derivative products (LPG, diesel oil, gasoline, kerosene) from the Russian Federation and other countries subject to economic sanctions through the diversification of supplies, investments in production capacities, linear infrastructure and storage, and in alternative fuels. In the interim period, these functions will be fulfilled by coal and gas sources, which Poland will not abandon until the establishment of a nuclear power sector within the country. With this in mind, the following amendments to "Poland's Energy Policy until 2040" have been proposed:

- Greater technological diversification and expansion of capacities based on national sources.
- Continued development of RES capacities, with efforts focused on ensuring that approximately half the country's electricity is generated from renewable sources by 2040. In addition to the continued development of wind and solar power generation, activities aimed at facilitating the use of renewable energy sources independent of weather conditions, such as water, biomass, biogas or earth heat, will be intensified. The use of renewable energy sources in energy cluster, energy cooperatives and hybrid plants will be particularly desirable.
- Efforts will be made to improve energy efficiency in order to reduce the demand for energy and thus diminish the need for raw materials and the consequences of potential shortages of energy supplies.
- Continued diversification of supplies and providing alternatives to hydrocarbons.
- Aligning investment decisions in gas generation capacities with the availability of gaseous fuel. Gas-fired plants will retain their significance for adjusting the operation of the energy system, but because of the altered geopolitical situation and the unpredictability of the natural gas market in the medium term, the degree of utilization of existing coal units may increase.
- Utilization of coal units. The utilization of domestic hard coal deposits may peak periodically if threats occur to the country's energy security. In order to ensure the continuity of supplies, measures will be taken to keep coal-fired units on stand-by in accordance with their technological lifespan, which is longer than that resulting from economic considerations based on their financial sensitivity to the prices of CO_2 emission allowances.
- Deployment of a nuclear energy program based primarily on large reactors (above 1000 MW). In parallel to the ongoing work on the construction of Poland's first nuclear power plant, efforts will be continued to deploy small modular reactors (SMRs) in the future.
- Development of the grid and energy storage facilities.

According to the forecast scenario presented by the Ministry of Climate and Environment in the context of the objectives for the update of "Poland's Energy Policy until 2040," Poland's installed RES capacity is expected to reach 50 GW by 2030 and 88 GW by 2040, which, compared to 2022, will signify an increase by 100% in 2030 and by 300% in 2040. Meanwhile, the country's installed nuclear power capacity, including in SMRs, is scheduled to reach 7.8 GW by 2040. This will help reduce CO_2 emissions in the power sector by 65% in 2040.

Moreover, Poland will be involved in negotiations aimed at reforming the mechanisms of the European Union's climate policy to ensure that the pursuit of a low-emission and ambitious transition contributing to the achievement of EU goals is possible, but that it also takes into account the transitional spike in demand for conventional generation capacity, without incurring excessive costs resulting from climate policy. Such changes in the ENEA Group's environment exert a major impact on the pursuit of the "ENEA Group Development Strategy until 2030 with an outlook to 2040" and the strategic goals and development directions laid down therein. Accordingly, when the Strategy is updated, its content will properly reflect these matters.

The ENEA Group's mission and vision presented in the "ENEA Group Development Strategy until 2030 with an outlook to 2040" currently in place are as follows:

MISSION

ENEA, while carrying out the transformation of the Polish energy sector in a reasonable and efficient manner, provides reliable products and services to customers by building lasting relationships based on respect for the environment and shared values.

VISION

ENEA is a leading supplier of integrated products and services, setting new trends during energy transition.

The ENEA Group, as a responsible entity operating in the power sector striving to meet other global challenges, is committed to running its business in a manner that is the least harmful to the natural environment. Acting in accordance with the assumptions adopted for the transition of the power sector in Poland, the Group takes steps to spin off from its structures any assets related to the generation of electricity in conventional coal-fired units. The ENEA Group intends to conduct its business in a sustainable manner while minimizing its impact on the natural environment. These development directions form a foundation which is used to define strategic objectives:

1. Development of energy storage projects and provision of services to third parties
2. Involvement in offshore wind energy generation
3. Intensification of activities aimed at gaining access to green energy through the execution of projects included in the ENEA Group's RES portfolio
4. Development of hybrid installations
5. Conventional energy generation based on low-emission sources (gas – as a transition fuel; biomass; RDF)
6. Development of a smart power grid
7. Changed operation of the DSO in the new power market model
8. Development of the ENEA Group's wholesale trade area (prop-trading, origination)
9. Construction of multi-energy products, including supply chain management
10. Expansion of sales and enhancing customer loyalty
11. Development of new lines of business
12. Development of micro and macro energy clusters
13. Development of a modern offering for prosumers, including cooperation with local governments and urban development NGOs, and participation in the creation and management of energy islands (energy clusters)

The ENEA Group, as one of the key entities on the energy market in Poland, co-responsible for the state's energy security, observes global trends and understands the challenge posed by climate change. This is why it is actively involved in the development of the RES sector and as part of ENEA's Transformation #TransformacjaEnei it wants to invest in zero-carbon technologies.

Sustainable transition increasing the shareholder value of the ENEA Group is its overriding objective. The map of objectives includes, apart from the overriding objective, the following partial ones:

From the Owner's Perspective:

- Development of Renewable Energy Sources based on state-of-the-art technologies;
- Lasting relationships with customers, gradually decreasing costs of reaching and retaining customers;

- Ensuring financial security of the ENEA Group;
- Reliability and continuity of electricity supply;
- Implementation of innovative solutions and new technologies in all areas of the ENEA Group's business.

From the Customer's Perspective:

- Responsible partner in sustainable management of relations with local communities, the environment and Customers;
- Ability to satisfy the Customer's comprehensive needs;
- Attractive price to quality ratio of the offered product and service bundles;
- Development of new lines of business to be able to offer Customers new products, not only power-related ones.

From the Process Perspective:

- Producing an optimum and sustainable mix of products and services for well-identified Customers in cooperation with business and social partners;
- Reaching customers efficiently and delivering the promised value, on time, at the right price and quality point, while ensuring responsible and ethical marketing and reliable information;
- Consistent, integrated and sustainable management of flexible, open competence groups in clearly defined lines of business, in the preferred role of business operators on entrusted assets.

From the Development Perspective:

- Modern, transparent and ethical corporate governance system at all levels across the ENEA Group;
- Efficient operating model of the ENEA Group aligned with the Group's evolution;
- Progressive education taking into account the challenges of transition.

ENEA assumes that it will achieve the following by implementing the Strategy:

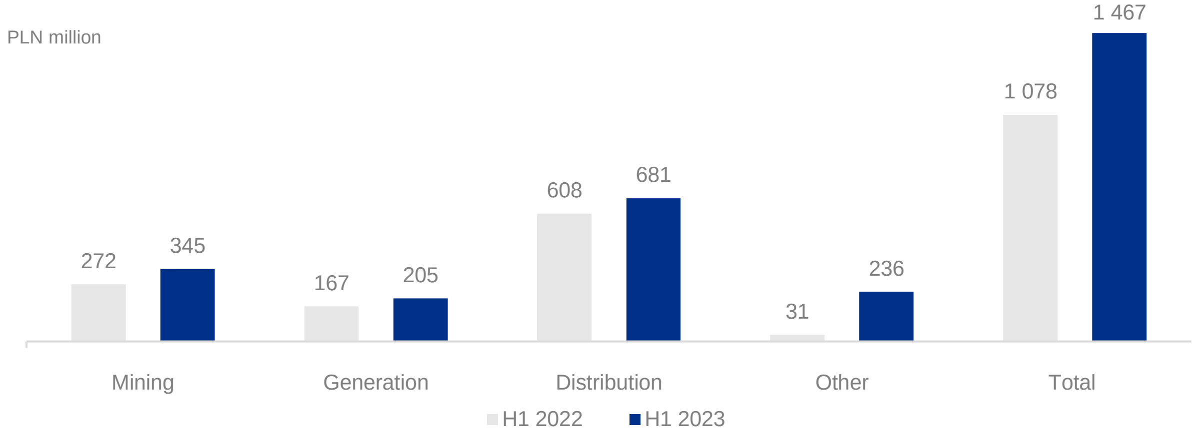
1. increase in (gross) installed capacity from renewable energy sources by 1,510 MW by 2030 and 3,580 MW in 2040, calculated in relation to 2020 (without taking into account the capacity of the already existing "Green Unit" owned by ENEA Elektrownia Połaniec);
2. reduction of the unit CO_2 emission measure to 254 kg CO_2/MWh in 2030, with the intent to achieve 201 kg CO_2/MWh by 2040; by 2050, the ENEA Group intends to achieve climate neutrality;
3. share in the sales of electricity to ENEA Group Customers in Poland's total electricity sales market of 16% by 2030 and at least 17% by 2040;
4. SAIDI at 74.59 minutes in 2030 and 70 minutes in 2040;
5. SAIFI at 2.02 in 2030 and 1.93 in 2040;
6. network losses in distribution at 5.14% in 2030 and 5.0% in 2040;
7. ROE of the ENEA Group at 6.4% in 2030 and 7.1% in 2040;
8. ROA of the ENEA Group at 2.9% in 2030 and 4.6% in 2040;
9. contribution of the New Lines of Business to the ENEA Group's EBITDA at 7-12% by 2030 and 10-15% by 2040, in relation to the total EBITDA of the ENEA Group.

The estimated measures of strategic objectives to be achieved by 2040 mentioned in items 1–2 and 7–9 have been calculated based on the assumption of the spin-off of coal-fired assets outside the ENEA Group.

Indicator	Expected value of the ratio in the year:	
Return on Equity (ROE)	2030	6.4%
	2040	7.1%
Return on assets (ROA)	2030	2.9%
	2040	4.6%
Unit CO_2 emission indicator in the ENEA Group	2030	254 kg CO_2/MWh
	2040	201 kg CO_2/MWh
SAIDI	2030	74.59 min.
	2040	70 min.
SAIFI	2030	2.02
	2040	1.93
Index of grid distribution losses	2030	5.14%
	2040	5.0%

2.5. Actions and investments pursued

2.5.1. Capital expenditures (CAPEX)



CAPEX – capital expenditures [PLN m]	Q2 2022	Q2 2023	Actuals Q2 2023/Plan Q2 2023	H1 2022	H1 2023	Actuals H1 2023/Plan H1 2023	Plan 2023
Mining	141.7	178.5	72.1%	271.6	344.9	82.8%	861.5
Generation	76.0	132.9	80.2%	167.2	204.5	64.9%	791.6
Distribution	347.1	350.5	70.0%	607.5	681.2	75.6%	1,877.5
Support and other	18.8	224.6	114.7%	31.4	236.0	50.5%	595.6
Total	**583.6**	**886.5**	**79.9%**	**1,077.7**	**1,466.6**	**69.9%**	**4,126.2**

Environmental investment projects

Description	Actuals Q2 2023 [PLN m]	Actuals H1 2023 [PLN m]
Lubelski Węgiel “Bogdanka” Group	6.0	12.3
ENEA Połaniec	14.2	14.7
ENEA ELKOGAZ	4.1	4.1
Other	1.5	3.3
Total environmental investments	**25.8**	**34.4**

2.5.2. Execution of other projects

Mining Area

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
Operating investments – new mining pits and modernization of existing ones – in H1 2023, 16.7 km of roadways were made	243.9
Development investments - purchase of finished goods, machinery and equipment, purchase and installation of a longwall system	74.8
Other investments	26.2
Investments planned for H2 2023:	
Operating investments – new mining pits and modernization of existing ones	309.8
Development investments - purchase of finished goods, machinery and equipment, purchase and installation of a longwall system	202.1
Other investments	75.6

Generation Area – Kozienice Power Plant

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
- Modernization of Unit 7	45.4
- Completion of other capital expenditure projects in 2023	41.0
- Modernization of Unit 2	20.7
- Upgrade of FGD IV booster fans	2.4
- Modernization of ceilings in the unit's boiler house 10	2.1
- Modernization of Unit 8	1.4
Investments planned for H2 2023:	
- Modernization of Unit 9	62.9
- Other investments	30.3
- Regular overhauls	12.0
- Other investments related to Unit 11	6.0
- Connection of the technological steam collector for units 1–10 with the steam collector for unit 11	5.2
- Modernization of MKM-33 coal pulverizers	5.0
- Modernization of PC pumps for 500 MW units	5.0
- Adaptation of the IT area to operation in NABE	4.9
- Connection of the general-purpose electrical system for units 1–10 and unit 11 with the replacement of the 6kV PR4 switching station	3.9
- Replacement upgrade of the Sicon IOS II and IV type conveyor	3.7
- Modernization of the roofs of the engine rooms for 200 MW units	3.4
- Upgrade of Wagon Tippler No. 3	2.4
- Modernization of slag pipelines	1.2

Generation Area – ENEA Nowa Energia

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
- PV Krzęcin – 6.6 MW	16.1
- PV-FW Lubno I – 3 MW, independent project, construction outsourced	5.2
- Other	4.7
- PV Lubno I and II – 2x1 MW, independent project, construction outsourced	3.9
- PV Darżyno – 2 MW, independent project, construction outsourced	3.3
- Development of own acquisition projects	0.2
- Upgrade of the Gorzesław Biogas Plant	0.1
Investments planned for H2 2023:	
- Other development, upgrade, reconstruction and renovation projects, including FW Bejsce	91.4
- PV Jastrowie II – 10 MW	12.5
- PV Dygowo I – 8 MW, independent project, construction outsourced	11.5
- Development of own acquisition projects	7.5
- PV Gryfice – 31 MW	6.0
- Construction of photovoltaic farms	5.0
- PV Krzęcin – 6.6 MW, independent project, construction outsourced	4.0
- Development program for the wind area	4.0
- PV Darżyno – 2 MW, independent project, construction outsourced	3.9
- PV-FW Lubno I – 3 MW, independent project, construction outsourced	2.3
- PV-Darżynko – 30 MW	1.8
- PV Lubno I and II – 2x1 MW, independent project, construction outsourced	1.7
- Upgrade of the Gorzesław Biogas Plant	0.3

Generation Area – Miejska Energetyka Cieplna Piła

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
- Reconstruction of heating networks	2.0
- Purchase of fixed assets	0.4
Investments planned for H2 2023:	
- Reconstruction of heating networks/hub infrastructure	6.7
- Optimization of generation sources	1.8
- Purchase of fixed assets	0.4

Generation Area – ENEA Ciepło

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
- Replacement of the TZ3 generator	7.6
- Replacement of the TZ4 turboset	3.9
- Other investments Head Office area	3.6
- Development investments – building new heat distribution networks, connections and hubs, telemetry	3.0
- Modernization of coal-fired boilers in the Zachód Heat Plant to adapt them to the environmental requirements	1.6
- Replacement of motors with energy-saving ones	1.5
- Other capital expenditures in the Białystok CHP Plant area	1.1
- Modernization of physiochemical measurements in unit water and steam circuits	0.7
- Modernization of the emergency power supply (from a power generator)	0.5
- Replacement of chemical storage systems and regeneration systems SUW2	0.4
- Construction of a biomass-fired cogeneration unit	0.2
- Investments with co-funding – rebuilding existing heat distribution networks and hubs	0.2
Investments planned for H2 2023:	
- Investments with co-funding – rebuilding existing heat distribution networks and hubs	22.4
- Replacement of the TZ3 generator	19.3
- Development investments – building new heat distribution networks, connections and hubs, telemetry	14.6
- Other capital expenditures in the Białystok CHP Plant area	6.1
- Other investments Head Office area	6.1
- Modernization of coal-fired boilers in the Zachód Heat Plant to adapt them to the environmental requirements	4.0
- Construction of a biomass-fired cogeneration unit	2.2
- Replacement of chemical storage systems and regeneration systems SUW2	1.1
- Modernization of the emergency power supply (from a power generator)	0.4

Generation Area – ENEA ELKOGAZ

Name of investment	Value [PLN m]
Investment completed in H1 2023:	
- Restoration of generation capacity of 200 MW coal-fired units in the Kozienice Power Plant based on the gaseous fuel combustion technology	4.1
Investment project planned for H2 2023:	
- Restoration of generation capacity of 200 MW coal-fired units in the Kozienice Power Plant based on the gaseous fuel combustion technology	48.2

Generation Area – Połaniec Power Plant

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
- Adaptation of ENEA Elektrownia Połaniec to Capacity Market requirements after 1 July 2025	13.0
- Other modernization/development investments	11.2
- Adaptation of ENEA Elektrownia Połaniec to the BAT conclusions	1.6
Investments planned for H2 2023:	
- Other modernization/development investments at units	50.3
- Adaptation of ENEA Elektrownia Połaniec to Capacity Market requirements after 1 July 2025	26.8
- Adaptation of ENEA Elektrownia Połaniec to the BAT conclusions	3.9

Distribution Area – ENEA Operator

Name of investment	Value [PLN m]
Investments completed in H1 2023:	
- Construction and modernization of a number of grid infrastructure elements, such as high, medium and low voltage lines and transformer stations, related to the pursuit of the following objectives: fulfilling the public-legal obligation, ensuring energy security for the region, improving the reliability and quality of electricity supply – grid automation, change of the MV network structure from overhead to cable, activities aimed at achieving the “smart grid” standard	653.2
- Development of the infrastructure area to support operations in terms of buildings and tools	10.7
- Development of the infrastructure area to support operations in terms of IT and telecommunications	9.3
- Development of the infrastructure area to support operations in terms of transport	6.6
Investments planned for H2 2023:	
- Construction and modernization of a number of grid infrastructure elements, such as high, medium and low voltage lines and transformer stations, related to the pursuit of the following objectives: fulfilling the public-legal obligation, ensuring energy security for the region, improving the reliability and quality of electricity supply – grid automation, change of the MV network structure from overhead to cable, activities aimed at achieving the “smart grid” standard	1,059.4
- Development of the infrastructure area to support operations in terms of IT and telecommunications	89.0
- Development of the infrastructure area to support operations in terms of transport	23.4
- Development of the infrastructure area to support operations in terms of buildings and tools	8.3

Trading Area – execution of key projects

Area
Retail and Customer Service Area
- Continuation of work on introducing automation processes in the customer service area through, e.g., robotic process automation (RSA and UiPath) that will translate into timely achievement of key indicators within the implemented processes,
- Continuation of the eCustomer Program, the purpose of which is to implement new technical and organizational solutions, increasing the level of digitalization of customer contacts, develop modern and low-cost channels for reaching and servicing customers and to develop modern service and sales channels: online execution of agreements, e-Applications, marketplace. Since the beginning of July of this year, chatbots and voicebots have been deployed. The program was expanded with a mobile application project providing for ENEA software to be installed on mobile devices (smartphones or tablets) fulfilling the most frequently reported need for information on the part of customers. The app is scheduled to be made available to customers in the second half of next year.
- Contact Center outsourcing has been launched by hiring an external supplier to support the internal Contact Center in handling redundant traffic in remote channels (including the 611 111 111 hotline, e-mail and chat). This measure will help facilitate the provision of customer service, shorten the customer’s waiting time to connect with a consultant and contribute to improved customer satisfaction.
- Continued work related to the project for adjusting customer service systems of the ENEA Group to the changes to the Central Energy Market Information System (CSIRE). The purpose of the CSIRE is simplify the information exchange between energy market participants. Similarly to other participants, the ENEA Group is obligated to adapt its organization, processes and IT systems to the CSIRE.
- The Company continues its endeavors to roll out in practice and apply the mechanisms of the governmental Solidarity Shield in 2023 and to obtain funding from the Settlements Authority.
- Rollout work has been completed on the Enea Trade 24 system for business customers’ self-management of electricity purchases under a model in which electricity prices are shaped based on commodity exchange indices. This innovative online platform enables customers to optimize their electricity purchase expenses and independently pursue their own procurement strategy. Access to the Enea Trade 24 platform is offered to ENEA’s existing and new business customers from all over Poland.
Wholesale Area
- Continuation of the project entitled “Adaptation of ENEA Group Companies to changes in the operation of the Balancing Market in Poland.”
- Continuation of the project entitled “Development of biomass trading activity by ENEA Trading Sp. z o.o.”

2.5.3. Executed contracts

Contracts of material importance for the ENEA Group's operations

In H1 2023, ENEA Group companies executed no contracts of material importance, although the following contracts were signed in this period:

- Agreement No. 1-DB-2023 of 19 January 2023 between ENEA Wytwarzanie and DB Cargo Polska S.A. to deliver 1,000,000 tons of steam coal by rail from Silesia in the period from 19 January 2023 to 18 January 2024 or until the said weight limit of steam coal to be delivered has been exhausted.
- Agreement no. 1-25-021-23 between ENEA Połaniec Power Plant and PKP CARGO S.A. for the transport of steam coal for ENEA Elektrownia Połaniec in the period from 25 January 2023 to 24 April 2024.
- Agreement no. 1-25-050-23 between ENEA Połaniec Power Plant and PKP CARGO S.A. for the transport of steam coal for ENEA Elektrownia Połaniec in the period from 21 February 2023 to 20 February 2024.
- Agreement No. 6/P/PGG/2023/K between ENEA Elektrownia Połaniec and Polska Grupa Górnicza S.A. for the delivery of steam coal in the period from 1 January 2023 to 31 December 2023.

2.5.4. External financing – bonds and loans

ENEA S.A. finances its investment program by using financial surpluses from its business activities and external debt. The ENEA Group pursues an investment financing model whereby ENEA S.A. acquires funds from external sources and distributes them to its subsidiaries. In its subsequent activities, ENEA S.A. will focus on ensuring appropriate diversification of external sources of financing for investments planned in the "ENEA Group Development Strategy until 2030 with an outlook to 2040", with a particular consideration given to the Distribution and RES segments. At the same time, considering the very limited financing opportunities available for generation companies, the ENEA Group has taken steps to spin off from its structures any assets related to the generation of electricity in conventional coal- and lignite-fired units.

On 27 January 2023, ENEA S.A. entered into a financing agreement with a consortium of banks consisting of Polska Kasa Oszczędności Bank Polski S.A., Bank Gospodarstwa Krajowego, Bank Polska Kasa Opieki S.A., Alior Bank S.A. and Bank of China (Europe) S.A. Poland Branch. Under this agreement, the Company obtained financing in the total amount of PLN 2,500 million, including a term facility up to the amount of PLN 1,500 million ("Facility A") and a revolving facility up to the amount of PLN 1,000 million ("Facility B"). In accordance with the provisions of the agreement, the Company may allocate the funds made available under Facility A solely for the financing and refinancing of capital expenditures of the ENEA Group incurred in connection with the construction, expansion, upgrade or maintenance of the distribution network and the acquisition, development, expansion, financing, construction, upgrade, maintenance or commissioning of any renewable energy sources.

As at 30 June 2023, the nominal debt of ENEA S.A. arising from bonds and loans totaled PLN 5,746 million, including PLN 2,883 million from long-term loans and PLN 2,863 million from bonds.

Some ENEA Group companies entered into external financing agreements. As at 30 June 2023, the total nominal amount of external debt under loans and borrowings (without ENEA S.A.'s external sources of debt) was PLN 31 million.

In H1 2023, ENEA Group companies did not terminate any loan and borrowing agreements.

2.5.5. Sureties and guarantees granted

In H1 2023, bank guarantees in the total amount of PLN 29.9 million were issued at ENEA S.A.'s request.

The table below presents the largest bank guarantees granted at ENEA S.A.'s request in the said period under the respective bank guarantee agreements:

Security granting date	Security validity date	Secured entity	Purpose of the agreement	Security form	Security amount [PLN m]
1 April 2023	1 April 2024	Telewizja Polska S.A.	Quality and statutory warranty guarantee	under a guarantee facility of up to PLN 110,000,000	2.4
2 April 2023	2 April 2025	ELTEL Networks Energetyka S.A.	Payment guarantee	under a guarantee facility of up to PLN 110,000,000	25.9

On 31 January 2023, ENEA S.A. issued a corporate guarantee to Goldman Sachs Paris Inc. et Cie for the liabilities of ENEA Trading ("subsidiary") arising from ISDA 2002 Master Agreement along with the Schedule to the 2002 Master Agreement and the Credit Support Annex to the Schedule to the ISDA Master Agreement, up to a maximum amount of EUR 170 million, for an indefinite term with a termination option at ENEA S.A.'s discretion with a 30-day notice. The liabilities include cash to be provided by Goldman Sachs Paris Inc. to the subsidiary on account of forward transactions related to CO_2 emission allowances executed by the subsidiary.

As at 30 June 2023, the total value of corporate sureties and guarantees granted by ENEA S.A. to secure the liabilities of the ENEA Group companies was PLN 8,137 million, while the total value of bank guarantees issued at the request of ENEA S.A. and as collateral for liabilities of the ENEA Group companies was PLN 94.2 million.

2.5.6. Interest rate swaps

In H1 2023, ENEA S.A. did not enter into any new interest rate hedging transactions.

2.5.7. Intra-group financing – bonds

Currently, in the Distribution area, ENEA S.A. has intra-group bond issue programs in place with a total initial par value of PLN 2,371 million. These programs have been fully utilized and are redeemed in installments. Moreover, in previous years, ENEA S.A. also executed intra-group bond issue program agreements with its subsidiaries, which are used to finance investments in the RES and Heat Segments, which were redeemed in full on 31 March 2023. As at 30 June 2023, the total nominal exposure arising from intra-Group bonds held by ENEA S.A. was PLN 1,384 million.

2.5.8. Intra-group financing – loans

In H1 2023, ENEA S.A granted loans to ENEA Group companies and other companies in which it held interests, in the total value of PLN 1,500 million. (ENEA S.A. signed a PLN 1,500 million loan agreement with ENEA Operator sp. z o.o., under which PLN 800 million has been drawn down after the balance sheet date). In February 2023, ENEA S.A. executed an annex to the loan agreement with Elektrownia Ostrołęka Sp. z o.o. under which the repayment period for the loan granted by ENEA S.A. to Elektrownia Ostrołęka Sp. z o.o. was postponed until April 2023. In February and April 2023, ENEA Operator Sp. z o.o. disbursed 2 tranches of the loan for a total amount of PLN 222 million under the PLN 750 million loan agreement entered into on 13 September 2022, thereby fully utilizing the available loan amount. In July 2023, ENEA S.A. entered into a loan agreement with ENEA ELKOGAZ sp. z o.o. for PLN 20 million, which was fully drawn down in July 2023, that is after the balance sheet date. The par value of the companies' debt as at 30 June 2023 was PLN 5,190 million. Detailed information on the loan agreements signed by ENEA S.A. and active in H1 2023 and their utilization is presented in the table below.

Starting date	Ending date	Company	Value of agreements PLN million	Amount of the loan contracted in H1 2023 PLN million	Interest rate	Loan debt as at 30 June 2023 PLN m
March 2020	July 2028	ENEA Operator	4,840	222	Base rate + margin	2,900
December 2019	April 2023	Ostrołęka Power Plant	170	0	Fixed	0
January 2020	September 2024	ENEA Wytwarzanie	2,200	0	Base rate + margin	1,782
February 2020	December 2024	ENEA Elektrownia Połaniec	500	0	Base rate + margin	500
June 2021	December 2031	Miejska Energetyka Cieplna Piła	15	0	Base rate + margin	8

The amounts presented in the above table in the columns "Value of agreements in PLN million" and "Loan debt as at 30 June 2023 in PLN million" refer to total values of all the signed agreements between ENEA S.A. and a given company and the total value of a given company's debt to ENEA as at 30 June 2023.

2.5.9. Related party transactions

In H1 2023, ENEA S.A. and its subsidiaries did not enter into any related-party transactions on a non-arm's length basis. Information on transactions with related parties entered into by ENEA S.A. or its subsidiaries is provided in note 24 to the "Condensed interim consolidated financial statements of the ENEA Group for the period from 1 January to 30 June 2023".

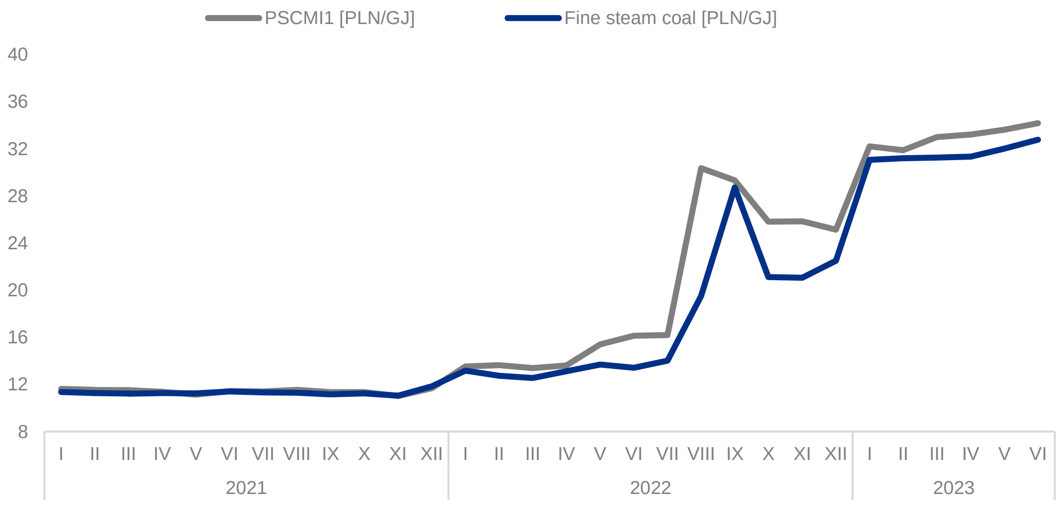
3. Risk management

ENEA Group's Risk Model

No.	Key risks to which the ENEA Group was exposed	Mitigating measures
1	Risk of losing pending lawsuits	- Granting powers-of-attorney to professional representatives - Collecting evidence - Review of case-law and applicable legislation
2	Risk of a generation gap or loss of competence	- Organization of paid traineeships and apprenticeships, cooperation with endorsed schools - Ensuring a transparent, competitive and motivational remuneration system
3	Risk of unfavorable social climate	Maintaining active and regular dialog with the social stakeholder
4	Risk of a personal data security breach	Conducting an information campaign among employees, including induction and periodic training on personal data protection
5	Risk of improper management of information in a crisis situation	- Maintaining efficient communication channels with key business units. - Regular anti-crisis workshops
6	Risk of exceeding the parameters required by regulations and environmental permits	Ongoing monitoring of environmental indicators
7	Risk of a breach of financing agreements	Monitoring of banking covenants in the ENEA Group
8	Risk of rating downgrade	Ongoing consultations with a credit rating agency
9	Liquidity risk	Cash flow planning in the current and strategic horizon
10	Risk of interest rate fluctuations	Ongoing monitoring of exposure to the risk of unfavorable changes in interest rates in consideration of the current limits adopted for this risk
11	Volumetric risk related to the hedging of open positions on electricity or gaseous fuel	Forecasting and monitoring volumes on hedging portfolios and ongoing analysis of factors affecting the process of hedging these portfolios
12	Risk of commodity price volatility on the forward market, the spot market and Balancing Market	- Continuous analysis of the fuel and energy market - Improving methods and tools to optimize commodity portfolios - Maintaining and developing competence to manage commodity risk
13	Risk of losses due to counterparty default (including credit risk)	Conducting structured activities in the area of credit risk management and debt collection
14	Risk of adverse environment of the insurance market	Holding a dialog with the insurance and reinsurance market
15	Risk of a breach of stock exchange disclosure obligations	Ongoing review of information and events with a view to disclosure obligations
16	Risk of unexpected increase in costs of purchasing electricity or gaseous fuel and reducing revenues because of the regulatory environment	- Monitoring of drafts of regulatory amendments affecting assumed and planned margin levels - Forecasting potential effects of regulatory changes in the Company's planned financial result
17	Risk of claims from contractors executing the grid investment projects, resulting from increased project expenditures	- Negotiations with the contractors to work out amendments - Ongoing analyses regarding the increase in prices of materials, commodities, services and labor costs
18	Risk of interruptions and damages caused by extreme weather events	- Visual inspections, check-ups and maintenance procedures - Removal of the effects of failures and damage to power lines and installations - Capital expenditure endeavors related to the restoration of grid assets
19	Risk of loss of continuity of ICT environments and infrastructure	- Reviews of ICT infrastructure - Optimization of resources used
20	Risk of violation of ICT security	- Ongoing analysis of ICT security and responding to ICT security incidents - Conducting an information campaign among employees regarding ICT security principles
21	Risk of losing access to billing systems	- Maintenance contracts with the vendor - Ensuring the efficiency and quality of infrastructure and its monitoring - Creating backup copies
22	Risk of errors related to DSO reporting on the Balancing Market	Regular monitoring of security on the Balancing Market
23	Risk of delays and error in invoicing	- Analysis of unsettled Employee Pension Schemes, correctness of agreements, price lists - Communication with Clients, DSO, automation area - Cooperation on changes to service systems
24	Risk of deteriorating grid reliability ratio	Maintaining high quality of operational inspections and preventive treatments on the grid
25	Risk of losses in capacity caused by hydrologic conditions	Monitoring of weather and hydrological conditions
26	Risk of disasters and industrial failures	- Maintaining technical infrastructure in proper order to prevent failures - Observing procedures and instructions - Major overhauls and ongoing repairs
27	Risk of non-continuity of fuel supplies	Diversification of supply sources and service providers
28	Volumetric risk of fuel and transport	- Optimization of coal deliveries within the ENEA Group - Daily monitoring of inventories
29	Risks related to delayed achievement of the ENEA Group's strategic objectives	- Diversification of acquisition targets - Monitoring the environment, ongoing analysis, long-term plans aimed at adaptation to changing conditions

4. Market environment

Coal prices on the Polish market

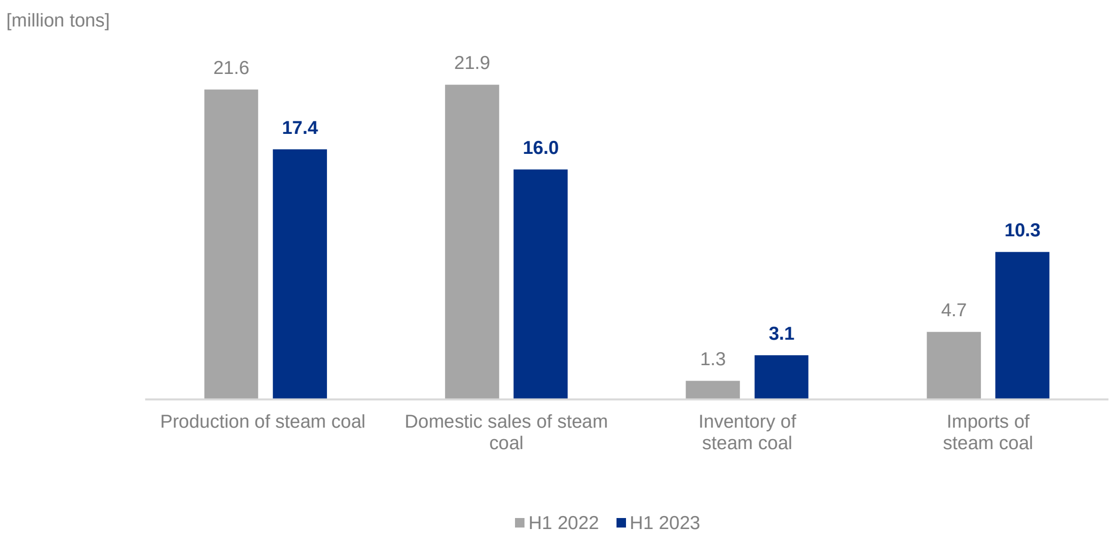


Data: Industrial Development Agency.

PSCMI1: In H1 2023, the average price quoted through the Polish Steam Coal Market Index (PSCMI1) was PLN 33.02 per GJ, 131.1% higher than the average price (PLN 14.29 per GJ) quoted in the corresponding period the year before.

Fine coal fractions: The average price of fine steam coal sold to commercial power plants in H1 2023 was PLN 31.62 per GJ, up 141.1% y/y. At the end of June 2023, the cost of purchasing of one ton of fine steam coal was PLN 32.78 per GJ or as much as 144.4% than the year before.

Decline in steam coal mining and sales, increase in domestic coal inventories and imports



Data: Industrial Development Agency.

The downward trend in steam coal mining and sales continued in the Polish market, with simultaneous increases in inventories and imports of this commodity. In H1 2023, the output of Polish mines was 17.4 million tons of steam coal, down 19.4% y/y. At the end of June 2023, steam coal inventories totaled 3.1 million tons, up 138.5% y/y. The strong increase in the volume of stock of this commodity is a consequence of decline in domestic coal-fired electricity generation and the relatively weak demand during the period. In the first six months of 2023, total imports reached 10.3 million tons of steam coal, up 119.1% compared to the corresponding period of 2022. A combined 76% of the imported steam coal volume came from destinations such as Australia, Colombia, Kazakhstan, South Africa, Indonesia and others.

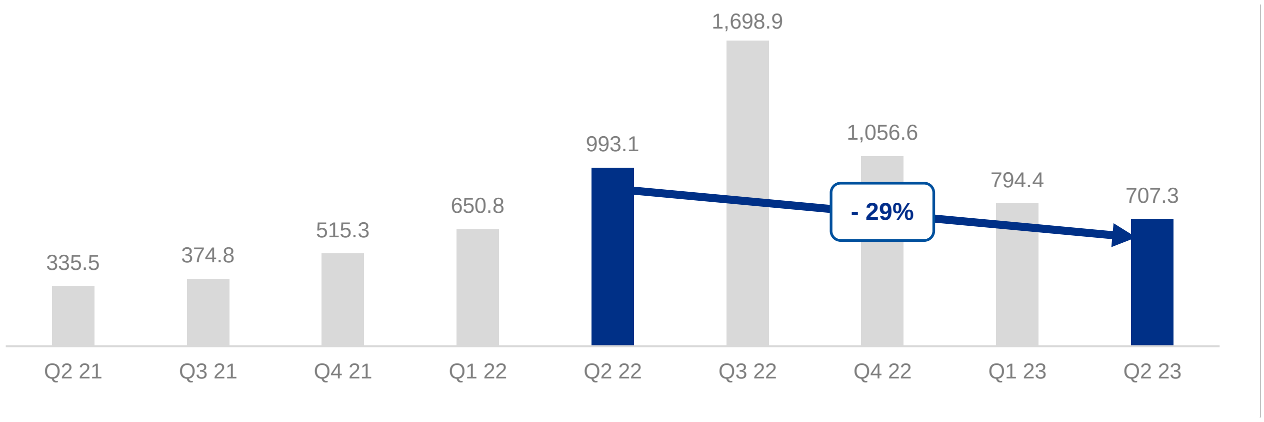
Situation in the domestic bituminous coal mining sector

Declines in domestic supply and demand for the share of coal in electricity generation with simultaneous increases in inventories and imports were the primary macroeconomic trends in the Polish coal market in H1 2023. The average price of hard coal at ARA ports plummeted by nearly 50% y/y, while the domestic PSCMI 1 fine steam coal price index increased by an average of 141.1% in the same period.

Legislative work is underway to finalize the establishment of the National Energy Security Agency (NABE) as a governmental coal agency controlling approx. 60% of the country's generation capacity. The transition will result in a reorganization of the mining sector in terms of the share of coal assets in the energy mix and the forms of their financing.

Energy prices on the Polish market

BASE_Y_22/23/24 (PLN/MWh)



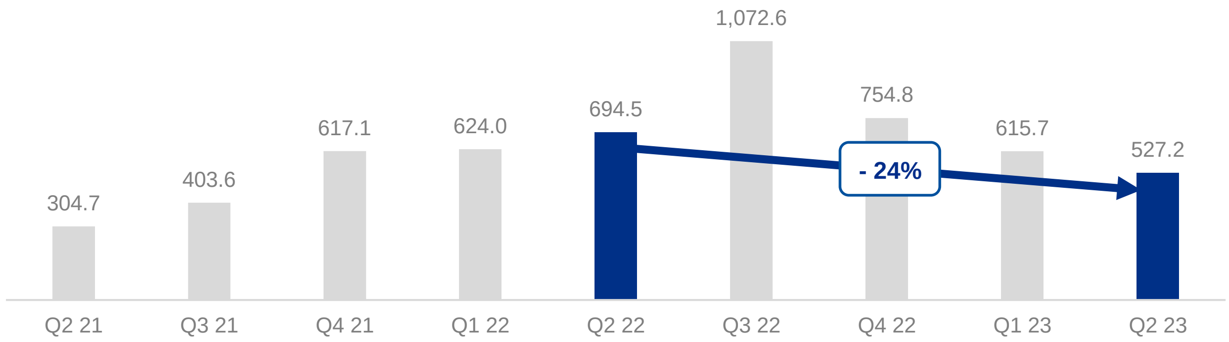
Source: Own study based on publicly available stock market data.

In Q2 2023, on the wholesale electricity forward market, the price of the BASE Y-24 product decreased by 29% to the average level of PLN 707.28 per MWh, compared to the corresponding product (i.e. BASE Y-23) in Q2 2022.

The market price of BASE Y-24 in H1 2023 was highly volatile. At the beginning of the year, it stood at PLN 1,029.00 per MWh, to decline to PLN 679.30 per MWh towards the end of H1 2023. The price of BASE Y-24 in H1 2023 was affected by various factors, including: price changes on the market for fuels and CO_2 emission allowances and legislative amendments on the energy market.

In H1 2023, the volume of trading in the annual frontal product BASE Y-24 totaled 1,300 MW, signifying a major drop compared to H1 2022, when transactions for a total of as much as 3,911 MW were executed under BASE Y-23 contracting (down by 67% y/y). Importantly, the disproportion in terms of liquidity for the products in question deepened: the average per-session volume contracted in H1 2022 was 31 MW and fell to 10 MW in H1 2023.

RDN BASE (PLN/MWh)



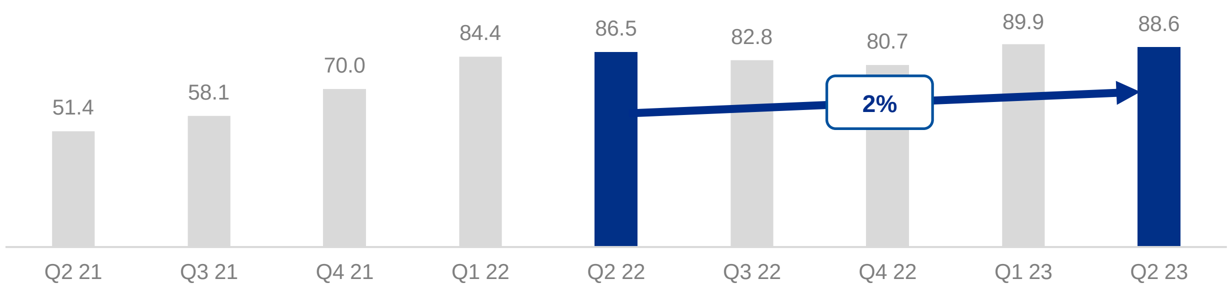
Source: Own study based on publicly available stock market data. Q4 2021 data corrected.

The average price of electricity on the spot market in Q2 2023 was 24% lower than in the corresponding period of 2022. Since Q4 2022, the factor curbing the prices in the balancing market, and hence also in the spot stock exchange market, has been the introduction of changes in the principles of submitting bids in the balancing market. Pursuant to the "Regulation of the Minister of Climate and the Environment of 27 September 2022 amending the Regulation on detailed conditions of operation of the power system," bid prices in the balancing market have reflected unit variable costs of electricity generation and may not be higher than the so-called maximum bid price since the Regulation came into force.
The level of electricity prices on the spot market in Q2 2023 was affected by:

- lower demand for electricity in the Polish Power System (PPS) than planned (price-lowering effect),
- relatively high air temperatures (price-suppressing effect),
- high volume of photovoltaic generation (price-suppressing effect),
- high prices of CO_2 emission allowances (price-increasing effect).

Prices of CO_2 emission allowances and "green" property rights

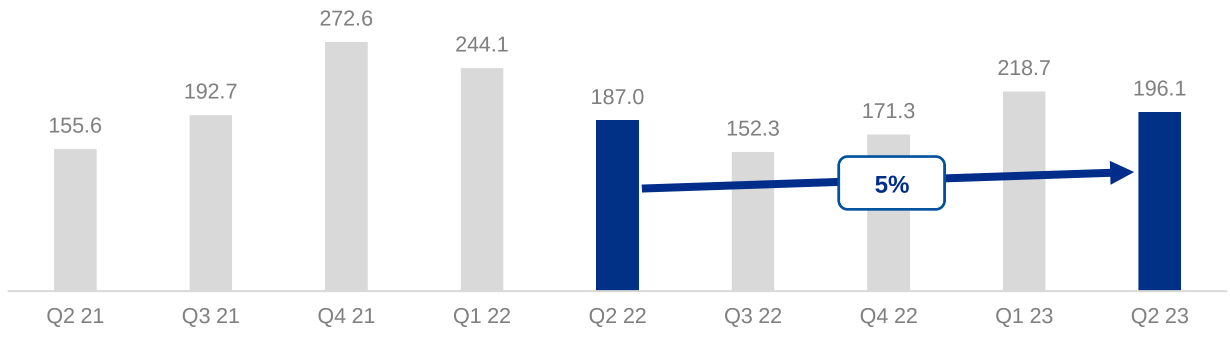
CO_2 emission allowances (DEC-23) (EUR/t)



Source: Own study based on publicly available stock market data. Data corrected for Q2, Q3, Q4 2021 and Q1, Q2 2022 due to the change of the front product from DEC-22 to DEC-23.

The European market for CO_2 emission allowances was highly volatile in Q1 2023. The first session of the year closed with the price of the DEC-23 contract at EUR 86.28 per ton. Over the next 4 sessions, the price declined to EUR 77.39 per ton – the lowest in Q1. Thereafter, the allowances followed a sideways trend, which continued until 16 January when prices remained within a narrow range of between EUR 77.57 and 81.45 per ton. On 17 January, the prices of CO_2 emission allowances entered an upward trend that lasted until 21 February when the closing price of the DEC-23 contract was EUR 100.34 per ton – the highest value in the period in question. The vicinity of EUR 100 per ton remained a resistance level for DEC-23, which was tested twice more in Q1. Later in February and until the end of March, the prices followed a downward and highly volatile trend. From 17 February to the end of March, the prices remained within the broad range of between EUR 87.07 per ton and EUR 100.23 per ton. The last session of the quarter closed at EUR 91.93 per ton. Significant price drivers in Q1 2023 included weather conditions, negotiations on the REPowerEU plan and the financial standing of European financial institutions.
The first session of Q2 2023 was closed with the price of EUR 95.75 per ton. Until 20 April 2023, the closing DEC-23 prices were in the range of EUR 91.96-97.44 per ton. For the rest of April, DEC-23 prices remained below EUR 90 per ton, while the last April session closed with the price of EUR 87.34 per ton. What should be regarded as significant events on the EUA market in April was the vote of the European Parliament on amendments to the EU ETS system within Fit for 55, and the end of the redemption period for 2022 falling at the end of the month. The first session in May closed with the price of EUR 85.91 per ton and a very low trading volume in connection with the celebration of the Labor Day in many European countries. Until 24 May 2023, the DEC-23 closing prices were in the range of EUR 84.67-89.88 per ton. The last May sessions closed with prices below EUR 83.00, with the last price of the month at the level of EUR 81.02 per ton. In May, the European Commission published Communication on the Total Number of Allowances in Circulation (TNAC) for 2022. In 2022, the surplus was 1.135 billion allowances. The first session in June was the least expensive in the quarter – the closing price was EUR 78.72 per ton. Then the DEC-23 price completely changed direction and with slight adjustments went up until 20 June 2023, when the closing price was EUR 94.85 per ton. Later June sessions were in the range of EUR 86.55-90.55 per ton, with the last session of the quarter closing at the price of EUR 89.08 per ton. In June, the EEX Stock Exchange published an updated auction calendar for allowances for the second half of the year, in which the auction volume was adjusted to the surplus of TNAC and the additional volume from the REPowerEU program.
In Q2 2023, the average price of DEC-23 was 2% higher than the average price in the corresponding quarter of 2022.

Prices of "green" property rights (PMOZE_A) (PLN/MWh)



Source: Own study based on publicly available stock market data.

Session quotations of "green" property rights during the first session of 2023 tested the 200.00 PLN/MWh threshold. Some transactions were executed at that price, while the daily average was 196.21 PLN/MWh. It was the only January session during which the average price remained at or below the 200.00 PLN/MWh threshold. The average daily prices during the subsequent sessions of the month oscillated between PLN 200.47 and 224.79 per MWh. On the last day of January, the average session price was 216.79 PLN/MWh. February brought further increases in the prices of green certificates. At the first session of the month, the price increased by 7.32 PLN/MWh from the previous session and reached 224.11 PLN/MWh. Each subsequent February session turned out to trade at higher prices than the first one, and the average session prices oscillated between PLN 224.11 and 241.10 per MWh. In March, the price of green property rights started to stabilize at lower values. The first session of the month turned out to see much lower prices than the preceding session, the average session price fell by over 12.00 PLN/MWh to 216.46 PLN/MWh. Subsequent sessions saw similar transaction prices, with the average daily price remaining within a narrow range of between PLN 213.52 and 217.52 per MWh. The average price at the last session March was below PLN 200.00 per MWh for the second time only during the quarter – on that day, the price stood at 199.39 PLN/MWh.

The second quarter of 2023 featured a lower price variability compared to the preceding quarter. The first April session ended with the average daily price of PLN 196.39 per MWh. Until 20 April 2023, the price of PMOZE_A increased to 206.45 PLN/MWh, the highest value for the discussed quarter. From 27 April to 23 May, the average session prices remained below PLN 200.00 per MWh, within a narrow range of PLN 192.82-196.86 per MWh. In the short period from 25 May to 1 June 2023, the average price of green certificates exceeded 200.00 PLN/MWh. Later in June, the average session prices stayed below 200 PLN/MWh, and at the end of the quarter, the price of green certificates of origin started to fall considerably. In the period from 15 to 29 June, the average price of PMOZE_A decreased from 198.24 to 175.17 PLN/MWh.

At the end of June, the Polish Government Legislation Center published on its website "Draft Regulation of the Minister of Climate and the Environment on the change of the quantity share of the total electricity resulting from the redeemed certificates of origin confirming the production of electricity from renewable energy sources in 2024-2026", which defined the obligation for RES in 2024, 2025 and 2026 as percentages at the level of 11%, 10% and 9% respectively.[2)].

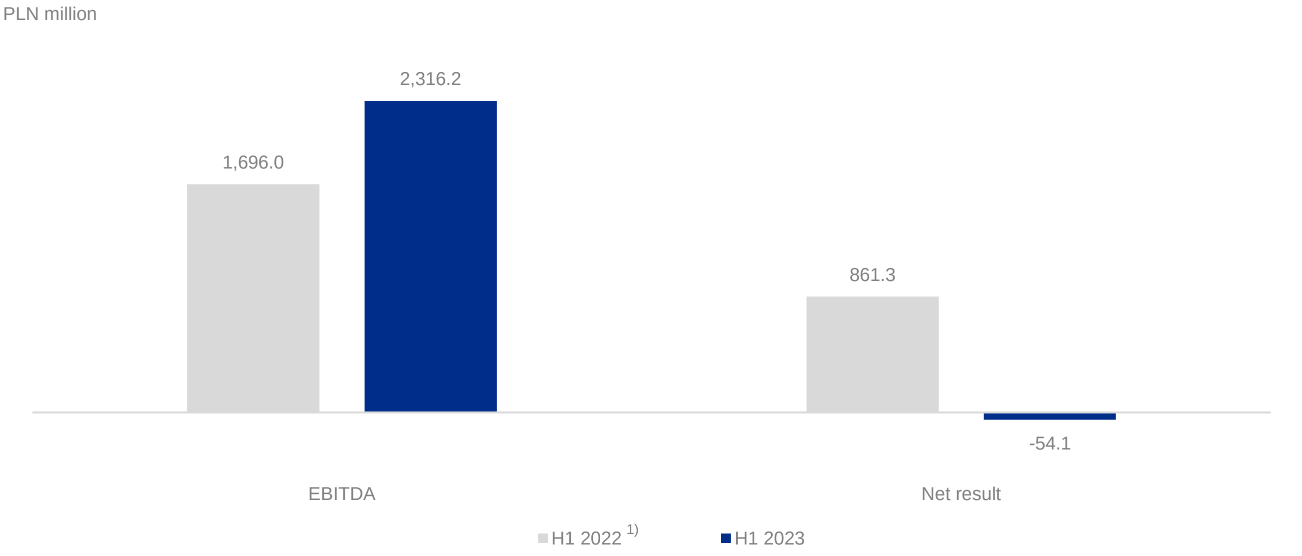
In Q2 2023, 4.1 TWh of property rights were issued and 7.3 TWh of green certificates of origin were redeemed, leaving 14 TWh of active rights in the register as at the end of June of this year. In Q2 2023, the average price was 5% higher than the average price in the corresponding period of 2022.

[2)] In August 2023, the draft regulation was updated to change the obligation level for 2024 from the previously proposed 11% to 5%, while no obligation level was indicated for the years 2025-2026. At the first session after its publication, the average price of PMOZE_A fell down to PLN 82.50 per MWh.

5. Financial standing

5.1. Selected consolidated financial data

[PLN 000s]	H1 2022 1)	H1 2023	Change	% change
Revenue from sales and other income	14,711,061	24,021,583	9,310,522	63.3%
Operating profit / (loss)	921,745	723,627	-198,118	-21,5 %
Profit / (loss) before tax	1,054,988	(123,565)	-1,178,553	-111,7%
Net profit / (loss) for the reporting period	861,328	(54,149)	-915,477	-106,3%
EBITDA	**1,696,002**	**2,316,196**	**620,194**	**36.6%**
Net cash flows from:				
operating activities	4,162,493	1,163,580	-2,998,913	-72.0%
investing activities	(1,524,953)	(1,220,997)	303,956	19.9%
financing activities	(1,352,313)	1,321,751	2,674,064	197.7%
Cash at the end of the period	5,438,780	2,828,050	-2,610,730	-48.0%
Net profit/(loss) attributable to shareholders of the parent company	739,055	(144,252)	-883,307	-119.5%
Weighted average number of shares	472,660,616	529,731,093	57,070,477	12.1%
Net earnings/(loss) per share [PLN]	1.56	(0.27)	-1.83	-117.3%
Diluted earnings/(loss) per share [PLN]	1.56	(0.27)	-1.83	-117.3%

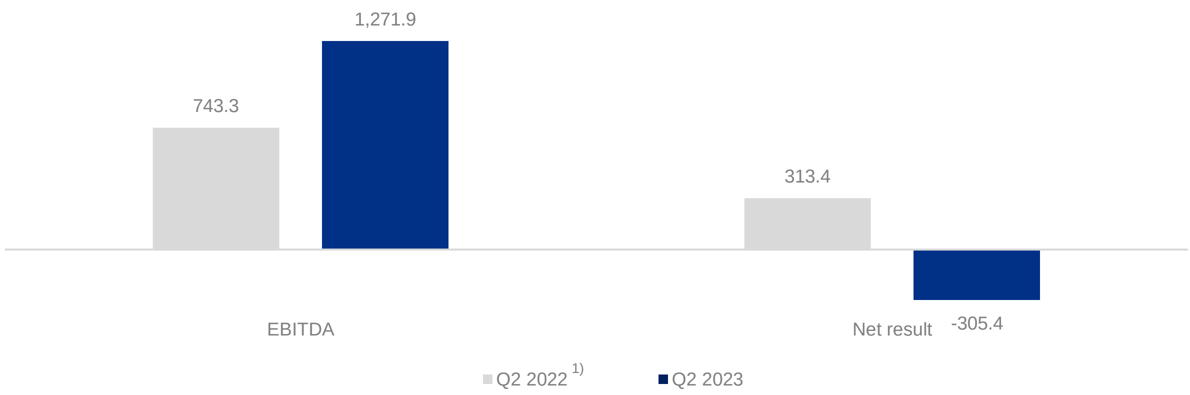


1) Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023

[PLN 000s]	31 December 2022	30 June 2023	Change	% change
Total assets	37,434,972	36,091,533	-1,343,439	-3.6%
Total liabilities	21,288,861	20,176,919	-1,111,942	-5.2%
Non-current liabilities	7,699,793	7,308,534	-391,259	-5.1%
Current liabilities	13,589,068	12,868,385	-720,683	-5.3%
Equity	16,146,111	15,914,614	-231,497	-1.4%
Share capital	676,306	676,306	-	-
Book value per share [PLN]	30.48	30.04	-0.44	-1.4%
Diluted book value per share [PLN]	30.48	30.04	-0.44	-1.4%

[PLN 000s]	Q2 2022 1)	Q2 2023	Change	% change
Revenue from sales and other income	7,464,695	11,490,641	4,025,946	53.9%
Operating profit / (loss)	348,440	112,135	-236,305	-67.8%
Profit / (loss) before tax	396,152	(486,458)	-882,610	-222.8%
Net profit / (loss) for the reporting period	313,433	(305,425)	-618,858	-197.4%
EBITDA	**743,322**	**1,271,887**	**528,565**	**71.1%**
Net profit/(loss) attributable to shareholders of the parent company	244,073	(346,465)	-590,538	-242.0%
Weighted average number of shares	503,535,600	529,731,093	26,195,493	5.2%
Net earnings/(loss) per share [PLN]	0.48	(0.65)	-1.13	-235.4%
Diluted earnings/(loss) per share [PLN]	0.48	(0.65)	-1.13	-235.4%

PLN million



1) Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023

5.2. Key operating data and indicators for ENEA Group

	Unit	H1 2022 1)	H1 2023	Change	% change	Q2 2022 1)	Q2 2023	Change	% change
Revenue from sales and other income	PLN 000s	14,711,061	24,021,583	9,310,522	63.3%	7,464,695	11,490,641	4,025,946	53.9%
EBITDA	PLN 000s	1,696,002	2,316,196	620,194	36.6%	743,322	1,271,887	528,565	71.1%
EBIT	PLN 000s	921,745	723,627	-198,118	-21.5%	348,440	112.135	-236,305	-67.8%
Net profit / (loss) for the reporting period	PLN 000s	861,328	(54,149)	-915,477	-106.3%	313,433	(305,425)	-618,858	-197.4%
Net profit/(loss) attributable to shareholders of the parent company	PLN 000s	739,055	(144,252)	-883,307	-119.5%	244,073	(346,465)	-590,538	-242.0%
Net cash flows from operating activities	PLN 000s	4,162,493	1,163,580	-2,998,913	-72.0%	3,560,122	2,947,208	-612,914	-17.2%
CAPEX	PLN 000s	1,077,663	1,466,587	388,924	36.1%	583,610	886,531	302,921	51.9%
Net debt	PLN 000s	-1,059,867	4,843,611	5,903,478	557.0%	-1,059,867	4,843,611	5,903,478	557.0%
Net debt / EBITDA 2)	-	-0.30	1.71	2.01	670.0%	-0.30	1.71	2.01	670.0%
Return on assets (ROA) 2)3)	%	4.8%	-0.3%	-5.1 p.p.	-	3.5%	-3.4%	-6.9 p.p.	-
Return on equity (ROE) 2)3)	%	10.1%	-0.7%	-10.8 p.p.	-	7.3%	-7.7%	-15.0 p.p.	-
Trading									
Sales of electricity and gaseous fuel to retail customers	GWh	12,019	11,551	-468	-3.9%	5,802	5,532	-270	-4.7%
Number of customers (Power Delivery Points)	000s	2,639	2,714	75	2.8%	2,639	2,714	75	2.8%
Distribution									
Sales of distribution services to end users	GWh	10,174	10,066	-108	-1.1%	4,895	4,873	-22	-0.4%
Number of customers (closing balance)	000s	2,713	2,771	58	2.1%	2,713	2,771	58	2.1%
Generation									
Total net generation of electricity, of which:	GWh	13,303	10,513	-2,790	-21.0%	6,809	5,193	-1,616	-23.7%
from conventional sources	GWh	12,152	9,433	-2,719	-22.4%	6,216	4,690	-1,526	-24.5%
from renewable sources	GWh	1,151	1,080	-71	-6.2%	593	503	-90	-15.1%
Gross heat generation	TJ	4,305	4,030	-275	-6.4%	1,485	1,407	-78	-5.3%
Sales of electricity, including:	GWh	15,090	11,840	-3,250	-21.5%	7,628	5,978	-1,650	-21.6%
from conventional sources	GWh	12,152	9,433	-2,719	-22.4%	6,216	4,690	-1,526	-24.5%
from renewable sources	GWh	1,151	1,080	-71	-6.2%	593	503	-90	-15.1%
from purchase	GWh	1,787	1,327	-460	-25.7%	819	785	-34	-4.1%
Sales of heat	TJ	3,947	3,651	-296	-7.5%	1,353	1,268	-85	-6.3%
Mining									
Net production	000s tons	5,570	3,266	-2,304	-41.4%	2,761	1,643	-1,118	-40.5%
Sales of coal	000s tons	5,237	3,062	-2,175	-41.5%	2,521	1,480	-1,041	-41.3%
Inventories at the end of the period	000s tons	354	226	-128	-36.2%	354	226	-128	-36.2%
Excavation works	km	18.40	16.66	-1.74	-9.5%	9.78	8.11	-1.67	-17.1%

1) Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023
2) Definitions of the ratios are presented in section 12 entitled: "Glossary of terms and abbreviations"
3) Ratio numerator i.e. net profit (loss) for the reporting period is annualized

5.3 Financial performance of the ENEA Group in H1 2023 and Q2 2023

Consolidated statement of profit and loss in H1 2023

[PLN 000s]	H1 2022 1)	H1 2023	Change	% change
Revenue from sales of electricity	11,530,592	18,271,692	6,741,100	58.5%
Revenue from sales of heat	253,897	319,486	65,589	25.8%
Revenue from sales of gas	170,955	75,239	-95,716	-56.0%
Revenue from sales of distribution services	1,645,899	2,317,490	671,591	40.8%
Revenue from connection fees	36,914	64,449	27,535	74.6%
Revenue from certificates of origin	438	14,395	13,957	3,186.5%
Revenue from sales of goods and materials	108,387	88,188	-20,199	-18.6%
Revenue from sales of other products and services	108,368	84,166	-24,202	-22.3%
Revenue from sales of coal	400,845	191,127	-209,718	-52.3%
Revenue from the Capacity Market	447,632	472,638	25,006	5.6%
Net revenue from sales	**14,703,927**	**21,898,870**	**7,194,943**	**48.9%**
Compensation	0	2,114,940	2,114,940	100.0%
Revenue from leases and operating subleases	7,134	7,773	639	9.0%
Revenue from sales and other income	**14,711,061**	**24,021,583**	**9,310,522**	**63.3%**
Amortization and depreciation	771,680	800,260	28,580	3.7%
Employee benefit costs	1,139,277	1,475,147	335,870	29.5%
Consumption of materials and supplies and cost of goods sold	4,210,108	7,508,078	3,297,970	78.3%
Purchase of energy and gas for subsequent sale	6,001,699	10,145,981	4,144,282	69.1%
Transmission services	256,269	335,486	79,217	30.9%
Other third-party services	478,235	542,804	64,569	13.5%
Taxes and charges	258,945	1,836,281	1,577,336	609.1%
Tax-deductible expense	**13,116,213**	**22,644,037**	**9,527,824**	**72.6%**
Other operating revenue	88,916	133,058	44,142	49.6%
Other operating costs	178,694	141,154	-37,540	-21.0%
Change in provision related to onerous contracts	-556,042	184,148	740,190	133.1%
Profit/(loss) on change, sale and liquidation of property, plant and equipment and right-to-use assets	(24,706)	(37,662)	-12,956	-52.4%
Impairment loss/(reversal of impairment loss) on non-financial non-current assets	2,577	792,309	789,732	30,645.4%
Operating profit / (loss)	**921,745**	**723,627**	**-198,118**	**-21.5%**
Finance costs	142,639	266,985	124,346	87.2%
Finance income	87,297	76,907	-10,390	-11.9%
Profit/(loss) on FX derivatives not used for hedge accounting purposes	142,658	(657,600)	-800,258	-561.0%
Dividend income	1,163	93	-1,070	-92.0%
Impairment losses/ (reversal thereof) on financial assets measured at amortized cost	7,133	0	-7,133	-100.0%
Share in the results of associates and jointly controlled entities	51,897	4,714	-47,183	-90.9%
Recognition/(reversal) of impairment loss on investments in associates and jointly controlled entities	0	4,321	4,321	100.0%
Profit / (loss) before tax	**1,054,988**	**(123,565)**	**-1,178,553**	**-111.7%**
Income tax	193,660	-69,416	-263,076	-135.8%
Net profit / (loss) for the reporting period	**861,328**	**(54,149)**	**-915,477**	**-106.3%**
EBITDA	**1,696,002**	**2,316,196**	**620,194**	**36.6%**

1) Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023

Key EBITDA drivers for the ENEA Group in H1 2023 (up by PLN 620.2 million):

(+) an increase in revenue from sales of electricity by PLN 6,741 million, driven mainly by an increase in the average sales price and a concurrent decrease in sales volume
(+) an increase in revenue from sales of heat by PLN 66 million, driven mainly by an increase in the average sales price and a concurrent decline in sales volume
(-) a decrease in revenue from sales of natural gas by PLN 96 million, driven mainly by a lower sales volume with a higher average sales price
(+) an increase in revenue from sales of distribution services by PLN 672 million, mostly as a result of higher fee rates in the approved 2023 tariff coupled with a lower volume of distributed energy
(+) higher revenues from grid connection fees by PLN 28 million, resulting mainly from a greater number of RES facilities connected in the current year in the 2nd, 3rd and 4th connection groups
(-) a decrease in revenue from sales of coal by PLN 210 million driven mainly by a lower coal sales volume combined with a higher average sales price
(+) the performance for H1 2023 includes the value of electricity compensation of PLN 2,115 million, as referred to in Article 12 of the Act of 7 October 2022 on special solutions for protecting electricity buyers in 2023 in connection with the situation on the electricity market [Consumption Limits Law] and in Article 8 of the Act of 27 October 2022 on emergency measures to reduce electricity prices and support certain consumers in 2023 [Price Limits Law]
(-) an increase in employee benefit costs by PLN 336 million driven mainly by higher payroll costs and payroll-related charges, a change in employee provisions and higher average headcount
(-) an increase in the cost of consumption of materials and supplies and cost of goods sold by PLN 3,298 million is mainly due to higher costs of CO_2 emission allowances, coal consumption costs and costs of biomass consumption for the whole Generation Area
(-) an increase in the costs of purchasing electricity and gas by PLN 4,144 million results mainly from higher average sales prices with the lower sales volume
(-) an increase in costs of transmission services by PLN 79 million caused mainly by an increase in the rates of fixed and variable fees in settlements with PSE S.A. and neighboring DSOs
(-) an increase in costs of third-party services by PLN 65 million caused mainly by an increase in the costs of repair services, property insurance costs and other tasks outsourced to external companies at variable rates
(-) an increase in the costs of taxes and fees by PLN 1,577 million, largely caused by the charge for the Price Difference Fund
(+) movement in provisions related to onerous contracts (decrease in provisions by PLN 740 million):
- (+) in H1 2022, establishment of a provision for onerous contracts of PLN 446.9 million in the Generation Area
- (+) in H1 2023, the use of a portion of this provision was recognized in revenues in the amount of PLN 184.1 million, included in costs in December 2022 for the estimated loss on Tariff G resulting from the fact that the ERO President did not take into account the incurred energy purchase costs in the Tariff of 17 December 2022 and for the application of the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market in the amount of PLN 368.3 million
- (+) in H1 2022, a provision of PLN 64.2 million was recognized in costs for a possible loss on Tariff G due to the increase in the electricity purchase costs
- (+) in H1 2022, the use of a portion of the provision totaling PLN 8.7 million was recognized and the remeasurement of this provision was recognized in the expenses in the amount of PLN 53.6 million for the loss arising from the distribution fee rebate which was settled by ENEA S.A. acting as the offtaker of last resort in relation to electricity supplied to the grid by prosumers

(+) the result on other operating activities up by PLN 69 million:
- (+) decrease in provisions for potential claims by PLN 94 million, including costs of provisions for claims under terminated RES property rights contracts lower by PLN 84 million
- (+) an increase in fixed assets accepted free of charge by PLN 21 million, partly as a result of a larger number of agreements providing for interferences on grid assets
- (-) an increase in provisions for non-contractual use of transmission corridors by PLN 30 million
- (-) loss arising from liquidation of property, plant and equipment up by PLN 13 million

Material changes affecting net result:

(-) movement in the result on currency derivatives not used in hedge accounting by PLN 800.3 million resulting from changes in the valuation of currency contracts and realized foreign exchange differences related to these contracts
(-) increase in the impairment allowance for non-financial non-current assets in the Mining segment by PLN 789.1 million resulting in a deterioration of the net result by PLN 639.2 million – mostly due to the impact of the recognition of a PLN 748.8 million allowance resulting from the estimation of the market value of the equity stake in LW Bogdanka S.A.; detailed information on the recognition of the allowance is provided in Note 29 of the "Condensed interim consolidated financial statements of the ENEA Group for the period from 1 January to 30 June 2023"
(-) in H1 2022, partial reversal of the provision for future investment commitments to Elektrownia Ostrołęka Sp. z o.o. was recognized in the amount of PLN 41.6 million

Consolidated statement of profit and loss in Q2 2023

[PLN 000s]	Q2 2022 [1)]	Q2 2023	Change	% change
Revenue from sales of electricity	5,929,596	8,878,261	2,948,665	49.7%
Revenue from sales of heat	92,506	120,264	27,758	30.0%
Revenue from sales of gas	62,940	23,843	-39,097	-62.1%
Revenue from sales of distribution services	804,256	1,126,467	322,211	40.1%
Revenue from connection fees	21,852	32,095	10,243	46.9%
Revenue from certificates of origin	96	6,691	6,595	6,869.8%
Revenue from sales of goods and materials	58,420	44,773	-13,647	-23.4%
Revenue from sales of other products and services	52,382	46,668	-5,714	-10.9%
Revenue from sales of coal	219,176	84,837	-134,339	-61.3%
Revenue from the Capacity Market	221,240	229,225	7,985	3.6%
Net revenue from sales	**7,462,464**	**10,593,124**	**3,130,660**	**42.0%**
Compensation	0	893,832	893,832	100.0%
Revenue from leases and operating subleases	2,231	3,685	1,454	65.2%
Revenue from sales and other income	**7,464,695**	**11,490,641**	**4,025,946**	**53.9%**
Amortization and depreciation	392,355	396,112	3,757	1.0%
Employee benefit costs	552,837	760,886	208,049	37.6%
Consumption of materials and supplies and cost of goods sold	2,247,713	3,545,317	1,297,604	57.7%
Purchase of energy and gas for subsequent sale	2,880,279	4,791,321	1,911,042	66.3%
Transmission services	142,764	143,412	648	0.5%
Other third-party services	241,384	286,307	44,923	18.6%
Taxes and charges	128,658	775,912	647,254	503.1%
Tax-deductible expense	**6,585,990**	**10,699,267**	**4,113,277**	**62.5%**
Other operating revenue	78,500	30,188	-48,312	-61.5%
Other operating costs	93,615	17,293	-76,322	-81.5%
Change in provision related to onerous contracts	-505,048	92,074	597,122	118.2%
Profit/(loss) on change, sale and liquidation of property, plant and equipment and right-to-use assets	(7,575)	(20,568)	-12,993	-171.5%
Impairment loss/(reversal of impairment loss) on non-financial non-current assets	2,527	763,640	761,113	30,119.2%
Operating profit / (loss)	**348,440**	**112,135**	**-236,305**	**-67.8%**
Finance costs	73,524	129,215	55,691	75.7%
Finance income	71,537	41,522	-30,015	-42.0%
Profit/(loss) on FX derivatives not used for hedge accounting purposes	36,009	(514,133)	-550,142	-1,527.8%
Dividend income	1,163	93	-1,070	-92.0%
Impairment losses/ (reversal thereof) on financial assets measured at amortized cost	3,468	0	-3,468	-100.0%
Share in the results of associates and jointly controlled entities	15,995	4,187	-11,808	-73.8%
Recognition/(reversal) of impairment loss on investments in associates and jointly controlled entities	0	1,047	1,047	100.0%
Profit / (loss) before tax	**396,152**	**(486,458)**	**-882,610**	**-222.8%**
Income tax	82,719	-181,033	-263,752	-318.9%
Net profit / (loss) for the reporting period	**313,433**	**(305,425)**	**-618,858**	**-197.4%**
EBITDA	**743,322**	**1,271,887**	**528,565**	**71.1%**

[1)] *Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023*

Key drivers of the change in the ENEA Group's EBITDA in Q2 2023 (up by PLN 528.6 million):

(+) an increase in revenue from sales of electricity by PLN 2,949 million, driven mainly by an increase in the average sales price and a concurrent decrease in sales volume
(+) an increase in revenue from sales of heat by PLN 28 million, largely driven by an increase in the average sales price
(-) a decrease in revenue from sales of natural gas by PLN 39 million, driven mainly by a lower sales volume
(+) an increase in revenue from sales of distribution services by PLN 322 million, mostly as a result of higher fee rates in the approved 2023 tariff coupled with a lower volume of distributed energy
(-) a decrease in revenue from sales of coal by PLN 134 million driven mainly by a lower coal sales volume combined with a higher average sales price
(+) the performance for Q2 2023 includes the value of electricity compensation of PLN 893.8 million, as referred to in Article 12 of the Act of 7 October 2022 on special solutions for protecting electricity buyers in 2023 in connection with the situation on the electricity market [Consumption Limits Law] and in Article 8 of the Act of 27 October 2022 on emergency measures to reduce electricity prices and support certain consumers in 2023 [Price Limits Law]
(-) an increase in employee benefit costs by PLN 208 million driven mainly by higher payroll costs and payroll-related charges, a change in employee provisions and higher average headcount
(-) an increase in the cost of consumption of materials and supplies and cost of goods sold by PLN 1,298 million is mainly due to higher costs of CO_2 emission allowances, coal consumption costs and costs of biomass consumption for the whole Generation Area
(-) an increase in the costs of purchasing electricity and gas by PLN 1,911 million results mainly from higher average sales prices with the lower sales volume
(-) an increase in costs of third-party services by PLN 45 million caused mainly by an increase in the costs of repair services, property insurance costs and other tasks outsourced to external companies at variable rates
(-) an increase in the costs of taxes and fees by PLN 647 million, largely caused by the charge for the Price Difference Fund
(+) movement in provisions related to onerous contracts (decrease in provisions by PLN 597 million):

(+) in Q2 2022, establishment of a provision for onerous contracts of PLN 446.9 million in the Generation Area
(+) in Q2 2023, the use of a portion of this provision in the amount of PLN 92.1 million was recognized, included in costs in December 2022 for the estimated loss on Tariff G resulting from the fact that the ERO President did not take into account the incurred energy purchase costs in the Tariff of 17 December 2022 and for the application of the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market in the amount of PLN 368.3 million
(+) in Q2 2022, a provision of PLN 64.2 million was recognized in costs for a possible loss on Tariff G due to the increase in the electricity purchase costs
(-) in Q2 2022, a portion of the provision was recognized for the loss arising from the settlement, by ENEA S.A., as the offtaker of last resort by virtue of the distribution fee rebate for the electricity supplied to the grid by prosumers in the amount of PLN 6.1 million

(+) the result on other operating activities up by PLN 15 million:

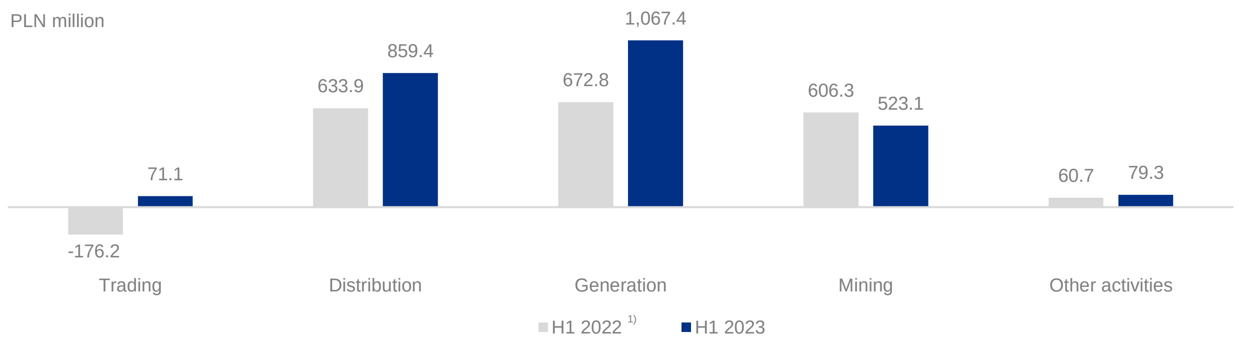
(+) decrease in provisions for potential claims by PLN 66 million, including costs of provisions for claims under terminated RES property rights contracts lower by PLN 74 million
(-) remeasurement of CO_2 contracts, forward transactions for energy and gas down by PLN 27 million
(-) loss arising from liquidation of property, plant and equipment up by PLN 13 million
(-) an increase in provisions for non-contractual use of transmission corridors by PLN 6 million

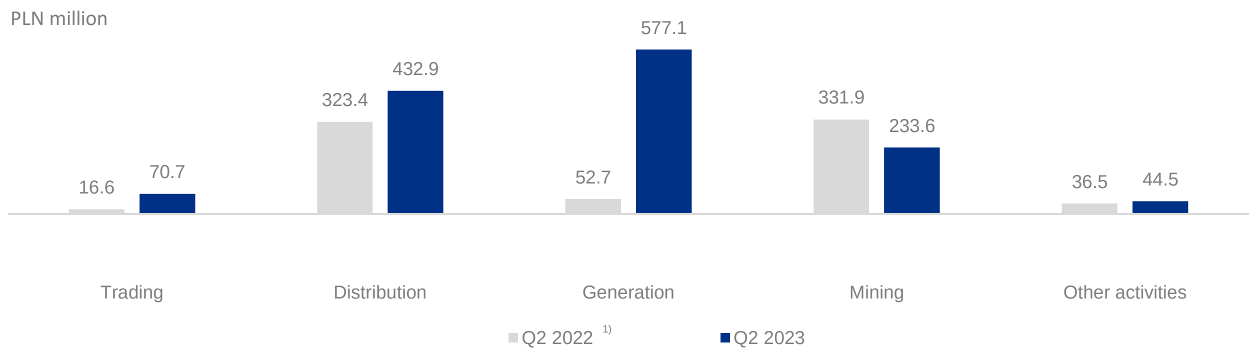
Material changes affecting net result:

(-) increase in the impairment allowance for non-financial non-current assets in the Mining segment by PLN 760.5 million resulting in a deterioration of the net result by PLN 616.0 million – mostly due to the impact of the recognition of a PLN 748.8 million allowance resulting from the estimation of the market value of the equity stake in LW Bogdanka S.A.; detailed information on the recognition of the allowance is provided in Note 29 of the "Condensed interim consolidated financial statements of the ENEA Group for the period from 1 January to 30 June 2023"
(-) movement in the result on currency derivatives not used in hedge accounting by PLN 550.1 million resulting from changes in the valuation of currency contracts and realized foreign exchange differences related to these contracts
(-) in Q2 2022, partial reversal of the provision for future investment commitments to Elektrownia Ostrołęka Sp. z o.o. was recognized in the amount of PLN 10.5 million

Financial performance of the ENEA Group in H1 2023 and Q2 2023

EBITDA [PLN 000s]	H1 2022 1)	H1 2023	Change	% change	Q2 2022 1)	Q2 2023	Change	% change
Trading	-176,249	71,078	247,327	140.3%	16,578	70,659	54,081	326.2%
Distribution	633,882	859,398	225,516	35.6%	323,362	432,863	109,501	33.9%
Generation	672,759	1,067,358	394,599	58.7%	52,697	577,105	524,408	995.1%
Mining	606,289	523,062	-83,227	-13.7%	331,865	233,589	-98,276	-29.6%
Other activities	60,673	79,275	18,602	30.7%	36,528	44,520	7,992	21.9%
Unassigned items and exclusions	-101,352	-283,975	-182,623	-180.2%	-17,708	-86,849	-69,141	-390.5%
Total EBITDA	**1,696,002**	**2,316,196**	**620,194**	**36.6%**	**743,322**	**1,271,887**	**528,565**	**71.1%**





1) Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023

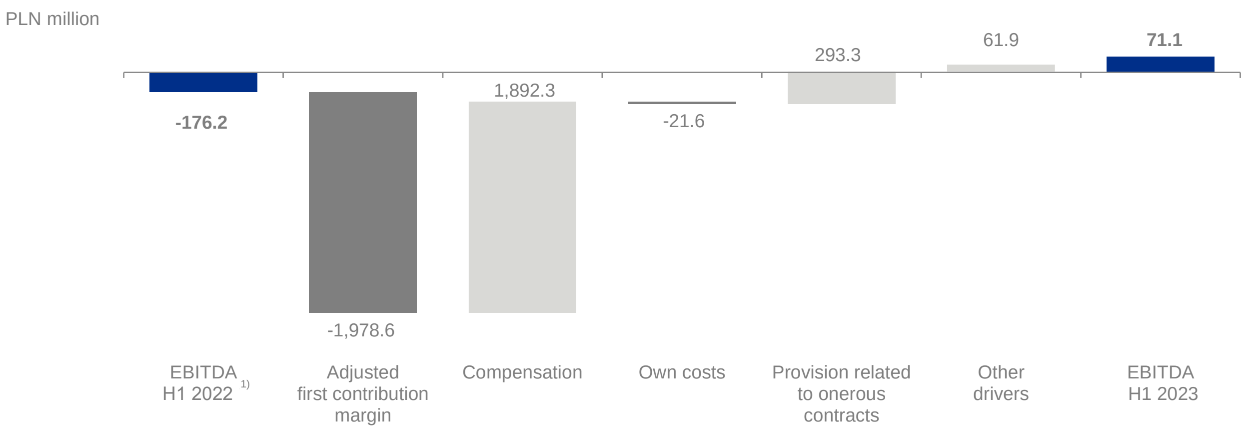
Trading Area in H1 2023 and Q2 2023

Retail sales of electricity are carried out by ENEA S.A.

In addition, in the Trading area, financial data of ENEA Trading and ENEA Power&Gas Trading are presented (on 3 April 2023, there was a spin-off and transfer of certain assets of ENEA Trading in the form of an organized part of the enterprise to ENEA Power & Gas Trading).

[PLN 000s]	H1 2022 [1)]	H1 2023	Change	% change	Q2 2022 [1)]	Q2 2023	Change	% change
Net revenue from sales	6,599,987	10,915,596	4,315,609	65.4%	3,216,174	4,475,409	1,259,235	39.2%
Compensation	0	1,892,333	1,892,333	100.0%	0	792,855	792,855	100.0%
Revenue from sales and other income	6,599,987	12,807,929	6,207,942	94.1%	3,216,174	5,268,264	2,052,090	63.8%
EBIT	-177,593	70,003	247,596	139.4%	15,919	70,173	54,254	340.8%
Amortization and depreciation	1,344	1,075	-269	-20.0%	659	486	-173	-26.3%
EBITDA	**-176,249**	**71,078**	**247,327**	**140.3%**	**16,578**	**70,659**	**54,081**	**326.2%**
CAPEX [2)]	1,375	26	-1,349	-98.1%	433	26	-407	-94.0%
Area's sales revenue as % of the Group's sales revenue	38%	42%	4 p.p.	-	37%	38%	1 p.p.	-

[1)] Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023
[2)] without ENEA S.A.'s equity investments



[1)] Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023

Key EBITDA drivers in H1 2023 (up by PLN 247.3 million):

Adjusted first contribution margin (down by PLN 1,978.6 million)
(-) average energy purchase price up by 109.9%
(-) energy sales volume down by 3.2%
(+) average energy sales price up by 55.4%
(+) costs of environmental obligations down by 44.0%
(+) higher result on trade in gaseous fuel
(-) remeasurement of CO_2 contracts, forward transactions for energy and gas

Compensation (up by PLN 1,892.3 million)
the performance for H1 2023 includes the value of electricity compensation of PLN 1,892.3 million, as referred to in Article 12 of the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market [Consumption Limits Law] and in Article 8 of the Act of 27 October 2022 on emergency measures to reduce electricity prices and support certain consumers in 2023 [Price Limits Law]

Own costs (up by PLN 21.6 million)
(-) direct selling costs up by PLN 16.2 million
(-) general and administrative expenses up by PLN 3.0 million
(-) costs of shared services up by PLN 2.4 million

Change in provisions related to onerous contracts (down by PLN 293.3 million)

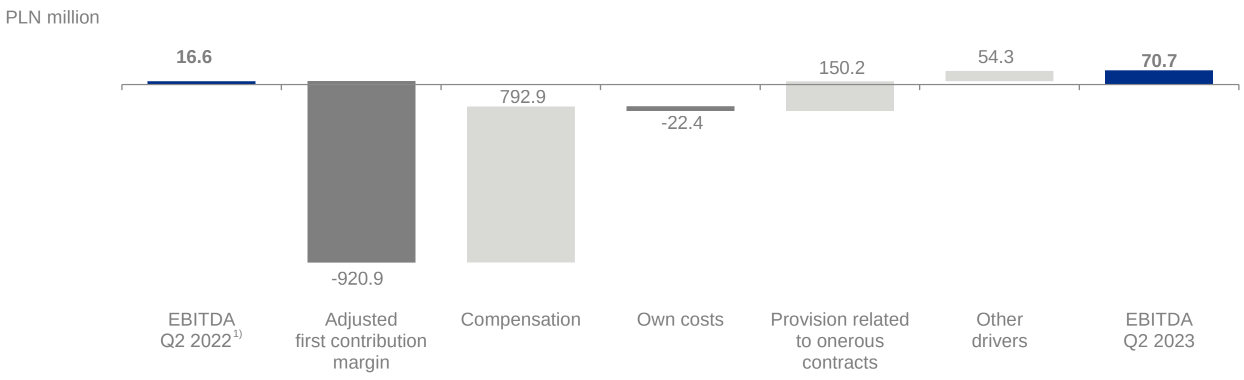
(+) in H1 2023, the use of a portion of the provision in the amount of PLN 184.1 million established in expenses in December 2022 was recognized in revenues for an estimated loss on Tariff G resulting from the failure to take into account the incurred electricity purchase costs in the Tariff of 17 December 2022 approved by the ERO President and from the application of the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market in the amount of PLN 368.3 million

(+) in H1 2022, a provision of PLN 64.2 million was recognized in costs for a possible loss on Tariff G due to the increase in the electricity purchase costs

(+) in H1 2022, the use of a portion of the provision totaling PLN 8.7 million was recognized and the remeasurement of this provision was recognized in the expenses in the amount of PLN 53.6 million for the loss arising from the distribution fee rebate which was settled by ENEA S.A. acting as the offtaker of last resort in relation to electricity supplied to the grid by prosumers

Other factors (up by PLN 61.9 million)

(+) revenue from sales of services up by PLN 25.5 million
(+) costs of provisions for anticipated losses and potential claims down by PLN 83.5 million
(+) litigation costs down by PLN 2.9 million
(+) written off receivables recognized in expenses down by PLN 2.5 million
(+) revenues from licenses linked to the ENEA brand up by PLN 4.3 million
(-) costs of distribution services related to the existing model of settlements with prosumers up by PLN 53.2 million
(-) donation costs up by PLN 2.0 million
(-) impairment losses for receivables up by PLN 5.4 million



[1)] Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023

Key EBITDA drivers in Q2 2023 (up by PLN 54.1 million):

Adjusted first contribution margin (down by PLN 920.9 million)

(-) average energy purchase price up by 98.6%
(-) energy sales volume down by 4.0%
(+) average energy sales price up by 47.2%
(+) costs of environmental obligations down by 41.7%
(+) higher result on trade in gaseous fuel
(-) remeasurement of CO_2 contracts, forward transactions for energy and gas

Compensation (up by PLN 792.9 million)

in the Q2 2023 performance, the value of electricity compensation was recognized in the amount of PLN 792.9 million, as referred to in Article 12 of the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market [Consumption Limits Act] and in Article 8 of the Act of 27 October 2022 on Emergency Measures to Reduce Electricity Prices and Support Certain Consumers in 2023 [Price Limits Act]

Own costs (up by PLN 22.4 million)

(-) direct selling costs up by PLN 15.5 million
(-) general and administrative expenses up by PLN 3.8 million
(-) costs of shared services up by PLN 3.1 million

Change in provisions related to onerous contracts (down by PLN 150.2 million)
(+) in Q2 2023, the use of a portion of the provision in the amount of PLN 92.1 million established in expenses in December 2022 was recognized in revenues for an estimated loss on Tariff G resulting from the failure to take into account the incurred electricity purchase costs in the Tariff of 17 December 2022 approved by the ERO President and from the application of the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market, in the amount of PLN 368.3 million
(+) in Q2 2022, a provision of PLN 64.2 million was recognized in costs for a possible loss on Tariff G due to the increase in the electricity purchase costs
(-) in Q2 2022, a portion of the provision was recognized for the loss arising from the settlement, by ENEA S.A., as the offtaker of last resort by virtue of the distribution fee rebate for the electricity supplied to the grid by prosumers in the amount of PLN 6.1 million

Other factors (up by PLN 54.3 million)
(+) revenue from sales of services up by PLN 3.5 million
(+) costs of provisions for anticipated losses and potential claims down by PLN 73.6 million
(+) written off receivables recognized in expenses down by PLN 1.0 million
(+) revenues from licenses linked to the ENEA brand up by PLN 2.0 million
(+) donation costs down by PLN 3.0 million
(-) costs of distribution services related to the existing model of settlements with prosumers up by PLN 27.6 million
(-) impairment losses for receivables up by PLN 4.2 million

Generation Area in H1 2023 and Q2 2023

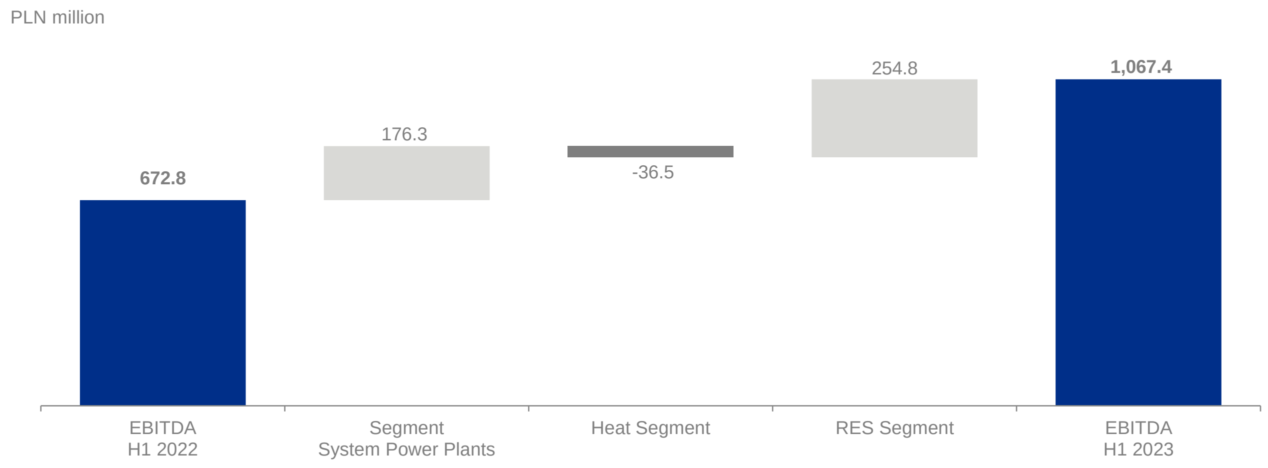
In the Generation Area, the financial data of ENEA Wytwarzanie, MEC Piła, PEC Oborniki, ENEA Nowa Energia, ENEA Ciepło, ENEA Ciepło Serwis, ENEA Elektrownia Połaniec, ENEA Połaniec Serwis, ENEA ELKOGAZ and ENEA Bioenergia are presented.

ENEA Połaniec Serwis was acquired by ENEA Elektrownia Połaniec on 16 January 2023.

ENEA Ciepło Serwis was acquired by ENEA Ciepło on 3 October 2022.

ENEA Wytwarzanie owns, among others, 11 high-efficiency and modernized power units in the Kozienice Power Plant. ENEA Elektrownia Połaniec owns 7 coal-fired units with the total maximum capacity of 1,674 MW and the world's largest biomass-fired unit with the total maximum capacity of 225 MW.

[PLN 000s]	H1 2022	H1 2023	Change	% change	Q2 2022	Q2 2023	Change	% change
Net revenue from sales	7,400,068	12,724,246	5,324,178	71.9%	3,809,222	6,178,990	2,369,768	62.2%
electricity	6,390,399	11,673,705	5,283,306	82.7%	3,328,233	5,704,258	2,376,025	71.4%
Capacity Market	447,632	472,638	25,006	5.6%	221,240	229,225	7,985	3.6%
certificates of origin	262,227	224,509	-37,718	-14.4%	141,066	104,305	-36,761	-26.1%
heat	248,065	310,317	62,252	25.1%	90,232	116,879	26,647	29.5%
other	51,745	43,077	-8,668	-16.8%	28,451	24,323	-4,128	-14.5%
Revenue from leases and operating subleases	437	485	48	11.0%	237	246	9	3.8%
Revenue from sales and other income	7,400,505	12,724,731	5,324,226	71.9%	3,809,459	6,179,236	2,369,777	62.2%
EBIT	453,366	836,759	383,393	84.6%	-55,731	460,912	516,643	927.0%
Amortization and depreciation	221,130	231,733	10,603	4.8%	110,165	117,327	7,162	6.5%
Impairment loss/(reversal of impairment loss) on non-financial non-current assets	(1,737)	(1,134)	603	34.7%	(1,737)	(1,134)	603	34.7%
EBITDA	**672,759**	**1,067,358**	**394,599**	**58.7%**	**52,697**	**577,105**	**524,408**	**995.1%**
CAPEX	167,169	204,482	37,313	22.3%	76,034	132,886	56,852	74.8%
Area's sales revenue as % of the Group's sales revenue	42%	42%	-	-	43%	45%	2 p.p.	-

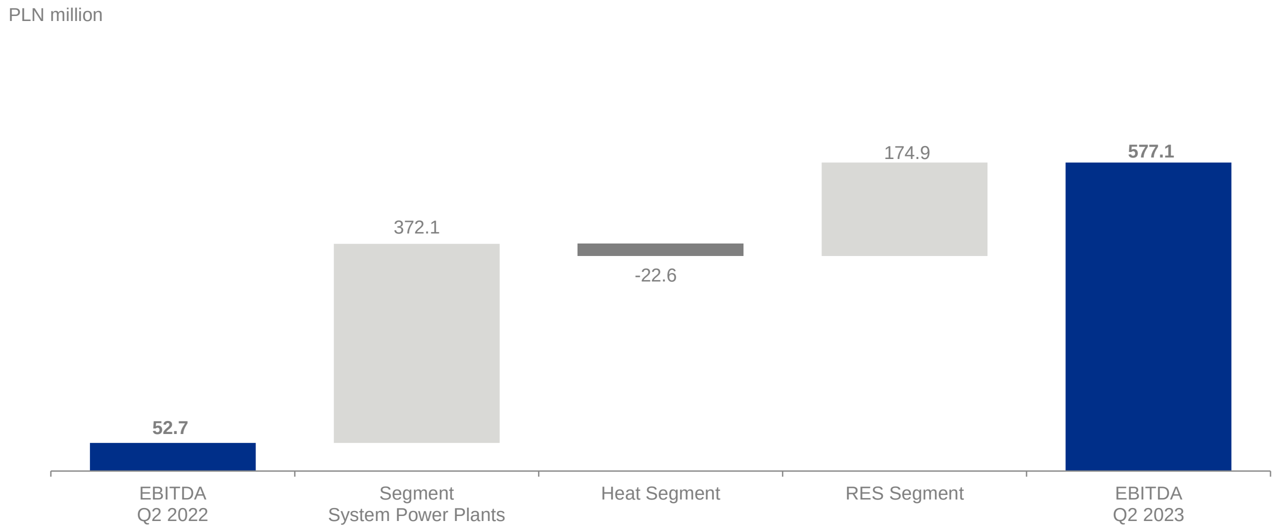


Key EBITDA drivers in H1 2023 (up by PLN 394.6 million):

System Power Plants Segment – up by PLN 176.3 million
(+) generation margin up by PLN 718.4 million
(+) Balancing Market repurchase margin up by PLN 462.4 million
(+) in H1 2022, establishment of a provision for onerous contracts in the amount of PLN 388.7 million
(+) trading margin up by PLN 93.6 million
(+) revenue from Regulatory System Services up by PLN 29.9 million
(+) revenue from the Capacity Market up by PLN 24.0 million
(-) PLN 1,407.2 million contribution to the Price Difference Fund
(-) fixed costs up by PLN 100.9 million
(-) other drivers down by PLN 32.6 million

Heat Segment – down by PLN 36.5 million
(-) fixed costs up by PLN 16.1 million
(-) PLN 12.3 million contribution to the Price Difference Fund
(-) other drivers down by PLN 10.5 million
(+) heat margin up by PLN 1.6 million
(+) revenue from the Capacity Market up by PLN 0.8 million

RES Segment (up by PLN 254.8 million)
(+) Biomass Area (Green Unit) PLN 275.0 million (of which PLN -1.3 million from ENEA Bioenergia Sp. z o.o): margin on renewable energy generation up by PLN +305.9 million, establishment of a provision for onerous contracts in H1 2022 up by PLN +58.2 million, PLN -59.2 million contribution to the Price Difference Fund, Green Unit's margin on sales of green certificates down by PLN -21.6 million, PLN -5.2 million increase in fixed costs, PLN -1.8 million increase in other variable costs
(+) Photovoltaics Area (PLN +2.1 million): the result on other operating activities of PLN +2.0 million, revenue from energy sales up by PLN +0.8 million, fixed costs up by PLN -0.7 million
(-) Hydro Area (PLN -11.8 million): PLN -50.0 million in contribution to the Price Difference Fund, PLN +39.2 million increase in revenue from sales of energy
(-) Wind Area (PLN -9.1 million): PLN -53.1 million contribution to the Price Difference Fund, PLN -5.7 million decrease in revenue from certificates of origin, PLN -1.2 million increase in costs of third-party services, PLN +51.4 million increase in revenue from energy sales
(-) Biogas Area (PLN -0.5 million)



Key EBITDA drivers in Q2 2023 (up by PLN 524.4 million):

System Power Plants Segment – up by PLN 372.1 million
(+) in Q2 2022, establishment of a provision for onerous contracts in the amount of PLN 388.7 million
(+) Balancing Market repurchase margin up by PLN 309.9 million
(+) generation margin up by PLN 302.4 million
(+) revenue from Regulatory System Services up by PLN 15.9 million
(+) trading margin up by PLN 12.1 million
(+) revenue from the Capacity Market up by PLN 8.7 million
(-) PLN 584.8 million contribution to the Price Difference Fund
(-) fixed costs up by PLN 57.9 million
(-) other drivers down by PLN 22.9 million

Heat Segment – down by PLN 22.6 million
(-) PLN 6.5 million contribution to the Price Difference Fund
(-) other drivers down by PLN 6.5 million
(-) fixed costs up by PLN 6.1 million
(-) heat margin down by PLN 2.7 million
(-) revenue from the Capacity Market down by PLN 0.8 million

RES Segment – up by PLN 174.9 million
(+) Biomass Area (Green Unit) PLN 180.0 million (of which PLN +0.2 million from ENEA Bioenergia Sp. z o.o): margin on renewable energy generation up by PLN +166.6 million, establishment of a provision for onerous contracts in Q2 2022 up by PLN +58.2 million, Green Unit's margin on sales of green certificates down by PLN -30.9 million, PLN -10.6 million contribution to the Price Difference Fund, PLN -3.2 million increase in fixed costs, PLN -0.4 million increase in other variable costs
(+) Photovoltaics Area (PLN +2.1 million): the result on other operating activities of PLN +2.0 million, energy sales revenues up by PLN +0.4 million, fixed costs up by PLN -0.4 million
(-) Hydro Area (PLN -4.3 million): PLN -21.5 million in contribution to the Price Difference Fund, PLN +17.1 million increase in revenue from sales of energy
(-) Wind Area (PLN -2.4 million): PLN -23.4 million in contribution to the Price Difference Fund, PLN -0.9 million decrease in revenue from certificates of origin, PLN +22.7 million increase in revenue from sales of energy

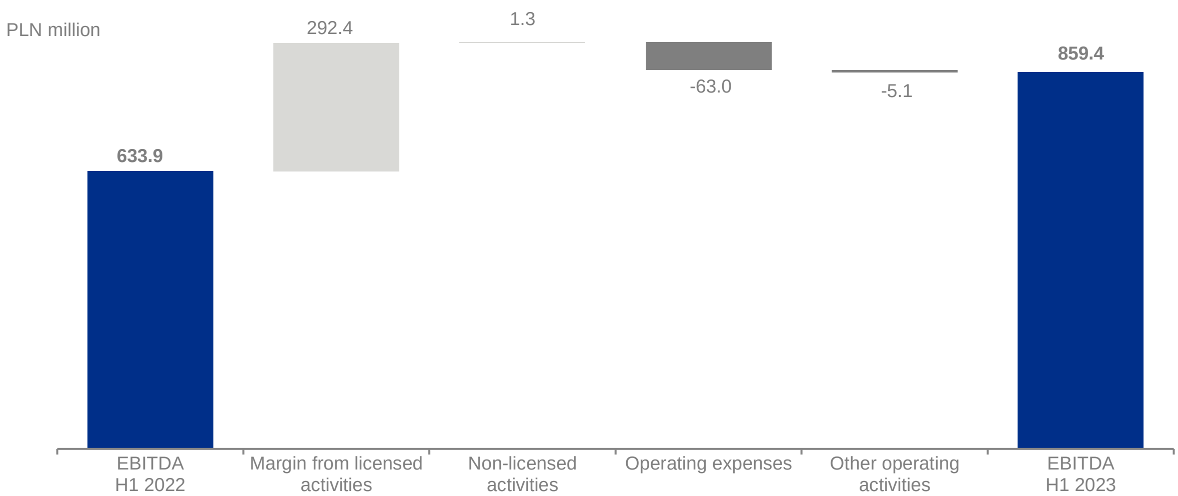
Distribution Area in H1 2023 and Q2 2023

ENEA Operator is responsible for the distribution of electricity to 2.8 million Customers – in western and north-western Poland in the area of 58.2 thousand km^2. The key task of ENEA Operator is to provide energy in a continuous and reliable manner, while maintaining appropriate quality parameters.

The Distribution Area includes financial data of the following Companies:

- ENEA Operator
- ENEA Serwis
- ENEA Pomiary
- ENEA Logistyka

[PLN 000s]	H1 2022	H1 2023	Change	% change	Q2 2022	Q2 2023	Change	% change
Net revenue from sales	1,790,399	2,452,841	662,442	37.0%	881,522	1,194,444	312,922	35.5%
distribution services to end users	1,628,988	2,250,532	621,544	38.2%	795,779	1,081,049	285,270	35.8%
grid connection fees	36,150	64,065	27,915	77.2%	21,852	32,095	10,243	46.9%
other	125,261	138,244	12,983	10.4%	63,891	81,300	17,409	27.2%
Compensation	0	222,607	222,607	100.0%	0	100,977	100,977	100.0%
Revenue from sales and other income	1,790,399	2,675,448	885,049	49.4%	881,522	1,295,421	413,899	47.0%
EBIT	286,333	499,976	213,643	74.6%	146,379	251,389	105,010	71.7%
Amortization and depreciation	347,549	359,422	11,873	3.4%	176,983	181,474	4,491	2.5%
EBITDA	**633,882**	**859,398**	**225,516**	**35.6%**	**323,362**	**432,863**	**109,501**	**33.9%**
CAPEX	607,523	681,234	73,711	12.1%	347,053	350,476	3,423	1.0%
Area's sales revenue as % of the Group's sales revenue	10%	8%	-2 p.p.	-	10%	9%	-1 p.p.	-

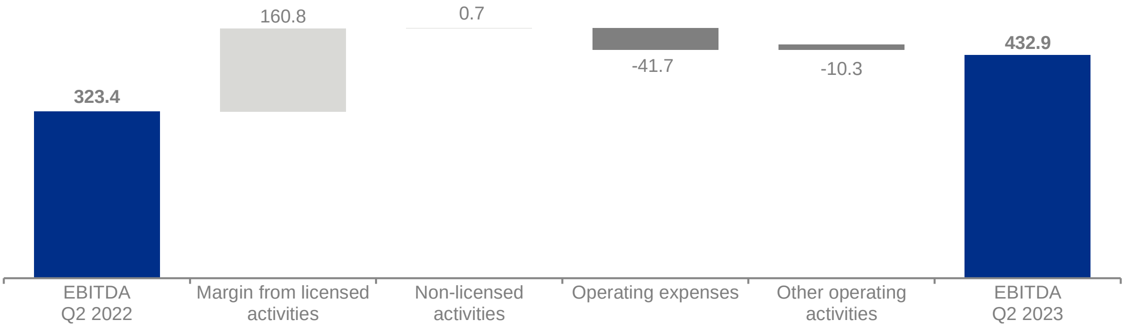


Key EBITDA drivers in H1 2023 (up by PLN 225.5 million):

Margin on licensed activity (up by PLN 292.4 million)
(+) revenue from sales of distribution services to end users up by PLN 844 million
(+) revenue from grid connection fees up by PLN 28 million
(-) costs of purchasing electricity to cover the balancing difference (balance) up by PLN 495 million
(-) costs of purchasing transmission and distribution services (balance) up by PLN 84 million

Operating expenses (up by PLN 63.0 million)
(-) employee benefit costs up by PLN 36 million
(-) costs of third-party services up by PLN 21 million
(-) other costs up by PLN 6 million

PLN million



Key EBITDA drivers in Q2 2023 (up by PLN 109.5 million):

Margin on licensed activity (up by PLN 160.8 million)
(+) revenue from sales of distribution services to end users up by PLN 386 million
(+) revenue from grid connection fees up by PLN 10 million
(-) costs of purchasing transmission and distribution services (balance) up by PLN 20 million
(-) costs of purchasing electricity to cover the balancing difference (balance) up by PLN 215 million

Operating expenses (up by PLN 41.7 million)
(-) employee benefit costs up by PLN 23 million
(-) costs of third-party services up by PLN 19 million

Other operating activity (down by PLN 10.3 million)
(-) change in provisions concerning grid assets by PLN 15 million
(+) revenues from the removal of infrastructure collisions up by PLN 6 million

Mining Area in H1 2023 and Q2 2023

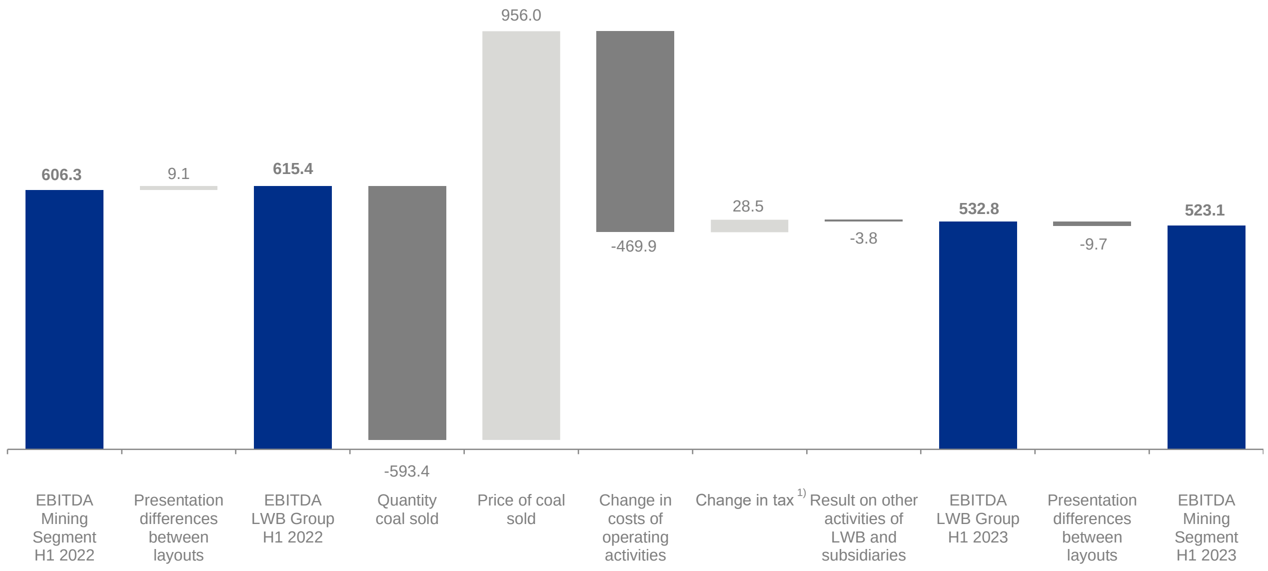
The Mining Area presents the financial results of the LW Bogdanka Group with the parent company – Lubelski Węgiel “Bogdanka” S.A. and its subsidiaries.

LW Bogdanka breaks down its product range into fine steam coal, which accounts for 99% of its output, pea and nut coal.

The main buyers are commercial and industrial energy sectors.

[PLN 000s]	H1 2022	H1 2023	Change	% change	Q2 2022	Q2 2023	Change	% change
Net revenue from sales	1,458,405	1,819,720	361,315	24.8%	728,638	881,237	152,599	20.9%
coal	1,423,729	1,780,993	357,264	25.1%	712,118	865,433	153,315	21.5%
other products and services	22,559	32,004	9,445	41.9%	10,481	12,144	1,663	15.9%
goods and materials	12,117	6,723	-5,394	-44.5%	6,039	3,660	-2,379	-39.4%
Revenue from leases and operating subleases	3,926	5,327	1,401	35.7%	1,954	3,126	1,172	60.0%
Revenue from sales and other income	1,462,331	1,825,047	362,716	24.8%	730,592	884,363	153,771	21.0%
EBIT	427,493	(453,649)	-881,142	-206.1%	239,840	(616,500)	-856,340	-357.0%
Amortization and depreciation	174,482	183,268	8,786	5.0%	87,761	85,315	-2,446	-2.8%
Impairment loss/(reversal of impairment loss) on non-financial non-current assets	4,314	793,443	789,129	18,292.3%	4,264	764,774	760,510	17,835.6%
EBITDA	**606,289**	**523,062**	**-83,227**	**-13.7%**	**331,865**	**233,589**	**-98,276**	**-29.6%**
CAPEX	271,577	344,882	73,305	27.0%	141,704	178,507	36,803	26.0%
Area’s sales revenue as % of the Group’s sales revenue	8%	6%	-2 p.p.	-	8%	6%	-2 p.p.	-

PLN million



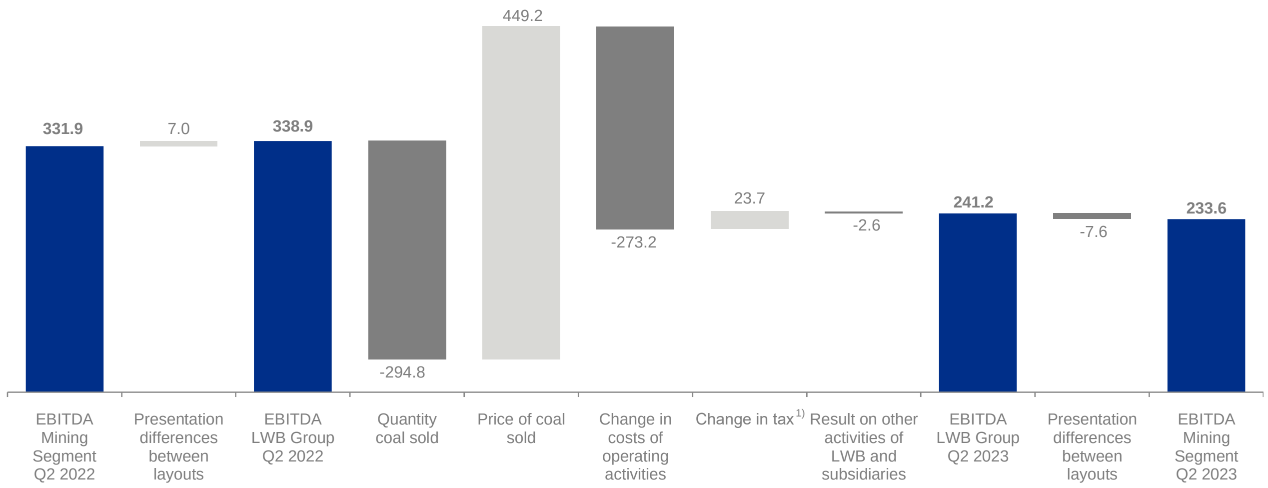
1) *impact on presented costs = technical coal production cost allocated according to the current structure * change of coal inventory volume in the analyzed period*

Key EBITDA drivers in H1 2023 (down by PLN 83.2 million):

(+) higher revenue from sales of coal: lower volume of coal sales (-2,175 thousand tons) with concurrently higher prices of steam coal in contracts
(-) drop in revenue from sales of goods and materials – lower sales of scrap metal
(-) higher mining cash cost – higher costs of third-party services; higher prices of energy and materials, higher employee costs
(+) during H1 2023, the value of inventories vs. the beginning of the year increased by PLN 86 million, or 204 thousand tons (decrease in the period's operating expenses), while during H1 2022, the value of inventories vs. the beginning of the year increased by PLN 57 million, or 333 thousand tons (decrease in the period's operating expenses)

There are differences in the way amortization and depreciation is presented in financial reports of the ENEA Group and the LW Bogdanka Group.

PLN million



1) *impact on presented costs = technical coal production cost allocated according to the current structure * change of coal inventory volume in the analyzed period*

Key EBITDA drivers in Q2 2023 (down by PLN 98.3 million):

(+) higher revenue from sales of coal: lower volume of coal sales (-1,040 thousand tons) with concurrently higher prices of steam coal in contracts
(-) drop in revenue from sales of goods and materials – lower sales of scrap metal
(-) higher mining cash cost – higher costs of external services, higher prices of energy and materials, higher employee costs
(+) during Q2 2023, the value of inventories increased by PLN 66 million, or 164 thousand tons (decrease in the period's operating expenses), while during Q2 2022, the value of inventories increased by PLN 42 million, or 240 thousand tons (decrease in the period's operating expenses)

There are differences in the way amortization and depreciation is presented in financial reports of the ENEA Group and the LW Bogdanka Group.

Other Activities Area in H1 2023 and Q2 2023

[PLN 000s]	H1 2022	H1 2023	Change	% change	Q2 2022	Q2 2023	Change	% change
Net revenue from sales	270,198	319,467	49,269	18.2%	133,712	165,129	31,417	23.5%
Revenue from leases and operating subleases	2,800	2,110	-690	-24.6%	64	387	323	504.7%
Revenue from sales and other income	272,998	321,577	48,579	17.8%	133,776	165,516	31,740	23.7%
EBIT	23,782	42,634	18,852	79.3%	18,484	26,619	8,135	44.0%
Amortization and depreciation	36,891	36,641	-250	-0.7%	18,044	17,901	-143	-0.8%
EBITDA	**60,673**	**79,275**	**18,602**	**30.7%**	**36,528**	**44,520**	**7,992**	**21.9%**
CAPEX	29,505	32,122	2,617	8.9%	18,252	21,472	3,220	17.6%
Area's sales revenue as % of the Group's sales revenue	2%	1%	-1 p.p.	-	2%	1%	-1 p.p.	-

The Other Activities Area consists of companies from the following areas:
- activities supporting other Group companies:

ENEA Centrum – the Shared Services Center in the Group in the field of accounting, human resources, ITC and customer service, collection, procurement and administration
ENEA Innowacje – deals with ventures that offer a chance to become, in the future, innovative and modern products offered by the Group
- accompanying activities:

ENEA Oświetlenie – a company specializing in indoor and outdoor lighting; it designs and builds road lighting, illumination for urban spaces, illumination for historic and public buildings

Ratio analysis

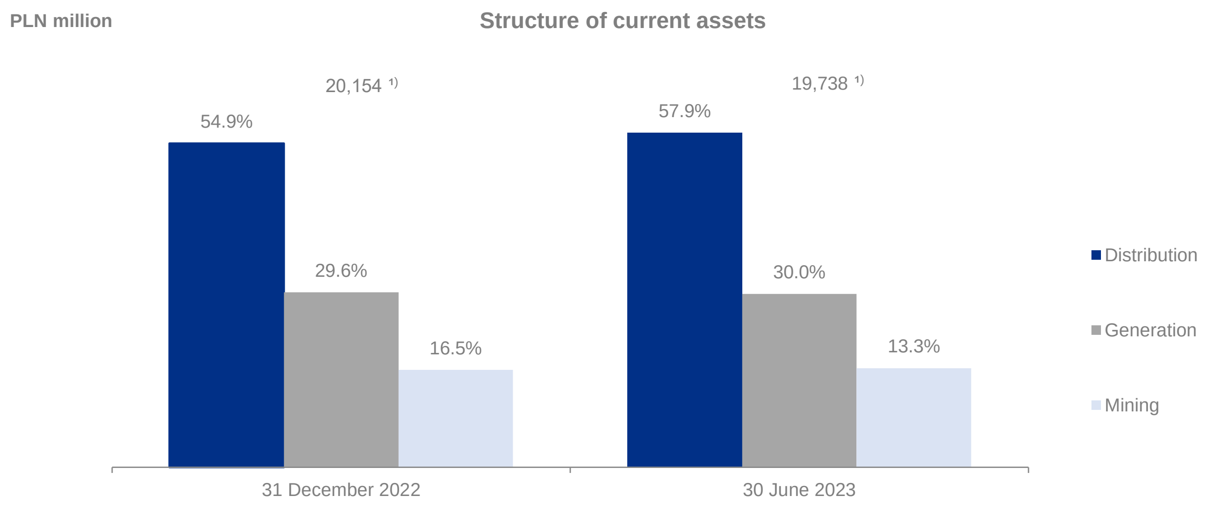
Definitions of the ratios are presented in section 12 entitled: "Glossary of terms and abbreviations"

	H1 2022 [1)]	H1 2023	Q2 2022 [1)]	Q2 2023
Profitability ratios				
ROE – return on equity [2)]	10.1%	-0.7%	7.3%	-7.7%
ROA – return on assets [2)]	4.8%	0.3%	3.5%	-3.4%
Net profitability	5.9%	-0.2%	4.2%	-2.7%
Operating profitability	6.3%	3.0%	4.7%	1.0%
EBITDA profitability	11.5%	9.6%	10.0%	11.1%
Liquidity and financial structure ratios				
Current liquidity ratio	1.2	1.0	1.2	1.0
Coverage of non-current assets with equity	73.6%	68.1%	73.6%	68.1%
Total debt ratio	52.4%	55.9%	52.4%	55.9%
Net debt / EBITDA	-0.30	1.71	-0.30	1.71
Economic activity ratios				
Current receivables turnover in days [3)]	46	43	45	45
Trade and other payables turnover in days [4)]	73	41	72	44
Inventory turnover in days	21	17	21	18

[1)] Presentation change in accordance with the condensed interim consolidated financial statements for 6 months of 2023
[2)] Ratio numerator i.e. net profit (loss) for the reporting period is annualized
[3)] Trade receivables – trade receivables, assets arising from contracts with customers and contract preparation expenses
[4)] Trade payables – trade payables, liabilities under contracts with customers

Financial position – structure of assets and liabilities of the ENEA Group

Assets [PLN 000s]	As at: 31 December 2022	As at: 30 June 2023	Change	% change
Non-current assets	**23,161,620**	**23,371,747**	**210,127**	**0.9%**
Property, plant and equipment	20,154,134	19,738,147	-415,987	-2.1%
Right-of-use asset	827,430	817,368	-10,062	-1.2%
Intangible assets	351,922	345,817	-6,105	-1.7%
Investment property	18,042	28,641	10,599	58.7%
Investments in associates and jointly controlled entities	163,317	168,485	5,168	3.2%
Deferred tax assets	1,315,108	1,987,621	672,513	51.1%
Financial assets at fair value	161,391	70,963	-90,428	-56.0%
Trade and other receivables	12,213	48,950	36,737	300.8%
Costs related to the execution of contracts	8,970	9,549	579	6.5%
Receivables under leases and finance subleases	1,168	1,002	-166	-14.2%
Cash in the Mine Closure Fund	147,925	155,204	7,279	4.9%
Current assets	**14,273,352**	**12,719,786**	**-1,553,566**	**-10.9%**
CO_2 emission allowances	4,093,130	58,570	-4,034,560	-98.6%
Inventories	1,979,850	2,481,352	501,502	25.3%
Trade and other receivables	5,260,383	6,016,107	755,724	14.4%
Costs related to the execution of contracts	11,006	10,579	-427	-3.9%
Assets arising from contracts with customers	623,900	686,882	62,982	10.1%
Receivables under leases and finance subleases	1,304	1,209	-95	-7.3%
Current income tax receivables	315,513	271,060	-44,453	-14.1%
Financial assets at fair value	382,546	365,977	-16,569	-4.3%
Debt financial assets at amortized cost	42,004	0	-42,004	-100.0%
Cash and cash equivalents	1,563,716	2,828,050	1,264,334	80.9%
Total Assets	**37,434,972**	**36,091,533**	**-1,343,439**	**-3.6%**



1) of which elimination

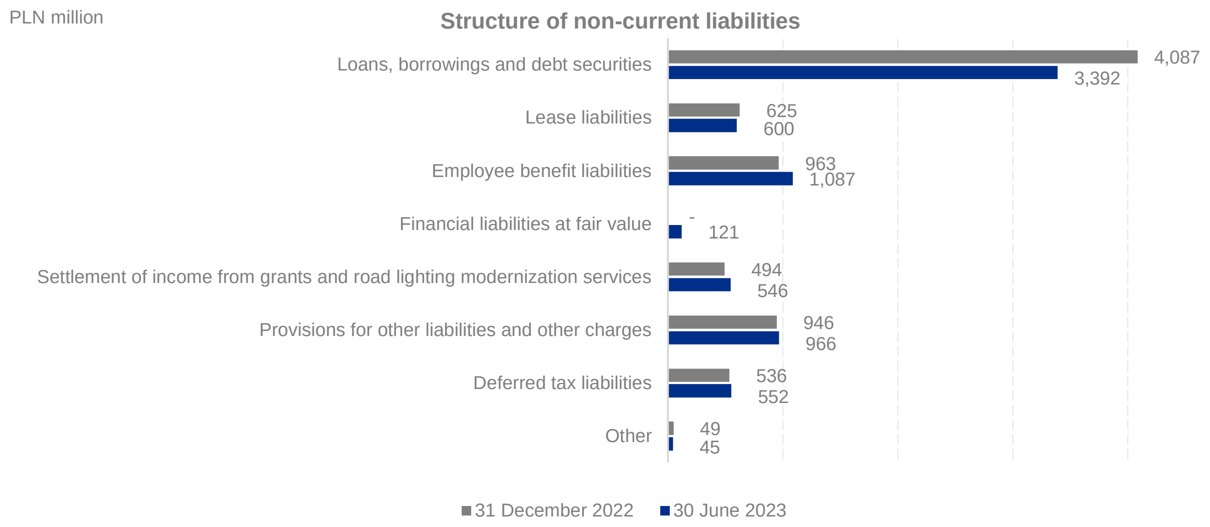
Key drivers of non-current assets (up by PLN 210 million):

- PLN 673 million increase in deferred tax assets – mainly the effect of the movement in provisions for CO2 emission allowances, the contribution to the Price Difference Fund, the impairment allowance for non-financial non-current assets and measurement of currency instruments not used in hedge accounting
- PLN 37 million increase in trade and other receivables – mainly in the value of collateral margins for forward CO2 emission allowance transactions
- decrease in property, plant and equipment by PLN 416 million, of which: increase in the value of depreciation and impairments by PLN 1,385 million with a simultaneous increase in the value of fixed assets by PLN 969 million PLN 90 million decrease in financial assets at fair value – mainly as a result of remeasurement of IRS financial instruments hedging against an increase in costs caused by changes in interest rates

Key drivers of current assets (down by PLN 1,554 million):

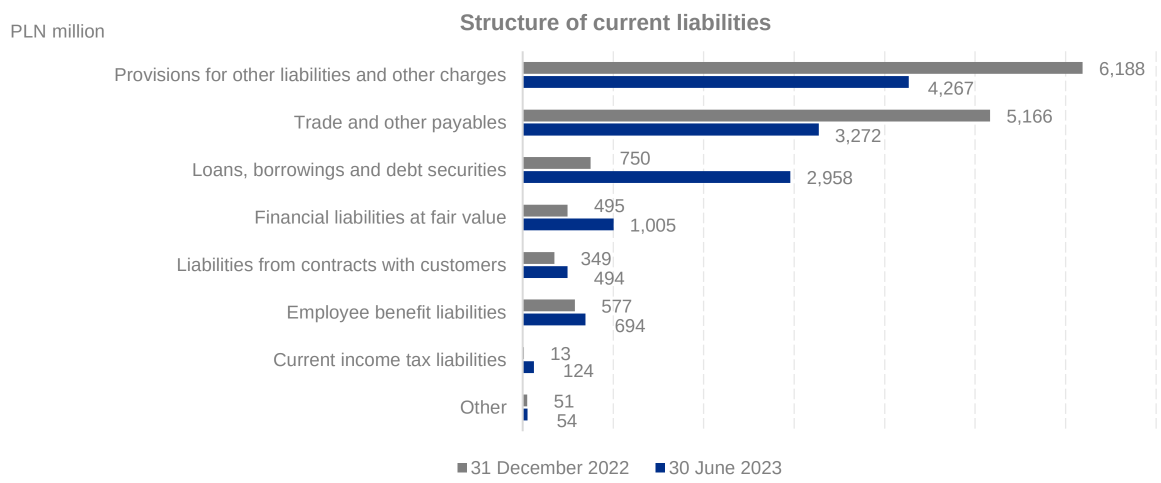
- PLN 4,035 million decrease in the value of CO_2 emission allowances, including: PLN 1,529 million purchase of allowances in 2023, PLN -5,563 million redemption of rights
- PLN 44 million decrease in the item of current income tax receivables – settlement of overpaid income tax in 2023
- PLN 42 million decrease in debt financial assets measured at amortized cost – value of the loan granted in 2022 to Elektrownia Ostrołęka Sp. z o.o.
- PLN 17 million decrease in financial assets at fair value – mainly as a result of remeasurement of IRS financial instruments hedging against an increase in costs caused by changes in interest rates
- PLN 1,264 million increase in cash and cash equivalents – chiefly obtaining financing in the form of a PLN 1 billion term loan which, in accordance with the terms of the agreement, was spent to finance current operations, electricity compensation received in accordance with the Price Limits Act, change in the amount of funds earmarked for trading in CO_2 emission allowances, an increase in margins securing IRGiT's clearing operations and an increase in funds from current activities
- PLN 756 million increase in trade and other receivables – mainly in the value of trade receivables with a concurrent decrease in tax receivables (excluding income tax) and a decrease in the value of collateral margins for forward CO_2 emission allowance transactions
- PLN 502 million increase in the value of inventories, including mainly an increase in inventories of coal, certificates of origin for energy, biomass and other materials
- PLN 63 million increase in the item of assets arising from contracts with customers – largely due to a higher volume of non-invoiced electricity sales

Equity and liabilities [PLN 000s]	As at 31 December 2022	30 June 2023	Change	% change
Total equity	**16,146,111**	**15,914,614**	**-231,497**	**-1.4%**
Share capital	676,306	676,306	-	-
Share premium	3,348,670	3,348,670	-	-
Revaluation reserve – measurement of hedging instruments	185,744	108,396	-77,348	-41.6%
Retained earnings	10,663,950	10,451,968	-211,982	-2.0%
Non-controlling interests	1,271,441	1,329,274	57,833	4.5%
Total liabilities	**21,288,861**	**20,176,919**	**-1,111,942**	**-5.2%**
Non-current liabilities	7,699,793	7,308,534	-391,259	-5.1%
Current liabilities	13,589,068	12,868,385	-720,683	-5.3%
Total equity and liabilities	**37,434,972**	**36,091,533**	**-1,343,439**	**-3.6%**



Key change drivers for non-current liabilities (down by PLN 391 million)

- PLN 695 million decrease in loans, borrowings and other debt securities – reclassification of certain non-current liabilities to current liabilities, with obtaining simultaneously financing in the form of a syndicated loan
- increase in employee benefit liabilities by PLN 124 million – mostly an update of provisions
- PLN 121 million increase in financial liabilities measured at fair value – mainly due to an update in the valuation of forward contracts for the purchase of electricity and gas
- PLN 52 million increase in the item of subsidy income settlements and road lighting modernization services – mainly deferred income from subsidies
- PLN 20 million increase in provisions for other liabilities and other charges – mainly an increase of the provision for non-contractual use of land, with a simultaneous reclassification of certain non-current liabilities to current liabilities



Key change drivers for current liabilities (down by PLN 721 million)

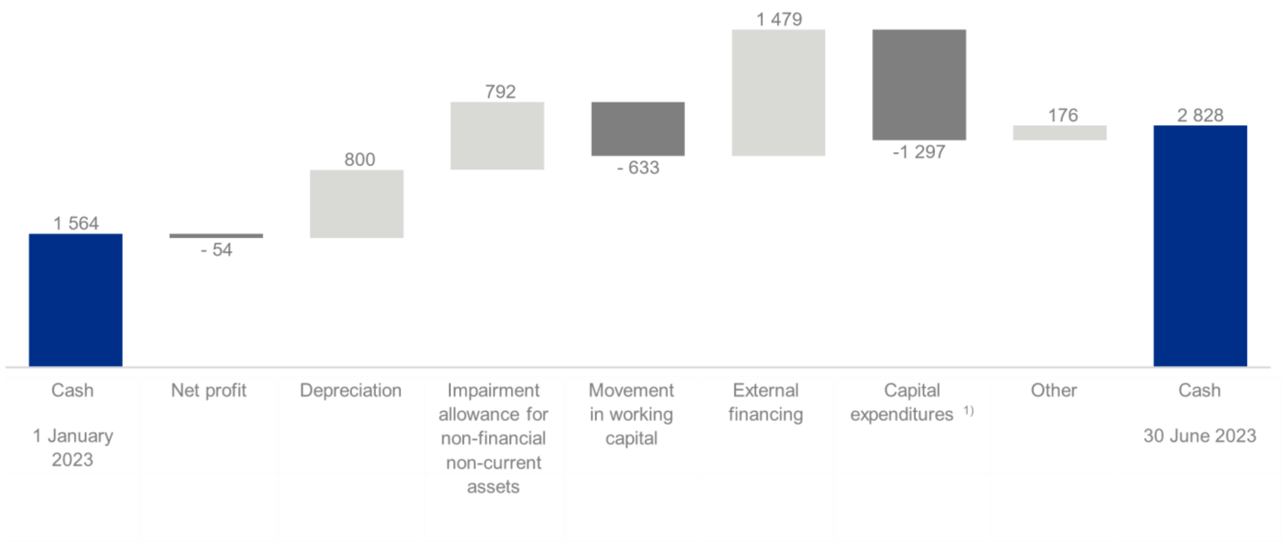
- PLN 1,921 million decrease in provisions for liabilities and other charges – including a decrease in provisions for the purchase of CO_2 emission allowances and the use of a portion of the provision recognized in costs in December 2022 for estimated losses under Tariff G with a simultaneous increase in provisions for energy origin certificates
- PLN 1,894 million decrease in trade payables – primarily a decrease in liabilities related to collateral margins for forward CO_2 emission allowance transactions, a decrease in investment liabilities, a decrease in trade liabilities, decrease in liabilities on account of advance compensation payments for reduction of revenues (under Act of 27 October 2022 on Emergency Measures to Reduce Electricity Prices and Support Certain Consumers in 2023) and, in 2022, the occurrence of liabilities on account of court settlements concerning terminated RES property rights contracts, with a concurrent increase in tax liabilities
- PLN 2,208 million increase in loans, borrowings and other debt securities – obtaining financing in the form of a syndicated loan, reclassification of certain non-current liabilities to current liabilities, with a simultaneous redemption of bonds and repayment of loan installments

- PLN 510 million increase in financial liabilities measured at fair value – mainly an update in the valuation of forward contracts for the purchase of electricity and gas
- PLN 376 million increase in other current liabilities – mainly an increase in liabilities from contracts with customers, an increase in liabilities on account of employee benefits, a growth of current income tax liabilities

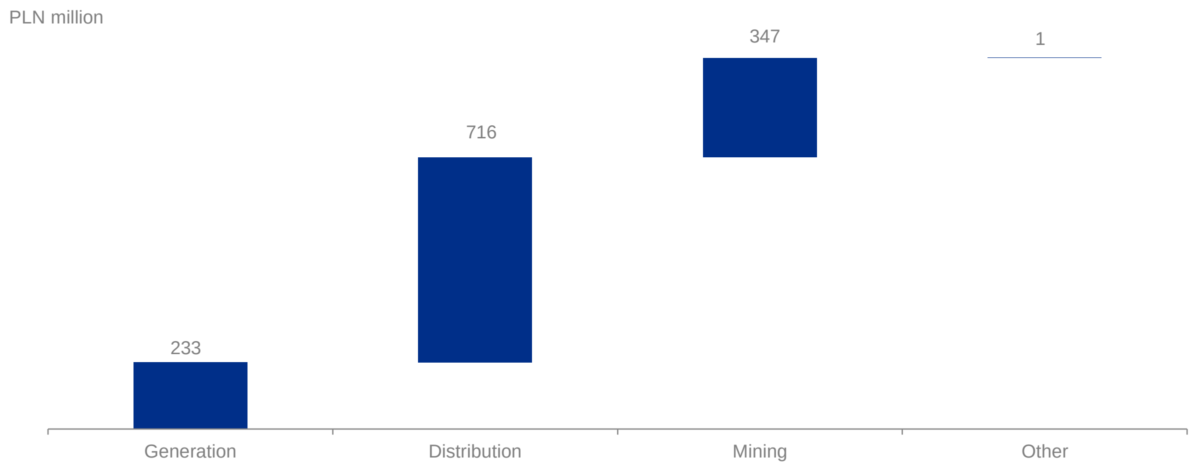
Cash position of the ENEA Group

Statement of cash flows [PLN 000s]	H1 2022	H1 2023	Change	% change
Net cash flows from operating activities	4,162,493	1,163,580	-2,998,913	-72.0%
Net cash flows from investing activities	(1,524,953)	(1,220,997)	303,956	19.9%
Net cash flows from financing activities	(1,352,313)	1,321,751	2,674,064	197.7%
Increase / (decrease) in net cash	1,285,227	1,264,334	-20,893	-1.6%
Cash at the beginning of reporting period	4,153,553	1,563,716	-2,589,837	-62.4%
Cash at the end of reporting period	**5,438,780**	**2,828,050**	**-2,610,730**	**-48.0%**

Cash flow in H1 2023



ENEA Group's capital expenditures[1)] in H1 2023



[1)] *Purchase/disposal of property, plant and equipment and intangible assets and purchase/disposal of subsidiaries, associates and jointly controlled entities*

6. Shares and shareholders

6.1. Equity and shareholding structure

As at 30 June 2023 and as at the publication date of this report, the share capital of ENEA S.A. is PLN 529,731,093 and is divided into 529,731,093 ordinary bearer shares with a par value of PLN 1.00 each. The total number of votes resulting from all outstanding shares of the Issuer corresponds to the number of shares, translating into 529,731,093 votes.

All shares in the Company are book-entry bearer shares registered in the Central Securities Depository of Poland.

Since the date of publication of the previous periodic report, no changes have been made to the Issuer's shareholding structure.

The table below presents the shareholding structure of ENEA S.A. as at the date of the periodic report for H1 2023.

Shareholder	Number of shares / number of votes at the General Meeting	Interest in the share capital / share in the total number of votes
State Treasury	277,015,422	52.29%
Other	252,715,671	47.71%
TOTAL	**529,731,093**	**100.0%**

6.2. ENEA S.A. stock prices on the Warsaw Stock Exchange

ENEA S.A. stock has been listed on the Warsaw Stock Exchange (WSE) since 17 November 2008.

In H1 2023, the ENEA S.A. stock price increased from PLN 6.00 to PLN 6.39, that is by PLN 0.39, or 6.5%. The highest closing price of ENEA S.A. stock in H1 2023 was recorded on 15 May 2023 (PLN 7.56), while the lowest price was recorded on 10 January 2023 (PLN 5.82).

Share of the Company's stock in stock exchange indices as at 30 June 2023:

WIG30	mWIG40	WIGenergia	WIGPoland
0.9	3.3	13.1	0.6

Data	H1 2023
Number of shares	529,731,093
Closing price – minimum [PLN]	5.82
Closing price – maximum [PLN]	7.56
Stock price at the end of the period [PLN]	6.39
Stock price at the end of the previous period [PLN]	6.00
Average volume	621,017

7. Company authorities

7.1. Composition of the ENEA S.A. Management Board

As at 1 January 2023	
Name	**Position**
Paweł Majewski	**President of the Management Board**
Dariusz Szymczak	Management Board Member for Corporate Matters
Marcin Pawlicki	Management Board Member for Operational Matters
Rafał Mucha	Management Board Member for Financial Matters
Lech Żak	Management Board Member for Strategy and Development

As at the publication date of the report for H1 2023	
Name	**Position**
Paweł Majewski	**President of the Management Board**
Jakub Kowaleczko	Management Board Member for Commercial Matters
Dariusz Szymczak	Management Board Member for Corporate Matters
Marcin Pawlicki	Management Board Member for Operational Matters
Rafał Mucha	Management Board Member for Financial Matters
Lech Żak	Management Board Member for Strategy and Development

On 6 July 2023, the Company's Supervisory Board adopted a resolution to appoint Mr. Jakub Kowaleczko, effective as of 17 July 2023, to the position of ENEA S.A. Management Board Member for Commercial Matters for the joint term of office commenced on the day following the date of holding the Ordinary General Meeting of ENEA S.A. which approved the financial statements for 2021.
Apart from the changes during the reporting period and until the publication date of the report for H1 2023, there were no other changes in the composition of the Company's Management Board.

7.2. Composition of the ENEA S.A. Supervisory Board

As at 1 January 2023	
Name	**Position**
Rafał Włodarski	**Supervisory Board Chairman**
Roman Stryjski	Deputy Chairman of the Supervisory Board
Mariusz Pliszka	Supervisory Board Secretary
Łukasz Ciołko	Supervisory Board Member
Mariusz Damasiewicz	Supervisory Board Member
Aneta Kordowska	Supervisory Board Member
Tomasz Lis	Supervisory Board Member
Paweł Łącki	Supervisory Board Member
Mariusz Romańczuk	Supervisory Board Member
Piotr Zborowski	Supervisory Board Member

As at the publication date of the report for H1 2023	
Name	**Position**
Łukasz Ciołko	**Supervisory Board Chairman**
Roman Stryjski	Deputy Chairman of the Supervisory Board
Mariusz Pliszka	Supervisory Board Secretary
Mariusz Damasiewicz	Supervisory Board Member
Aneta Kordowska	Supervisory Board Member
Tomasz Lis	Supervisory Board Member
Paweł Łącki	Supervisory Board Member
Mariusz Romańczuk	Supervisory Board Member

On 4 January 2023, the Company received Mr. Rafał Włodarski's resignation from the position of an ENEA S.A. Supervisory Board Member, including the function of the Company's Supervisory Board Chairman, effective as of 4 January 2023.

On 13 March 2023, the Company's Extraordinary General Meeting adopted a resolution by the power of which, as of that date, Ms. Aleksandra Agatowska was appointed a member of the ENEA S.A. Supervisory Board of the 11th term of office.

On 13 March 2023, the Extraordinary General Meeting of ENEA S.A. elected Mr. Łukasz Ciołko as Chairman of the ENEA S.A. Supervisory Board.

On 4 July 2023, the Company received Mr. Piotr Zborowski's resignation from the position of an ENEA S.A. Supervisory Board Member, effective as of 4 July 2023.

On 31 July 2023, the Company received Ms. Aleksandra Agatowska's resignation from the position of an ENEA S.A. Supervisory Board Member, effective as of 31 July 2023.

Apart from the above changes during the reporting period and until the publication date of the report for H1 2023, there were no other changes in the composition of the Company's Supervisory Board.

In accordance with the provisions of the Rules and Regulations of the Supervisory Board, the following standing committees operate within the Supervisory Board: the Audit Committee, the Nominations and Remuneration Committee and the Strategy and Investment Committee.

As at the day of publication of this report, the Audit Committee operates in the following composition:

Audit Committee	
Name	**Position**
Tomasz Lis [1) 2) 3)]	**Chairman**
Aneta Kordowska [1) 2)]	Member
Mariusz Damasiewicz [1) 3)]	Member
Mariusz Pliszka [1) 3)]	Member
Roman Stryjski [1)]	Member

[1)] An independent member within the meaning of Article 129 sec. 3 of the Act of 11 May 2017 on Certified Auditors and Public Supervision and within the meaning of corporate governance principles included in the Best Practice for WSE Listed Companies 2021.
[2)] Member with knowledge and skills in accounting or audit of financial statements, based on his/her education and previous professional experience.
[3)] Member with knowledge and skills in the industry in which the issuer operates, based on his/her education and previous professional experience.

As at the publication date of this report, the Nominations and Remuneration Committee is composed of:

Nominations and Remuneration Committee	
Name	**Position**
Roman Stryjski [1)]	**Chairman**
Łukasz Ciołko	Member
Paweł Łącki	Member
Mariusz Romańczuk [1)]	Member

[1)] An independent member within the meaning of the corporate governance principles included in the Best Practice for WSE Listed Companies 2021.

As at the publication date of this report, the Strategy and Investment Committee is composed of:

Strategy and Investment Committee	
Name	**Position**
Tomasz Lis	**Chairman**
Mariusz Damasiewicz	Member
Łukasz Ciołko	Member
Mariusz Pliszka	Member
Mariusz Romańczuk	Member

7.3. Number of shares and rights to ENEA S.A. shares held by members of the Management Board and Supervisory Board

Name	Position	Number of ENEA S.A. shares as at 24 May 2023	Number of ENEA S.A. shares as at 13 September 2023
Mariusz Pliszka	Supervisory Board Member	3,880	3,880

As at the date of this report, other members of the Management Board and Supervisory Board hold no shares in ENEA S.A. As at the date of this report, no members of the Management Board or Supervisory Board hold any rights to shares in ENEA S.A. As at the date of this report, no members of the Management Board or Supervisory Board hold any rights to shares in any ENEA S.A. subsidiaries.

8. Other information relevant to evaluation of the issuer's standing

8.1. Regulatory environment

The business of ENEA S.A. and its subsidiaries is conducted in an environment that is subject to special legal regulation, both at the national level and at European Union level (regulated economic activity). A number of legal regulations applicable to utility companies have been enacted based on decisions of a political nature. For this reason, these regulations are subject to frequent amendments. Specifically these days, the dynamically evolving regulatory and legislative reality in the Polish and European law in the energy sector, which results, among others, from political decisions made also in response to the socioeconomic situation arising from the Russian Federation's invasion of Ukraine, including the energy crisis, and the European Commission's wide-ranging activities aiming to reduce greenhouse gas emissions and achieve climate neutrality of Europe by 2050, makes the determination of certain effects for the pursued business activity difficult at times. This notwithstanding, ENEA S.A. and its subsidiaries ("ENEA Group") are subject to legal regulation in the field of tax system, competition and consumer protection, employee law and environmental protection. It cannot be ruled out that changes in these areas arising from specific legislation or individual interpretations related to significant areas of the ENEA Group's business may become a source of potential risks for this economic activity.

8.1.1. European Union's internal electricity market

The objective behind the EU's internal market in the energy sector is to establish an efficient market characterized by fair availability, high standard of consumer protection and an appropriate level of interconnections and electricity generating capacities. The main means through which the European Union is to enable the achievement of the aforementioned objective is the legislation intending to remove the obstacles and barriers to trade, align tax and pricing policies as well as standardize norms and standards, including ones in the area of safety and natural environment.

8.1.1.1. Financial markets (EMIR Refit)

The EMIR Regulation (European Market Infrastructure Regulation) is Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, along with Commission Delegated Regulations (EU) 148/2013 and 149/2013 of 19 December 2012, which entered into force on 16 August 2012, then on 17 June 2019 was amended by Regulation 2019/834 of 20 May 2019 (EMIR Refit) simplifying certain obligations especially for entities with low transaction values in financial instruments. The regulation introduced requirements for the reporting of derivative transactions to "trade repositories", risk mitigation techniques, in certain cases the obligation for central clearing of transactions by "Central Counterparties" (CCPs)[3)] and laid down sanctions for infringements of its provisions.
On 29 April 2024 (after an 18-month grace period) a technically new reporting manner will start to prevail based on the Regulations, published on 7 October 2022, amending or supplementing the Regulatory Technical Standards as defined in previous Regulations. In the grace period, any transactions and items not settled by 29 April 2024 will have to be updated to the newest standards within 180 days.

8.1.1.2. REMIT

REMIT is Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency. In accordance with this regulation, the electricity market is subject to specific restrictive rules governing the publication and disclosure of information that may affect the prices of energy products on the wholesale energy market, including an absolute prohibition of any market manipulation.

REMIT requires that every market participant be registered in the national register. Any market participant is obliged to report data on the transactions concluded on wholesale energy markets, including any orders placed.

REMIT also imposes the obligation to make public, by way of a formalized announcement, the so-called inside information concerning the capacity and use of facilities for production, storage, consumption or transmission of electricity, including concerning planned or unplanned unavailability of these facilities. REMIT prohibits manipulation or attempts to manipulate the market and prohibits the use of inside information for commercial activities. REMIT equips regulatory authorities with powers to conduct investigations, enforce the provisions of the regulation and establish penalties for failure to fulfill the obligations.

8.1.1.3. European EU ETS/MSR/CBAM scheme

The beginning of 2021 marked the launch of Phase IV of the EU ETS. The changes introduced as part of the EU ETS (e.g. Directive 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 as regards the establishment of the Modernization Fund and Decision 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the

[3)] *A Central Counterparty (CCP) means a legal person holding an authorization from the ESMA (European Securities and Markets Authority) that interposes itself between the counterparties to the contracts for Derivatives traded on one or more financial markets, becoming the buyer to every seller and the seller to every buyer.*

establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC) will significantly affect the framework for the operation of entities covered by the EU ETS in Phase IV, that is in 2021–2030. On 14 July 2021, the European Commission published “Fit for 55”, a legislative package which includes a directive regulating the linear reduction factor and the market stability reserve, which are the most important mechanisms within the EU ETS, contributing to a decreased supply in the EU ETS market. After the change, the value of the linear reduction factor has been 2.2% since 2021.

On 16 May 2023, in the Official Journal of EU (L 130), legislative amendments within the “Fit for 55” package were published, i.e.:

1. Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023, amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Union and Decision (EU) 2015/1814 on the establishment and operation of a market stability reserve for the EU Emissions Trading Scheme (EU ETS and MSR), which entered into force on 5 June 2023;
2. Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023, establishing a Carbon Border Adjustment Mechanism (CBAM).

The revision of the EU ETS Directive and the MSR Decision increased the linear reduction factor (LRF - the annual reduction in the number of emission allowances available in the system) from the present 2.2% through 4.3% from 2024 and 4.4% from 2028. The increase in the LRF factor from 2.2% to 4.3% means that each year from 2024 to 2028 about 86 million EUAs will be deducted from the total EU ETS allowance pool instead of 43 million EUAs. At the same time, from 2024, the number of allowances across the Union is increased by 78.4 million allowances for maritime shipping. In addition, there is provision for one-off ‘rebasing’ of the cap, or reducing the number of allowances in the EU ETS once. In 2024, the number of allowances in the whole European Union will be reduced by 90 million. In 2026, the number of allowances in the whole European Union will be lower by 27 million. The reduction amount is expected to reflect a reduction in emissions on a linear basis from 2021 with a new LRF of 4.3%. Until the end of 2030, a doubled intake rate (up to 24%) was retained, i.e. the rate of transfer/placement of surplus allowances in the Market Stability Reserve (MSR) (the intake rate was to fall to 12% from 2023 onwards)

At the same time, amendments were introduced in the mechanism of allocating free allowances in accordance with the following principles:

a) with regard to the modernization of the energy sector – the Member States concerned may allocate temporary free allowances to installations only for investments completed by 31 December 2024,
b) allocation only to support breakthrough/innovative technologies;
c) in a Member State where, in 2014-2018, the average share of emissions from heating networks across the Union divided by the Member State's share of the Union's total GDP is greater than five, the heating networks shall be allocated additional free allowances of 30%, provided that investments corresponding to the value of this additional free allowance allocation are made in order to significantly reduce emissions before 2030 in accordance with climate neutrality plans. From 1 May 2024, operators of a heating network will prepare a plan for achieving climate neutrality for the systems for which they apply for allocation of free allowances,
d) no free allowances will be allocated to the systems which discontinued operation. Installations whose greenhouse gas emissions permit has expired or been revoked and those which cannot operate or resume operations for technical reasons are considered as installations which have ceased operations.

Auction income generated from allowance trading is to be used in total for climate objectives as long as the income is not part of the EU budget. At the same time, 2.5% of the total number of allowances in 2024-2030 will be sold in auctions for the Modernization Fund (in order to finance energy climate transition of the Member States whose GDP per resident is under 75% of the EU average in 2016–2018). In addition, at least 80% of the income from 2% of the total number of allowances auctioned in 2021-2030 will be transferred to establish a fund for improving energy efficiency and modernizing energy systems using allowances.

Accordingly, the rules of the modernization fund have been adjusted – investments should be in line with the goals of the European Green Deal and European climate law: eliminating support for investments related to all fossil fuels, not just solid fossil fuels; increasing the percentage of the fund that must be allocated to priority investments; increasing the emphasis on renewable energy sources and energy efficiency investments in the transport, construction, waste and agricultural sectors; and supporting households to address the problem of energy poverty.

An additional supporting instrument was also introduced (carbon contracts for differences) from the innovation fund for climate-friendly investments, and the innovation fund itself was increased. A carbon contract for difference, or CfD, means a contract between the Commission and a producer of a low- or no-carbon product selected through a competitive bidding process, such as an auction, and under which the producer receives support from the Innovation Fund covering the difference between the winning price (also called the effective price) and a reference price derived from the average allowance price.

The EU ETS was extended to include new sectors: road transport and construction (for commercial buildings) starting in 2027 and maritime shipping (gradual imposition of the obligation to surrender allowances by shipping companies: 40% for verified emissions from 2024, 70% – from 2025 and 100% – from 2026). Non-CO_2 emissions (methane and N_2O) will be subject to a monitoring, reporting and verification system from 2024, and to the EU ETS from 2026. The Commission is to assess the possibility of including the municipal waste incineration sector in the EU ETS (by July 2026) with a view to including it from 2028, and to assess the potential need to allow Member States to opt out of such an inclusion (taking into account the importance of all sectors contributing to reducing emissions). EU ETS was also extended to cover maritime shipping and aviation.

With regard to the Market Stability Reserve (MSR), an intake rate was additionally introduced – to apply a buffer for placing allowances in the Market Stability Reserve if the Total Number of Allowances in Circulation (TNAC) is between 833 million and 1,096 million. In such a case, the intake will be the difference between the TNAC and the threshold of 833 million. At the same time, a cancellation mechanism was introduced, starting from 2023, surplus allowances placed in the Market Stability Reserve over the volume threshold for allowances that were to be auctioned last year will become invalid. The volume of allowances which were to be auctioned in the previous year may, however, depend on various factors, such as the threshold and the operation of the Market Stability Reserve itself. To ensure a higher predictability of the volume of allowances placed in the reserve after being cancelled, it is proposed to limit the number of allowances held in the reserve to 400 million. That number is also to correspond to the bottom threshold of the TNAC below which allowances are released from the Market Stability Reserve.

According to the European Commission's publication of 15 May 2023 on the total number of allowances in circulation in 2022 for the purposes of the Market Stability Reserve under the EU emission allowance trading scheme established by Directive 2003/87/EC:

- as at 31 December 2022, there were 3,001,222,787 allowances in the Market Stability Reserve,
- from 1 January 2023, 2,515,135,787 of these allowances became invalid. The remaining resources in the reserve include 486,087,000 allowances, which corresponds to the volume of allowances auctioned in 2022,
- as at 31 December 2022, the number of allowances in circulation amounted to 1,134,794,738.

The increased demand for EUAs is largely affected by announced and scheduled legislative initiatives of European Union institutions pursuing the objectives of the so called "European Green Deal", announced in 2019, including the draft amendment of the EU ETS Directive 2003/87/EC and Decision 2015/1814 on the Market Stability Reserve (specific information about the package is provided in Section 8.1.1.5.).

In the above context, there were temporary increases in April 2023 due to the planned publication of information on the surplus of allowances in the market; nevertheless, a decline in EU ETS quotations was recorded both in April and May. The trend did not continue and an increase in the stock market price of the product was observed in June.

Under the CBAM regulation, the assumption is that it should be a system that runs in parallel with the EU Emissions Trading Scheme (EU ETS) – it is to mirror and complement its operation for imported goods. It will gradually replace the existing EU mechanisms for coping with the risk of carbon leakage, in particular the allocation of free allowances under the EU ETS. The CBAM structure aims to bring about a gradual phasing out of free emission allowances and gradual introduction of the Carbon Border Adjustment Mechanism (CBAM). The CBAM coefficient should be 100% for the period between the entry into force of the Regulation and the end of 2025, and should be subject to the application of the provisions referred to in Article 36(2)(b) of the Regulation, namely 97.5% in 2026, 95% in 2027, 90% in 2028, 77.5% in 2029, 51.5% in 2030, 39% in 2031, 26.5% in 2032 and 14% in 2033. From 2034 onward, the CBAM will no longer be applicable.

The operation of the CBAM mechanism is to be based on a "CBAM certificate" – a certificate in electronic format equivalent to one ton of carbon emission equivalent embedded in imported goods.

It will be applicable, at the first stage, to goods produced in the high-emission sectors: iron and steel, cement, fertilizers, aluminum, electricity and hydrogen – as referred to in Annex I of the CBAM Regulation. The calculation of the charge will be based on 'embedded emissions' and verified by an accredited verifier (embedded emissions mean direct emissions released during the production of goods and indirect emissions from the generation of electricity consumed during production processes, which are calculated using the methods set out in the Regulation). Importation of goods into the customs territory of the Union shall only be made by an authorized CBAM declarant. An importer established in a Member State shall, prior to the importation of goods into the customs territory of the Union, apply for the status of authorized CBAM declarant (hereinafter referred to as 'application for authorization'). An application for authorization shall be made via the CBAM registry. An authorized CBAM declarant shall keep records of the documents required to demonstrate that the declared embedded emissions were subject to an emission fee in the country of origin of the goods, which was actually paid. In order to take into account an emission fee paid in the country of origin for the declared embedded emissions, an authorized CBAM declarant may declare in its CBAM declaration a reduction in the number of CBAM certificates to be surrendered for redemption. Such a reduction may only be reported if the emission fee has actually been paid in the country of origin.

By 31 May each year, and for the first time in 2027 for 2026, each authorized CBAM declarant submits via the CBAM registry a CBAM declaration for the previous calendar year. Sales of CBAM certificates by a Member State to 'authorized CBAM declarants' seated in that Member State will be performed on a common central platform. The Commission shall calculate the price of CBAM certificates as the average of the closing prices of EU ETS allowances on the auction platform in accordance with the procedures defined in Regulation (EU) No. 1031/2010 for each calendar week. By 31 May each year, and for the first time in 2027 for 2026, an authorized CBAM declarant shall submit via the CBAM registry CBAM certificates in the number corresponding to declared embedded emissions. The Commission shall remove CBAM certificates surrendered for redemption from the CBAM registry. An authorized CBAM declarant shall ensure that the required number of CBAM certificates remains on their account in the CBAM registry. On request by an authorized CBAM declarant, the Member State where the declarant is seated shall re-purchase the excess of CBAM certificates remaining on the declarant's account in the CBAM registry after the certificates have been surrendered. The Commission shall re-purchase surplus CBAM certificates via a common central platform. The price for re-purchasing each CBAM certificate is equal to the price paid by the authorized CBAM declarant for a given certificate at the time of purchase.

Every year on 1 July, the Commission shall cancel CBAM certificates purchased in the year before the previous calendar year which remain in the CBAM registry on the account of an authorized CBAM declarant. These CBAM certificates are cancelled without any compensation.

In principle, the mechanism will begin to operate on 1 October 2023. Until the end of 2025, CBAM will be applied only in the form of reporting obligations. Then, CBAM will be implemented gradually and in parallel with the withdrawal of free EU ETS allowances.

8.1.1.4. Activities aiming to liberalize gas and electricity markets

The initial Directives on liberalization (the first energy package) were adopted in 1996 (with respect to electricity) and 1998 (with respect to gas), whereas the deadlines for their transposition to the Member States' legal systems were set for 1998 (electricity) and 2000 (gas).

The second energy package was adopted in 2003 and the Directives forming it were to be transposed to the Member States' law by 2004, yet some laws did not enter into force until 2007. From then on, industrial consumers and Member States were able to freely choose their gas and electricity suppliers from among a larger group of competitors.

The third energy package was adopted in April 2009. The extent of its regulations was supposed to further the liberalization of internal electricity and gas markets. It amended the second package and was the foundation of the internal energy market implementation process.

In June 2019, the fourth energy package was adopted. It was composed of one Directive (Directive 2019/944/EU on electricity) and three Regulations (Regulation 2019/943/EU on electricity, Regulation 2019/941/EU on risk-preparedness and Regulation 2019/942/EU establishing a European Union Agency for the Cooperation of Energy Regulators). That package introduced new regulations to satisfy the needs related to energy from renewable sources and attract investments in that area. It provided for incentives for consumers and introduced a new limit below which power plants are eligible for grants under the generating capacity mechanism. Additionally, it imposed the obligation to prepare emergency plans in case of power crises on Member States and enhanced the powers of the Agency for the Cooperation of Energy Regulators (ACER) in the area of cross-border regulatory cooperation where the risk of national and regional fragmentation emerges.

The fifth energy package "Fit for 55" was published on 14 July 2021 with a view to adapt the EU's energy targets to the new European climate targets for 2030 and 2050.

Due to Russia's invasion of Ukraine in February 2022 and after Russia completely cut off its supply of gas to Europe, which resulted in an energy crisis, the EU decided to take actions for discontinuing the import of all Russian fossil fuels as soon as possible, introducing measures to facilitate energy savings, diversifying the import of energy, adopting structural measures in electricity and gas markets and expediting the development of renewable energy sources. The EU leaders, who gathered together at the European Council's meeting, agreed that it was necessary to impose further sanctions, which were to include the energy sector, on Russia already on 24 February 2022. On 8 April 2022, the EU Council adopted the so-called 5th package of sanctions, which covered, among others, prohibition of purchase, import or transfer of coal and other solid fossil fuels to the EU if they come from Russia or are exported from Russia. The said prohibition of coal imports became effective as of August 2022. Until the imposition of the sanctions, Russia had exported approx. 20% of its bituminous coal output to the EU, thus earning around EUR 8 billion per annum. On 3 June 2022, the EU Council adopted the so-called 6th package of sanctions, which covered, among others, a ban on purchase, import or transfer of seaborne crude oil and certain petroleum products from Russia to the EU. That ban became effective as of 5 December 2022 in the case of crude oil and as of 5 February 2023 in the case of refined petroleum products. A temporary exemption from the said prohibition was granted for crude oil imported by pipeline to the EU countries which, due to their geographic location, are particularly dependent on supplies from Russia. At the end of February 2023, as part of the so-called 10th package of sanctions, the EU put a ban also on provision of gas storage capacity in the EU for gas coming from Russia. The EU sanctions did not cover natural gas from Russia, but most EU countries stopped buying fuel supplied to Europe by the Russian Gazprom in 2022. On one hand, it was an effect of the political decisions intending to diversify gas supplies to the EU and become independent of Russian gas, and on the other hand, it resulted from the measures taken by Gazprom, which terminated the existing contracts unilaterally, thus trying to force its customers to pay in rubles. The situation described above continued into 2023.

8.1.1.5. "Fit for 55"

In March 2020, the Commission presented a proposal on the European Climate Law for reaching net zero emissions in Europe by 2050. With the Climate Target Plan, the Commission proposed that the EU's target to reduce greenhouse gas emissions be raised to at least 55% below 1990 levels by 2030, which is a considerable increase relative to the present target of 40%. The Climate Target Plan outlined also the actions required in all sectors of the economy, including changes in the key legislative instruments serving the purpose of reaching the more ambitious target and fulfilling the obligation specified in the communication on the European Green Deal to propose a comprehensive plan to raise the European Union's 2030 target to 55% in a responsible manner. In order to reach those targets, the European Commission's work program for 2021 announced the "Fit for 55" package with the aim to reduce greenhouse gas emissions by at least 55% by 2030 and achieve Europe's climate neutrality by 2050.

The package will include among others the following documents and propose the following changes:

– revision of the Regulation of the European Parliament and of the Council on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942

- On 15 December 2021, the European Commission submitted a proposal to amend the Regulation of the European Parliament and of the Council on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942;
- On 15 December 2022, the Council's general approach was adopted, calling for:
  - prohibition, starting on 1 January 2025, of flaring, with a destruction and removal efficiency below 98%, of methane from methane drainage stations, except in the event of an emergency, malfunction or unavoidable and absolutely necessary maintenance;
  - starting on 1 January 2027, prohibition of the release of methane into the atmosphere from ventilation shafts in coal mines, other than coking coal mines, emitting more than 5 tons of methane per kiloton of extracted coal.
  - starting on 1 January 2031, it is prohibited to release methane into the atmosphere from ventilation shafts in coal mines, other than coking coal mines, emitting more than 3 tons of methane per kiloton of extracted coal. These thresholds are applicable on an annual basis per mine.
- Moreover:
  - Member States should establish their own mitigation plan, taking into consideration those constraints and the technical feasibility of AMM mitigation (as geological constraints and environmental considerations prevent a one-size-fits-all approach to mitigate methane emissions from abandoned underground coal mines);
  - each Member State is expected to be required to designate at least one competent authority to supervise operators (required to cooperate with this authority) in terms of the effective fulfillment of obligations imposed on them by the Regulation, including to the following extent: continuous measurement and quantification of methane emissions from ventilation shafts in underground coal mines; continuous measurement of methane released into the atmosphere and flared in methane drainage stations, and the use of specific emission coefficients for opencast coal mines.

- revision of Directive 2018/2001/EU on the promotion of the use of energy from renewable sources:

- modification of the definition of renewable fuel of non-biological origin and the definition of standard value, as well as addition of new definitions, such as: renewable fuel, market area, smart metering system, charging point, market actors, electricity market, battery for home use, electrical vehicle battery, industrial battery, battery health, its charging level, power setpoint, smart charging, regulatory authority, bi-directional charging, regular power charging point, industry;
- revision of the RES share target to 45%[4)];
- increased annual RES consumption target in the district heating and cooling industry, by 1.1% until 2030;
- new EU indicative targets, according to which the share of renewable energy in the final energy consumption in buildings should reach 49% by 2030;
- tightening of the existing sustainability criteria for agricultural biomass production, also to include forest biomass;
- application of greenhouse gas reduction thresholds in electricity production, heating and cooling from biomass fuels also for existing installations, i.e. 70% by the end of 2025 and 80% from the beginning of 2026;
- obligation imposed on Member States to jointly determine, and agree to cooperate on, the amount of energy produced from marine renewable sources, which should be produced in each sea basin by 2050, and to set intermediate stages for 2030 and 2040;
- tightening of the terms of participation of biomass-fired installations in support systems, also through the proposed hierarchy of handling biomass;
- introduction, starting in 2027, of a rule not to support electricity production from forest biomass in electricity-only generation facilities.

On 9 November 2022, the Commission proposed another amendment (RED IV) to the Regulation of the Council, which sets the framework for expediting the implementation of energy from renewable sources. In accordance with the proposal, the power plants using renewable energy sources will be considered as being an overriding public interest, which would enable acceleration of the new procedures for issuing permits and allow specific exemptions from the EU legislation on environmental protection.

On 16 June 2023, COREPER (the Committee of Permanent Representatives of Governments of Member States in the European Union) approved the agreement between the Council and the European Parliament on the Directive amending the Directive on the promotion of the use of energy from renewable sources (known as the "revision of the RED" or "REDIII"), which is part of the "Fit for 55" legislative package published by the European Commission on 14 July 2021. The following was agreed:

[4)] Over 20% of the energy consumed in the EU comes from RES. The share has more than doubled since 2004. The present EU target is 32% by 2030, but it is being adjusted upward along with the updates of the objectives concerning buildings, heating and cooling as well as industry. In September 2022, the Parliament demanded that the 2030 target be raised to 45%.

- increase in the share of renewable energy in the EU's total energy consumption to 42.5%. At the same time, an indicative objective was proposed for Member States to increase the share of energy from renewable sources in their gross final energy consumption in the Union to 45% in 2030. In addition, Member States set indicative targets for innovative renewable energy technologies at the level of at least 5% of new installed renewable energy capacity until 2030;
- indicative target for the share of renewable energy in buildings of at least 49% by 2030. The agreement provides for an increase in binding renewable energy targets for heating and cooling at a national level: by at least 0.8 percentage point as the annual average calculated for 2021-2025 and by at least 1.1 percentage point as the annual average calculated for 2026-2030. The minimum annual average indicator applicable to all Member States will be supplemented by indicative additional targets calculated individually for each Member State;
- tightening the criteria for the sustainable consumption of biomass for energy generation purposes (forest biomass in particular) to reduce the risk of unsustainable bioenergy generation. At the same time, the principle of cascading biomass consumption will be introduced;
- binding sub-target: advanced biofuels (usually derived from non-food commodities) and renewable fuels of non-biological origin (mostly renewable hydrogen and hydrogen-based synthetic fuels) to generate 5.5% of the renewable energy to be supplied to the transport sector. Under this target, renewable fuels of non-biological origin are expected to generate at least 1% of the renewable energy supplied to the transport sector in 2030;
- option for Member States to select: a 14.5% target for reducing the intensity of greenhouse gas emissions in transport using RES or a 29% target for the share of RES in the final energy consumption in the transport sector in 2030;
- annual increase in the renewable energy use in the industry by at least 1.6 percentage point as the annual average for the periods 2021-2025 and 2026-2030 and setting a binding target according to which at least 42% of hydrogen used in the industry will come from renewable fuels of non-biological origin by 2030 and the share will be 60% by 2035. The agreement introduces the possibility for Member States to discount the contribution of RFNBOs in industry use by 20% in 2030 under two conditions: if the Member State is well on its way to achieve its national contribution to the binding overall EU target defined in a directive which is at least equivalent to their expected national contribution; if the share of hydrogen from fossil fuels consumed in the Member State is not more 23% in 2030 and 20% in 2035.
- accelerated permitting procedure. Member States will design renewables acceleration areas where renewable energy projects would undergo simplified and fast permit-granting process (for areas indicated by a member state, it will be 12 months, for other areas, it will be 24 months);
- TSOs and DSOs will be required to digitally provide information on the share of renewable electricity and the content of greenhouse gas emissions in the electricity supplied in each market area, with the greatest possible accuracy in time intervals corresponding to the frequency of market settlements, which may not be longer than one hour, along with forecasts, if available;
- obligation of Member States to ensure issuing guarantees of origin in response to a request from a manufacturer of energy from renewable sources, including gaseous renewable fuels of non-biological origin, such as hydrogen;
- obligation of Member States to promote testing innovative renewable energy technologies to generate, make available and store renewable energy through pilot projects in the real environment, for a limited time, in accordance with applicable EU laws and using appropriate security measures to guarantee safe operation of the energy system and avoid non-proportionate impact on the functioning of the internal market under the supervision of a relevant authority;
- obligation of member states to perform coordinated mapping within 18 months of the entry into force of the amended directive to deploy renewable energy in their territories. The mapping should involve identification of the national potential and available land surface, deep groundwater, sea or inland water needed for installing systems for producing energy from renewable sources and the related infrastructure, such as grid and storage facilities, including thermal storage, which are required to achieve at least the national contribution to the renewable energy target for 2030. Such areas, including existing plants and cooperation mechanisms must be proportionate to the estimated trajectories and the total planned installed capacity, broken down by renewable energy technologies defined in the national plans for energy and climate;
- within 27 months of the entry into force of the amended directive, Member States must ensure that competent authorities adopt a plan or plans defining, as a sub-set of the areas referred to in Article 15b, areas for accelerating changes related to renewable energy sources for at least one type of renewable energy sources. To do this, member states may exclude combustion of biomass and hydro-electric power plants.

- revision of Directive 2012/27/EU on energy efficiency (EED):

- Member States should set indicative contributions regarding their final and primary energy consumption, in order to achieve energy efficiency;
- a change of the definition of efficient heating and cooling systems by introducing progressively changeable minimum conditions that an installation must satisfy to be classified as efficient;
- Member States shall jointly ensure a reduction in final energy consumption by at least 11.7% in 2030 compared to energy consumption forecasts for 2030 prepared in 2020. This translates into a cap on final energy consumption in the EU at the

level of 763 million tons of crude oil equivalent and 993 million tons of crude oil equivalent on primary consumption. Member States shall achieve cumulative end-use energy savings at least equivalent to 1 (b) new savings each year from 1 January 2021 to 31 December 2030 of (i) 0.8% of annual final energy consumption from 1 January 2021 to 31 December 2023, averaged over the most recent three-year period prior to 1 January 2019; (ii) 1.3% of annual final energy consumption from 1 January 2024 to 31 December 2025, averaged over the most recent three-year period prior to 1 January 2019; (iii) 1.5% of annual final energy consumption from 1 January 2026 to 31 December 2027, averaged over the most recent three-year period prior to 1 January 2019; (iv) 1.9 of annual final energy consumption from 1 January 2028 to 31 December 2030, averaged over the most recent three-year period prior to 1 January 2019 (except for Cyprus and Malta – 0.24%), but they will be allowed to transfer no more than 10% of surplus savings to the next period;

- the public sector was obliged to reduce energy consumption by 1.7% per annum or at least 1.9% per annum if excluding public transport or armed forces;
- stipulation that at least 3% of the total heated or cooled floor area of buildings owned by public institutions should be renovated annually, with the goal of at least converting them to near-zero energy buildings;
- stipulating that construction supplies, services and works awarded under public procurement contracts should have very good energy parameters;
- implementation of an energy management system for enterprises whose average annual energy consumption in the last three years, for all energy carriers, exceeded 85 TJ or having these enterprises subjected to an energy audit;
- introduction of seller's obligations towards final consumers and end users regarding the content of the contract and the rules governing its performance;
- a provision on transparency of energy consumption by data processing centers. Starting from 2024, they would be supposed to publish annual information on their energy consumption. The Commission is to collect the information in a public EU database.

On 14 September 2022, after the first reading in the European Parliament, the draft was forwarded to the relevant Commission. On 25 July 2023, the Council approved the European Commission's proposal in its first reading. The document is awaiting publication in the Official Journal.

On 14 March 2023, the European Parliament approved its position on the Energy Performance of Buildings Directive (EPBD). In accordance with the approach adopted by the Parliament as a result of the plenary vote, residential buildings must achieve at least energy class E by 2030 and at least energy class D by 2033. As regards non-residential and public buildings, they will need to achieve the same energy classes by 2027 and 2030, respectively. Moreover, all new buildings constructed in the EU will have to be emission neutral starting from 2028. The next step scheduled for the EPBD are the trilogues (a coalition of over 15 member states has signaled an opposition push for mandatory renovations of buildings).

- revision of the Directive on taxation of energy products and electricity (ETD):

- expansion of the catalog of energy products and setting minimum taxation for each product;
- possibility of applying reduced tax rates (as required by the directive) for RES electricity; electricity will have the lowest tax rates, regardless of its purpose;
- possibility of applying reduced tax rates for electricity produced in cogeneration, meeting the definition of high-efficiency cogeneration under the EED. The amendments to the directive do not provide an option of facultatively abolishing excise tax for co-generation. The directive does not offer a sufficiently precise stipulation for co-generation;
- a general shift in how energy sources are viewed, in order to discourage the use of fossil fuels and encourage the use of alternative sources – introduction of the minimum tax rates for individual energy products: the cleaner the energy source, the lower the taxation;
- reduction of all kinds of exemptions and discounts that lead to fragmentation of the internal market;
- an option to apply the minimum tax rate for heating fuels to vulnerable households for a transition period of 10 years;
- the proposal of minimum tax rates for heating fuels is as follows: for natural gas and non-sustainable biogas: initially EUR 0.60 per GJ in 2023 and ultimately EUR 0.90 per GJ in 2033; for coal EUR 0.90 per GJ from 2023; for sustainable biogas: EUR 0.45 per GJ from 2023, for unsustainable forest biomass EUR 0.90 per GJ from 2023; and for sustainable forest biomass EUR 0.45 per GJ from 2023;
- the proposal of the minimum tax rate for electricity is EUR 0.15 per GJ from 2023;
- harmonization with the new reduction targets of the Regulation on the inclusion of greenhouse gas emissions and removals resulting from activities related to land use, land use change and forestry (LULUCF)[5)].

The draft is awaiting the position of the relevant commission.

[5)] *Political agreement in the matter of increasing the contribution of the Land Use, Land-Use Change and Forestry sector.*

- revision of the Regulation on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement:

- it proposes stricter emission reduction targets for each Member State as regards buildings, road transport and domestic maritime transport, agriculture, waste and small industries.

- Regulation setting CO_2 emission performance standards for passenger cars and light commercial vehicles

- 15 May 2023 saw the entry into force of the Regulation amending Regulation (EU) 2019/631 as regards the CO_2 emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's more ambitious climate goals. The new legislation lays down the following targets: reduction of CO_2 emissions by 55% for new passenger cars and 50% for new trucks between 2030 and 2034 compared to 2021 levels. 100% reduction in CO_2 emissions for both new passenger cars and new trucks starting from 2035;
- from 2025 until the end of 2029, a regulatory incentive mechanism for zero and low-emission vehicles (ZLEV) will be introduced.

Moreover, the Regulation contains other provisions, calling for:

- reduction of the limit of credits allocated to manufacturers for environmentally friendly innovations that verifiably decrease road CO_2 emissions to a maximum of 4 g/km annually between 2030 and the end of 2034 (currently: 7 g/km annually);
- common EU methodology for assessing the full life-cycle CO2 emissions and fuel and energy consumption by cars and trucks entering the EU market, to be developed by the Commission by 2025.

The Regulation retains a derogation for small manufacturers until the end of 2035.

- Regulation on the inclusion of greenhouse gas emissions and removals resulting from activities related to land use, land use change and forestry (LULUCF):

- on 16 May 2023, the Council approved the regulation aimed to minimize the risk of deforestation and degradation of forests which products introduced to the EU market or exported from the EU are connected with. The Regulation sets a general EU objective for removing carbon dioxide by natural sinks corresponding to 310 million tons of CO_2 emissions by 2030. The EU should strive for climate neutrality in land use, forestry and agriculture sectors by 2035, which includes also agricultural non-CO_2 emissions.

- revision of the Directive on alternative fuels infrastructure development:

- On 25 July 2023, the Council of the European Union approved, in first reading, the Commission's proposal on the Regulation of the European Parliament and the Council on alternative fuels infrastructure development and repealing Directive 2014/94/EU;
- it proposes that the requirement to increase the recharging capacities pro rata to the sales of zero-emission cars and the requirement to install recharging and refueling points on major highways at regular intervals: every 60 km for electricity recharging and every 150 km for hydrogen refueling be imposed on Member States.

8.1.1.6. EU Taxonomy

The so-called EU Taxonomy is a tool, through which private investments should become the instrument for implementing the assumptions of the European Green Deal.

On 15 July 2022, the Official Journal of the European Union published the Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.

The Regulation came into effect on 4 August 2022 and is to be applied as of 1 January 2023.

The regulation envisages the following amendments to the EU Taxonomy:

- establishing technical screening criteria for activities carried out in the natural gas and nuclear energy sectors which must be satisfied for the project to be deemed sustainable;
- emphasizing the transitional character of accepting electricity generation or heat/cooling production or cogeneration from fossil gas as environmentally sustainable activities;
- non-financial companies conducting activities such as: electricity generation, high-efficiency cogeneration of electricity and heat/cooling and production of heat/cooling from fossil gases, as of 1 January 2023 will disclose information on which parts of their activities in the above sectors are consistent or inconsistent with the assumptions of the "Taxonomy."

The regulation also contains a declaration that RES will play a crucial role in the implementation of the EU's climate and environmental goals and a postulate to increase investments in RES.

8.1.1.7. REPowerEU

To address the difficulties and disruption on the global energy market caused by Russia's attack on Ukraine, on 18 May 2022 the European Commission presented the REPowerEU plan.

REPowerEU is the European Commission's plan to rapidly reduce Europe's dependence on Russian fossil fuels early before 2030 in connection with the Russian invasion of Ukraine. REPowerEU is based on the assumption of the Fit For 55 package and it does not affect the key assumptions of achieving reduction of greenhouse gas emissions by at least 55% by 2030 and climate neutrality by 2050. The measures envisaged in REPowerEU may provide a response to that ambitious goal. These measures include: energy savings, diversification of energy supplies, and accelerated roll-out of renewable energy to replace fossil fuels in homes, industry and power generation. In the area of energy savings, REPowerEU assumes, among others: an increase from 9% to 13% of the binding Energy Efficiency Target set in the Fit for 55 package. In turn, with regard to the accelerated roll-out of renewable energy, the plan assumes, among others: an increase of the 2030 target for renewables from 40% to 45% of total energy production across EU; a phased-in legal obligation to install solar panels on rooftops – starting in 2026, photovoltaic systems are to be mandatory on new public and commercial buildings and new residential buildings with surfaces above 250 m^2; a shift away from natural gas in favor of accelerated development of clean hydrogen and biomethane; doubling of the rate of deployment of heat pumps, and measures to integrate geothermal and solar thermal energy in modernized district and communal heating systems.

On 8 October 2022, the Council Regulation (EU) on an emergency intervention to address high energy prices came into effect. The regulation assumes that common measures be introduced to reduce demand for electricity and to collect surplus revenues of the energy sector and pass them on to end users. A voluntary and general goal of reducing gross electricity consumption by 10% and a mandatory goal of reducing electricity consumption by 5% during peak hours. The Member States are required to identify peak hours corresponding in total to at least 10% of all hours in the period between 1 December 2022 and 31 March 2023 in order to reduce their total monthly gross electricity consumption by 10% compared to the average gross electricity consumption in the corresponding months of the reference period. The states will have the discretion to choose the appropriate measures to achieve their energy consumption with a view of achieving both goals in this period. The assumption underlying the regulation is to set a cap on market revenues at 180 EUR per MWh for electricity producers, including intermediaries that use "inframarginal technologies" for energy production, such as renewables, nuclear and lignite. Setting a limit at this level is to ensure profitability of the operators and to make sure they do not unduly prevent investments in renewables. The regulation also sets forth the rules for introducing a temporary solidarity tax on profits of companies with activities in the crude petroleum, natural gas, coal and refinery sectors. The contribution is to be calculated on the basis of taxable profits calculated in accordance with the national tax regulations in the fiscal year starting in 2022 or 2023 that exceed 20% of the average annual taxable profits since 2018. The solidarity contribution is to be applied over and above the regular taxes and charges applicable in the Member States. The EU Member States will use the proceeds from the solidarity contribution to provide financial support to households and businesses and to mitigate the effects of high retail prices of electricity. According to the regulation, Member States will be able to temporarily set the price of electricity supplied to small and medium enterprises in order to provide more support to SMEs (small and medium enterprises) struggling with high energy prices. Member States will have the opportunity, exceptionally and temporarily, to set the price for the delivery of electricity below the cost level, if certain conditions are satisfied. The measures are temporary and extraordinary in nature. They will be in effect from 1 December 2022 to the end of 2023, while the reduction targets for energy consumption, in accordance with Article 4 in conjunction with Article 22(2) of the said Regulation were in effect from 1 December 2022 to 31 March 2023. In turn, the mandatory limit on revenues will end after six months of the next year.

At the beginning of December 2022, the European Commission held a series of consultation meetings, including in particular with European trade societies, on a review of the internal electricity market structure. It was a harbinger of intensification of the works on a reform of the internal electricity market. In mid-December 2022, the Commission published a non-paper, where it officially announced launching a public consultation in order to develop a scenario of a reform of the internal electricity market. In its non-paper, the Commission informed that the scope of the announced consultation would be broad and the main purpose of the designed reform was to be the development of lasting ways of mitigating the impact of high gas prices on electricity bills. The public consultation was carried out after the balance sheet date, i.e. at the end of January and the beginning of February 2023.

On 14 March 2023, the European Commission (hereinafter: EC) presented the first official proposal regarding a reform of the internal energy market – EMD (Electricity Market Design). The reform proposal consists of the following two drafts:

- Draft Regulation amending Regulations (EU) 2019/943 and (EU) 2019/942 as well as Directives (EU) 2018/2001 and (EU) 2019/944 to improve the Union's electricity market design (hereinafter: draft EMD revision). The draft calls for amendments to:
    - Regulation of the European Parliament and of the Council (EU) 2019/943 of 5 June 2019 on the internal market for electricity;
    - Regulation of the European Parliament and of the Council (EU) 2019/942 of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (ACER);
    - Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources; Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity.
- Draft Regulation amending Regulations (EU) 1227/2011 and (EU) 2019/942 to improve the Union's protection against market manipulation in the wholesale energy market (hereinafter: draft REMIT revision). The draft calls for amendments to:
    - Regulation (EU) 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency;
    - Regulation of the European Parliament and of the Council (EU) 2019/942 of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (ACER).

- On 19 July 2023, there was a vote at the Committee on Industry, Research and Energy (ITRE). Accelerated legislative work is underway. The draft is awaiting the position of the EU Council. Following a vote on 19 July 2023, an amendment was adopted for consumer protection against volatility of short-term markets, reinforcing a reliable investment framework and strengthening the needs for sufficiency to maintain security of supplies. An amendment conditionally allowing support for coal-fired power plants from the capacity market after 2025 was rejected. Further work on the project will take place in the fall.

The key objectives of the reform include:

- stronger consumer protection;
- increased competitiveness of the EU economy through improvements in the stability and predictability of energy costs;
- boost to investments in renewable energy
- amendments to the REMIT [including: extension of the scope of data collected by the ACER through, without limitation, taking account of related markets, new balancing markets, balancing markets agreements; elevating the role of insider information platforms (IIPs) in the effective and timely disclosure of inside information to the public. The disclosure of inside information on special IIPs is expected to be mandatory to make that information easily accessible and to increase transparency; transaction data reporting is proposed to be carried out through Registered Reporting Mechanisms (RRMs), with the operation of RRM platforms to be authorized by the ACER].

On 16 March 2023, the EC proposed the wording of the Regulation establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act). The key drivers of the proposal, expected to support the achievement of 40% of demand, include:

- simplifying the regulatory framework and reducing administrative burdens for manufacturing and strategic projects with zero net worth;
- improving investment certainty;
- accelerating access to finance;
- improving qualifications to create quality jobs;
- supporting innovation through "regulatory sandboxes";
- facilitating carbon dioxide capture and storage.

On 16 March 2023, the EC published a draft Regulation on critical and strategic raw materials for the European Union economy. The document also contains a new updated list of critical raw materials (CRMA). Due to the accelerated energy transition process, it is expected that the demand for critical raw materials will increase 5 or 6 times by 2030 and 21 times by 2050. While domestic supplies currently fulfill only a fraction of existing needs, the Regulation strives to provide the EU with tools to ensure access to secure and sustainable supplies of critical raw materials, mainly by establishing clear priorities for action. The Regulation distinguishes between strategic materials and critical raw materials and sets benchmarks for national production capacities:

- at least 10% of the EU's annual consumption for mining,
- at least 40% of the EU's annual consumption for processing,
- at least 15% of the EU's annual consumption for recycling,
- no more than 65% of the Union's annual consumption of any strategic raw material at any significant processing stage from a single third country.

On 16 March 2023, the European Commission, in parallel with the presentation of the Green Industrial Plan, presented a communication on the European Hydrogen Bank (EHB). The purpose of the project is to support and develop the production and use of hydrogen fuel and to stimulate new investments. The funds will enable the development of investments and the pursuit of the goals set in the REPowerEU plan, which calls for the production of green hydrogen at a level of 10 million tons by 2030. The European Union intends to be a leader in innovation and green hydrogen technology and to support regions in the deployment of new solutions. To achieve this, the EHB is intended to perform the following four main functions:

- fostering transparency and coordination;
- coordinating existing project funding at EU and international levels;
- preparing collection contracts within the EU;
- preparing international collection contracts.

The EHB's operation will be based on:

- financing mechanisms for the EU internal market and the international market (outside the EU);
- financing mechanisms for the coordination of investments, that is for the assessment of demand, infrastructural needs and investment costs;
- streamlining existing support mechanisms and focusing them on the EHB's goals.

Regulation of the European Parliament and of the Council on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942.

On 9 May 2023, a position on a regulation to reduce methane emissions from the energy sector was adopted. At present, negotiations are continuing between the European Parliament and the EU Council. The most important issues include: reducing methane emissions; monitoring emissions; methane emission limits; penalties for exceeding emission levels. The proposal was forwarded to Commissions for further work.

Proposal Regulation of the European Parliament and of the Council establishing an EU framework for carbon dioxide removal certification.

Since May 2023, the proposal has been at the stage of the first reading. Debates are going on in the Council and its preparatory bodies. In turn, the Parliament referred the proposal to relevant commissions. It is anticipated that a discussion on it in plenary could take place in October 2023.

Proposal of the European Commission Industrial Carbon Emissions Management.

Carbon dioxide capture, storage and disposal are very important for the achievement of carbon neutrality in EU by 2050. This provides an opportunity to decarbonize some sectors where emissions reduction is problematic and can be crucial to accelerating industrial carbon dioxide removal. Public consultations on this topic were completed on 31 August 2023.

8.1.2. Domestic electricity market

8.1.2.1. Demand for electricity

According to the document entitled "Development plan in terms of satisfaction of the current and future demand for electricity in 2021-2030," the projected total net demand for electricity in Poland will increase from 159.9 TWh to 204.2 TWh in the period 2020–2040.[6)]

8.1.2.2. Capacity Market

In 2018-2022, pursuant to the provisions of:

- Capacity Market Act of 8 December 2017;
- Capacity Market Regulations approved by the decision of the ERO President of 10 November 2021;
- Regulation of the Minister of Energy:
  - of 18 July 2018 on performance of the capacity obligation, its settlement and demonstration, and execution of transactions on the secondary market;
  - of 3 September 2018 on financial collateral provided by power suppliers and participants of preliminary auctions;
- the Regulation of the Minister of Climate and the Environment of 10 August 2022 on the parameters of the main auction for delivery year 2027 and the parameters of additional auctions for delivery year 2024

Polskie Sieci Elektroenergetyczne S.A. conducted the following Capacity Market processes:

- general certifications;
- certifications for the main auctions for the years 2021-2027;
- certifications for the additional auctions for the years 2021-2024;
- main auctions for the years 2021-2027 and additional auction for 2021-2023.

As well as in 2023:

- general certifications,
- additional auctions for 2024 – 16 March 2023.

8.1.2.2.1. Contracted capacity obligations of ENEA Wytwarzanie and ENEA Elektrownia Połaniec

[MW]	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
1-year contract	-	-	-	1,004	1,004	-	-	-	-	-	-	-	-
5-year contract (modernized)	2,711	2,711	2,711	-	-	-	-	-	-	-	-	-	-
15-year contract (new)	915	915	915	915	915	915	915	915	915	915	915	915	915
Total	**3,626**	**3,626**	**3,626**	**1,919**	**1,919**	**915**	**915**	**915**	**915**	**915**	**915**	**915**	**915**

6) *https://www.gov.pl/documents/33372/436746/Wnioski_z_analiz_do_PEP2040_2018-11-23.pdf*

8.1.2.2.2. Estimated revenue from the Capacity Market of ENEA Wytwarzanie and ENEA Elektrownia Połaniec

[PLN million][1)]	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
1-year contract	-	-	-	402	408	-	-	-	-	-	-	-	-
5-year contract (modernized)	652	652	652	-	-	-	-	-	-	-	-	-	-
15-year contract (new)	220	220	220	220	220	220	220	220	220	220	220	220	220
Total	**872**	**872**	**872**	**622**	**628**	**220**	**220**	**220**	**220**	**220**	**220**	**220**	**220**

[1)] Non-indexed value.

ENEA Elektrownia Połaniec participated in all the aforementioned processes and, as a result, signed two capacity contracts for 5-year periods of 2021-2025, for units 2 and 7. This resulted from the ENEA Group's strategy approved by decisions of the ENEA S.A. Management Board before each of the main auctions. At the same time ENEA Elektrownia Połaniec signed capacity contracts for 1-year period for delivery year 2026 for units 2 and 4–7. The other units, except for unit 9, were notified for participation in the secondary market. ENEA Elektrownia Połaniec and ENEA Wytwarzanie executed a joint venture agreement in the area of the capacity market providing for the companies' joint operation in the capacity market and mutual reservations.
ENEA Wytwarzanie participated in all the aforementioned processes and, as a result, signed:

- nine capacity contracts for 5-year delivery periods of 2021-2025, for units 1-10 without unit 3,
- one capacity contract for a 15-year delivery period of 2021-2035 for unit 11,
- 1-year supply contracts for 2021, 2022, 2023, 2024 and 2025, for three Capacity Market units from the RES Segment (hydro power plants) with a total capacity of approx. 37 MW were transferred to ENEA Nowa Energia.

In 2021 and 2022, ENEA Elektrownia Połaniec participated in the Capacity Auction for delivery years 2026 and 2027. As a result, it signed 1-year capacity contracts for delivery years 2026 and 2027 for units 2, 4, 5, 6 and 7 with a total capacity of 1,004 MW, unit 3 is a backup for the above-mentioned units.

8.1.2.2.3. Contracted capacity obligations of MEC Piła

[MW]	2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Quarterly contracts	-	6	6	6	6
1-year contract	6	-	-	-	-
Total	**6**	**6**	**6**	**6**	**6**

8.1.2.2.4. Estimated revenue from the Capacity Market of MEC Piła

[PLN million]	2023	2024
Quarterly contracts	-	1.8
1-year contract	1	-
Total	**1**	**1.8**

8.1.2.2.5. Contracted capacity obligations of ENEA Ciepło

[MW]	2023				2024	2025	2026	2027
	Q1	Q2	Q3	Q4				
Quarterly contracts (existing)	38	-	-	23	-	-	-	
1-year contract (existing)	-	-	-	-	29	37[1)]	-	9
Total	**38**	**-**	**-**	**23**	**29**	**37[1)]**	**-**	**9**

[1)] The capacity contract of ENEA Ciepło for 2025 is valid from 1 January 2025 to 30 June 2025.

8.1.2.1.6. Estimated revenue from the Capacity Market of ENEA Ciepło

[PLN million] [1)]	2023	2024	2025	2026	2027
Quarterly contracts (existing)	5	-	-	-	
1-year contract (existing)	-	8	3[2)]	-	4
Total	**5**	**8**	**3[2)]**	**-**	**4**

[1)] Non-indexed value.
[2)] The capacity contract of ENEA Ciepło for 2025 is valid from 1 January 2025 to 30 June 2025.

ENEA Ciepło participated in all the aforementioned processes and, as a result, concluded two quarterly capacity contracts in delivery year 2023 (Q1 for unit 2 and Q4 for unit 3), one 1-year capacity contract for delivery year 2024 for unit 3, one 6-month capacity contract for delivery period from 1 January 2025 to 30 June 2025 for unit 3 and one 1-year capacity contract for delivery year 2027 for unit 1. This results from the documents entitled: "Strategy for participation of ENEA Ciepło CMU in the main auction of the capacity market (...)" for delivery years 2024, 2025, 2026, 2027 and "Strategy for participation of ENEA Group CMU in additional auctions (...)" for delivery year 2023 drawn up under the leadership of ENEA Trading and approved by decisions of the Management Board of ENEA Ciepło before the auctions.

In accordance with the document "Strategy for participation of ENEA Ciepło CMU in the main auction of the capacity market for 2026", it is assumed that unit 1 and/or unit 4 (TZ4) will be registered for certification for additional auctions for delivery year 2026, which will be carried out in 2024, after being informed about the physical condition of unit 1 after or during the major overhaul.

Units 1 and 4 were registered for participation in the secondary market for 2023, whereas for 2024 and 2025, units 1, 2, and 4 were registered. Units 2, 3 and 4 were registered for participation in the secondary market for 2027.

8.1.2.2.7. Contracted capacity obligations of ENEA Nowa Energia

[MW]	2023	2024	2025	2026	2027
1-year contract (existing)	37	38	37	24	24
Total	**37**	**38**	**37**	**24**	**24**

8.1.2.2.8. Estimated revenue from the Capacity Market of ENEA Nowa Energia

[MW]	2023	2024	2025	2026	2027
1-year contract (existing)	8	10	6	10	10
Total	**8**	**10**	**6**	**10**	**10**

ENEA Nowa Energia (formerly: ENEA Wytwarzanie RES Segment) participated in all main auctions of the Capacity Market and, as a result, concluded one-year capacity contracts:

- for the period 2021-2025, for three units with the average capacity of approx. 37 MW in a given delivery year,
- for 2026, for two units with the total capacity of 24 MW,
- for 2027, for two units with the total capacity of 24 MW.

8.1.2.3. Electromobility and Alternative Fuels Act

The Electromobility and Alternative Fuels Act of 11 January 2018 requires distribution system operators to build charging points for electric vehicles installed in generally accessible charging stations (GACS). In the area of operation of ENEA Operator, this obligation involves the construction of 417 charging points located in publicly available charging stations in 4 townships: Poznań, Szczecin, Bydgoszcz and Gorzów Wielkopolski. The amendment to the Act on Electromobility and Alternative Fuels and certain other acts of 2 December 2021, implementing Directive (EU) 2019/944 of the European Parliament and of the Council into the Polish legal system, allows for constructing charging stations for electric vehicles if the relevant townships fail to complete the task. For this reason, ENEA Operator is currently carrying out a project entitled "Implementation of ENEA Operator's statutory obligations related to electromobility under the Electromobility and Alternative Fuels Act." The adopted amendment to the Act repeals the provisions concerning the intervention scheme connected with the construction of GACS by DSOs and also introduces transitional provisions. These provisions make it possible to complete the already started investment projects.

In H1 2023, in fulfillment of its statutory obligation, ENEA Operator sold some of the GACS, those built and those currently under construction, in accordance with the terms of the tender agreed upon with the President of the Energy Regulatory Office and based on the proposals submitted as part of the tender by entities interested in purchasing the GACS.

8.1.2.4. Act on Special Solutions to Counteract the Provision of Support to Aggression against Ukraine and to Protect National Security

On 16 April 2022, the Act of 13 April 2022 on Special Solutions to Counteract the Provision of Support to Aggression against Ukraine and to Protect National Security entered into force. Article 8 of the said Act, in consideration of the existing threat to national security, imposed a ban on imports and/or transport of coal originating from Russia or Belarus to or through, as the case may be, the territory of the Republic of Poland. Moreover, the Act, in Article 13, requires entities marketing coal in the Republic of Poland (including domestic mines) to be in possession of documentation indicating the country of origin of such coal and to issue declarations for coal buyers indicating the country of its origin. The Act has directly translated into a further strengthening of demand for domestic coal.

8.1.3. Amendments to the Energy Law

8.1.3.1. Act of 20 May 2021 Amending the Energy Law Act and Certain Other Acts

On 18 June 2021, the Act of 20 May 2021 Amending the Energy Law Act and Certain Other Acts was published in the Journal of laws. It introduces a number of solutions that are important for the functioning of the members of the energy market. Key amendments include the roll-out of smart metering in Poland. This action will be deployed by distribution system operators, and thus also by ENEA Operator. The amended law contains a schedule for the installation of remote reading meters at electricity offtake points and stipulates that by 31 December 2028 such meters must be installed by at least 80% of end users. Moreover, the law provides that by 31 December 2023 there must be 15% of such users, by 31 December 2025 – 35%, and by 31 December 2027 – 65%.

The Act also introduces, among other things, changes in the scope of activity of the Negotiations Coordinator working for the ERO President, rules for entering into agreements with dynamic pricing, strengthens the existing customer rights and introduces new rights associated with the sales of electricity (new contractual terms, settlement obligations, dispute resolution with the seller, disclosure obligations).

The Act established the Energy Market Information Operator (OIRE). Since 3 July 2021, this function has been performed by Polskie Sieci Elektroenergetyczne S.A. The Energy Market Information Operator will manage the Central Energy Market Information System (CSIRE), scheduled to be deployed within three years from the date of entry into force of the amended Energy Law, the uses of which will include the processing of data obtained from smart meters. The Central Energy Market Information System will usher in fundamental changes to the method of information exchange between energy market participants. The amended law also contains solutions reinforcing the position of consumers and improving consumer protection on the energy and gaseous fuel market, and facilitating the operation of energy companies by creating a legal framework for the operation of closed distribution systems and energy storage facilities.

8.1.3.2. Act of 29 September 2022 Amending the Energy Law and the Renewable Energy Sources Act

The Act of 29 September 2022 Amending the Energy Law Act and the Renewable Energy Sources Act, which lifts the so-called exchange obligation, that is the obligation to sell electricity on the Polish Power Exchange by an energy generating utility company (deletion of e.g. Article 49a), entered into force on 6 December 2022. The "exchange obligation" remains valid for a transmission system operator as part of its activity consisting in transmitting electricity and for utility companies trading in gaseous fuels, which are obliged to sell at least 55% of methane-rich natural gas supplied to the transmission grid in a given year: 1) in entry points to the national transmission system on interconnections with transmission systems of other countries or 2) an upstream pipeline network or 3) liquefied natural gas terminals.

8.1.3.3. Act of 28 July 2023 Amending the Energy Law Act and Certain Other Acts

The Act aims to harmonize Polish legislation with European Union law, in particular to implement Directive 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market in electricity and amending Directive 2012/27/EU, hereinafter referred to as 'Directive 2019/944', as well as Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

The most important amendments:

- technical change of a supplier;
- the Central Information System for the Energy Market (CSIRE) covering the processes: technical change of a supplier and sale of reserve energy;
- contracts with dynamic energy prices;
- obligation to enter into comprehensive contracts;
- additional contractual duties of sellers of electricity and gas;
- price comparison engine;
- energy price regulation (departing from the tariff of offtaker of last resort);
- system services and system services unrelated to frequency;
- system flexibility;
- mechanism for non-market-based curtailment in energy generation from renewable sources and for restriction of grid electricity off-take and in-take by electricity storage facilities at the request of power system operators;
- regulations on a trademark of distribution system operator
- changes concerning direct lines
- amendments to the Act of 27 October 2022 on emergency measures to reduce electricity prices and support certain consumers in 2023;
- civic energy communities;
- statutory warranty for performing licensed activity.

Furthermore, it should be noted that at the stage of government work, a bill is processed for draft Act amending the Energy Law Act and certain other Acts (UD382). Key planned changes – the development of a hydrogen economy (one of the priorities for the implementation of the European Green Deal, whose main objective is to achieve a climate-neutral Europe by 2050. In response to the plans announced by the European Commission, on 2 November 2021, the Council of Ministers adopted the Polish Hydrogen Strategy until 2030 with an outlook until 2040).

8.1.3.4. Act of 17 August 2023 Amending the Renewable Energy Sources Act and Certain Other Acts

The Act responds to the need to implement Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion and use of energy from renewable sources into the Polish legal order.

The most important amendments – scope:

- regulation of biomethane in connection with the need to launch a market for this fuel;
- heat and cooling sectors;
- guarantees of origin;
- national RES Contact Point;
- administrative procedures;
- partnership peer-to-peer energy trading;
- implementation of a support system for modernized installations and operational support;
- modernization of installations of renewable energy sources, including operational support for RES installations for which the 15-year period of support system has expired;
- hybrid RES installations;
- customers' rights to terminate contracts for definite and indefinite terms;
- specification in detail of grid connection agreements and a request to issue connection conditions;
- introduction of the possibility of limiting the producer's supply to the grid, or stopping it completely without compensation if the producer exceeds its connection capacity;
- possibilities of connecting an energy storage facility or a source whose connection capacity may be less than or equal to their installed capacity

8.1.3.5. Act of 7 July 2023 amending the Act on the Preparation and Implementation of Strategic Investments in Transmission Networks and Certain Other Acts

On 3 September 2023, the Act of 7 July 2023 amending the Act on the Preparation and Implementation of Strategic Investments in Transmission Networks and Certain Other Acts entered into force. The Act on the Preparation and Implementation of Strategic Investments in Transmission Networks and Certain Other Acts introduces normative solutions aimed at shortening and simplifying procedures related to the implementation of investments in electricity transmission and distribution networks of particular importance for the operation of the national power market, as well as increasing the safety of operation of liquefied natural gas (LNG) bunkering facilities. The Act will enter into force 30 days after its promulgation.

8.1.3.6. Act on the principles of granting guarantees by the State Treasury for the obligations of the National Energy Security Agency

On 17 August 2023, a bill was passed by the Sejm of the Republic of Poland governing the rules for guarantees granted by the State Treasury to secure the National Energy Security Agency's liabilities. However, on 7 September 2023, the Senate moved to reject the bill in its entirety. Accordingly and in light of the fact that, as the date of publication of this report, the Sejm of the current term has already completed its scheduled sessions, it is possible that the bill will not be considered before the end of the current term of the Polish Parliament. The bill sets out the rules for the provision of guarantees by the State Treasury for liabilities of the National Energy Security Agency (types and amount of liabilities, amount of guarantees, rules for the provision and dates of reimbursements) and amends other sectoral statutes.

8.1.3.7. Other regulatory changes in retail trading and distribution

On 29 January 2022, the Act of 26 January 2022 on Special Solutions for Protecting Customers of Gaseous Fuels in connection with the Situation on the Gas Market (Journal of Laws 2022, Item 202) entered into force. The Act introduced special protective solutions, which enabled measures to mitigate the negative social and economic effects of a sudden, sharp rise in natural gas prices on the market. The amendments extended the list of entities covered by a tariff protection until 31 December 2023 and introduce a mechanism to compensate natural gas sellers for the effects of freezing prices for the protected entities.

On 26 February 2022, the Act of 27 January 2022 Amending the Act on Renewable Energy Sources and the Act Amending the Act on Renewable Energy Sources and Certain Other Acts (Journal of Laws 2022, Item 467) came into effect. This Act permitted the prosumers, who signed the agreement for the purchase, installation of a micro-installation or an agreement on co-funding of such installation with a local government unit by 31 March 2022 to operate under the previous net-metering billing scheme.

On 1 April 2022, the Act of 29 October 2021 Amending the Act on Renewable Energy Sources and Certain Other Acts (Journal of Laws 2021, Item 2376) came into effect. The Act introduced a number of changes, among others the concepts of a virtual renewable energy prosumer (for an installation remote from a given offtake point) and a collective renewable energy prosumer (for installations built within multi-unit buildings), along with mechanisms that allow prosumers to operate an installation not owned by them. In addition, the Act imposed on Sellers the obligation to ensure, as of 1 July 2022, the operation of an ICT system used to provide renewable energy prosumers, collective renewable energy prosumers or virtual renewable energy prosumers with detailed information relating to billing. In addition, the Act prolonged the possibility for prosumers to benefit from the existing net-metering billing scheme for micro-installations connected by 31 March 2022. The micro-installations connected since 1 April 2022, which were not connected under the Act of 27 January 2022 Amending the Act on Renewable Energy Sources and the Act Amending the Act on Renewable Energy Sources and Certain Other Acts (Journal of Laws 2022, Item 467), will be settled on the basis of net billing principles.

On 1 October 2022, the Regulation of the Minister of Climate and the Environment of 27 September 2022 amending the Regulation on detailed conditions of operation of the power system came into force (Journal of Laws of 2022, Item 2007). The Regulation introduced, among others, the obligation to submit balancing bids in the balancing market based on individual variable costs of energy generation by entities submitting balancing bids, regulations on the maximum bid price (MaxBP) along with the specification of its determination method and mechanisms for automatic limitation of the bid prices submitted by participants of the balancing market up to the MaxBP if the price submitted in the balancing bid is higher than the MaxBP.

On 18 October 2022, the Act of 7 October 2022 on Special Solutions for Protecting Electricity Buyers in 2023 in connection with the Situation on the Electricity Market (Journal of Laws of 2022, Item 2127) entered into force. The Act introduced, among others, the obligation for trading companies to apply in 2023, for Tariff Group G buyers, the 2022 prices if electricity consumption is within the specified limits, a compensation system for utility companies, the electricity allowance, which is available to a household in which electricity is the main source of heating, a 10% discount arising from the total amount of electricity billing and the distribution service for the period from 1 October 2022 to 31 December 2023 if the consumption in this period is no more than 90% of the consumption from 1 October 2021 to 31 December 2022, and imposed an obligation on managers of public finance entities to reduce their energy consumption in 2023 by 10% compared to 2022. Additionally, the Act of 7 October 2022 among others introduced a mechanism to mitigate electricity distribution costs by freezing the rates of the electricity distribution fee for 2023 at the 2022 levels for eligible buyers enumerated in the act. In connection with the above, the Act provides for a compensation payable to the operators, which is to be equal to the difference between the approved distribution price for 2023 and the 2022 price, up to the specified energy consumption limit. On 16 August 2023, the Act amending the Act on Special Solutions for Protecting Electricity Buyers in 2023 in Connection with the Situation on the Electricity Market and Certain other Acts was adopted, also with regard to the increase of the basic energy consumption limit covered by the price freeze at the 2022 level. up to 3 MWh (at present, 2 MWh) for all customers consuming energy for the needs of their households; 3.6 MWh (at present, 2.6 MWh) for households with people with disabilities; 4 MWh (at present, 3 MWh) for families with a Large Family Card and farmer households. In addition, the above Act amends the Act of 27 October 2022 on Emergency Measures to Reduce Electricity Prices and Support Certain Consumers in 2023, pursuant to which there will be amendments regarding provisions on the maximum electricity price at the level of PLN 693 per MWh (at present, PLN 785 per MWh) for small and medium-sized enterprises, local governments, public utility companies and other sensitive entities.

On 4 November 2022, the Act of 27 October 2022 on emergency measures to reduce electricity prices and support certain consumers in 2023 came into force (Journal of Laws of 2022, Item 2242) The Act introduced, among others, the obligation to apply, in settlements with eligible buyers, prices that are not greater than the maximum price set in the Act, a compensation system for entities eligible to the maximum price and the obligation to contribute to the Price Difference Fund.[7)] Pursuant to the Act of 28 July 2023 Amending the Energy Law Act and Certain Other Acts, amendments are introduced for the manner of calculating the contribution with regard to the guarantee of origin. The contribution to the Price Difference Fund is the sum of:

1) the product of: a) electricity sales volume and b) positive difference:

– volume-weighted average market price of the sold electricity and

– volume-weighted average price limit of the sold electricity

and

2) the sum of: a) revenue from sales of guarantees of origin within the meaning of the Renewable Energy Sources Act, b) revenue from contracts on the sale of electricity including financial instruments within the meaning of Article 2 sec. 1 of the Act of 29 July 2005 on Trading in Financial Instruments and c) other revenue resulting from additional cash settlements depending on the value or quantity of sold electricity – where all the values are defined as at the date of calculating the contribution to the Fund.

On 21 December 2022, the Act of 15 December 2022 on Special Protection of Certain Customers of Gaseous Fuels in 2023 in connection with the Situation on the Gas Market (Journal of Laws 2022, Item 2687) came into force. The Act introduced, among others, an obligation to apply, in settlements with eligible buyers referred to in Article 62b(1)(2) of the Energy Law Act (households, communities, entities obliged to supply gas, night shelters, etc.), prices that are not greater than the maximum price set in the Act, a compensation system for entities eligible to the maximum price and a possibility to apply for VAT refund in respect of the gaseous fuel purchased in 2023 by an eligible customer provided that the income criterion is satisfied.

On 1 January 2023, the Act of 4 November 2022 Amending the Consumer Rights Act, the Civil Code and the Private International Law (Journal of Laws of 2022, Item 2337) as well as the Act of 1 December 2022 Amending the Consumer Rights Act and Certain Other Acts (Journal of Laws of 2022, Item 2581) entered into force. The Acts introduced, among others, regulations regarding accountability for incompliance of goods with the contract or communication of a price reduction.

On 15 February, the Act of 8 February 2023 amending the Act on Special Solutions for Certain Heat Sources in Connection with the Situation on the Fuel Market and Certain Other Acts entered into force (Journal of Laws of 2023, item 295) which introduced, among others, amendments to the Act of 27 October 2022 on Emergency Measures to Reduce Electricity Prices and Support Certain Consumers in 2023. The purpose of the Act was to clarify certain provisions, remove interpretation doubts and reduce the financial burden on trading companies and industrial buyers.

[7)] Pursuant to the Act of 27 October 2022 on Emergency Measures to Reduce Electricity Prices and Support Certain Consumers in 2023 and the Regulation of the Council of Ministers of 8 November 2022 on the method for calculating a price limit, a producer or a trading company is to recognize a contribution to the Fund designated under the aforementioned Act and Regulation.

8.1.4. ENEA GROUP

8.1.4.1. Electricity tariffs

With decision ref. no. DRE.WRE.4211.71.9.2022.MBa of 17 December 2022, the President of the Energy Regulatory Office approved the “Electricity tariff for Tariff Group G customers” of ENEA S.A. for the period from 1 January 2023 to 31 December 2023. The tariff was published in *Energia Elektryczna,* the Industry Bulletin of the Energy Regulatory Office, No. 284(3795) of 17 December 2022.

The level of prices in the approved tariff does not cover the anticipated costs of energy purchases in the segment of household tariff customers. Accordingly, on 3 January 2023, the Company applied to the ERO President to change the electricity tariff for household customers approved and published by the ERO President on 17 December 2022.

With a decision of 26 May 2023, published on 29 May in *Energia Elektryczna,* the Industry Bulletin of the ERO, no. 246 (4063), the ERO President refused to approve the amendments to the ENEA S.A.’s tariff. On 29 June 2023, ENEA filed an appeal against the decision of the ERO President to the Regional Court in Warsaw, upholding its position about justifiability of the amendments to the tariff for 2023.

On 13 February 2023, the President of the Energy Regulatory Office approved the Change of the Tariff for electricity distribution services of ENEA Operator for 2023. The Decision of the ERO President was published in the ERO Industry Bulletin Energia Elektryczna (‘Electricity’) No. 111 (3928) of 13 February 2023. Pursuant to Resolution No. 80/2023 of the ENEA Operator Management Board of 16 February 2023, the Change of the Tariff has been in force since 1 January 2023.

8.1.4.2. Significant trends in the Distribution area

Provisions of the European law, in particular the energy package named Clean Energy for All Europeans, have an increasing impact on the functioning of ENEA Operator. These include Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity and Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU. These regulations contribute to the achievement of the EU’s goals of achieving a more competitive, secure and sustainable energy system and reducing greenhouse gas emissions by 2030. Commitments in this respect provide for a reduction of greenhouse gas emissions by at least 40% compared to 1990 levels while increasing energy efficiency by 32.5% and increasing the share of energy generation from renewable sources to 32% of final consumption. A consequence of the pursuit of these commitments will be a steady, as has already been observed, increase in installed capacity from renewable energy sources, which has created room for new energy market participants, led to a change in the manner of the power grid management and changed the roles of existing participants, including DSOs.

This effect was strengthened by “Fit for 55”, a legislative package on climate and energy announced by the European Commission on 14 July 2021, which includes, among others, proposals for further reduction of greenhouse gas emissions by 55% by 2030 and, which is particularly important from the DSO point of view, a revision of the RED II directive, which features the assumption that the share of RES in electricity consumption would rise to 40% in 2030, or a revision of the energy efficiency directive. All the member states will have to contribute to the achievement of these goals. “Fit for 55” is a key element of the European Green Deal, adopted in December 2019, which aims to transform member states’ economies to adjust them to the largest climate and energy reform in the European Union’s history. Currently, work is underway on the final shape of the package, aiming to reduce greenhouse gas emissions by at least 55% by 2030 (compared to 1990 levels) and achieve climate neutrality by 2050. It also adopts a reform of the EU Emissions Trading System (EU ETS) and a new Carbon Border Adjustment Mechanism (CBAM). The Social Climate Fund (SCF) was also established. The acceleration of the transformation is additionally guaranteed by the “REPowerEU” plan formally approved by the European Commission, which aims to rapidly reduce the dependence of EU countries on Russian fossil fuels and, at the same time, to prop up joint European efforts towards safe and sustainable energy generation at an affordable price. Accelerating the deployment of renewable energy generation is among the priorities called for by REPowerEU. It is expected that improving the energy efficiency and setting more ambitious renewable energy targets will accelerate the environmental transition and ensure a truly connected and resilient energy grid in Europe that will guarantee energy security for its participants.

The rapid development of distributed energy sources combined with new technologies, including ICT (Information and Communication Technologies), has had a significant impact on the distribution network, while shaping the new role of DSOs on the energy market. New challenges in this area for ENEA Operator include: the new role of DSOs as entities supporting market development (local markets in particular), tapping into the flexibility of distributed energy sources, data management, cooperation with TSOs/DSOs, new IT and ICT technologies, development of smart grids, transformation of a passive (unidirectional) grid into an active one (bi-directional), activation of customers, dynamic increase in the number and capacity of dispersed energy sources, in particular microinstallations, emergence of energy communities (energy clusters and cooperatives, local balancing areas, owners of energy storage, electric cars and car charging stations), cyber security and development of research and development and innovation activities.

It should be also noticed that the amendment to the Energy Law Act, which came into force on 3 July 2021, imposed on the Company the duty to install, by 31 December 2028, AMI meters at no fewer than 80% of end users connected to at most a 1 kV grid and, consequently, to install AMI meters at 15% of such users by the end of 2023, at 35% of such users by the end of 2025, and at 65% of such users by the end of 2027. ENEA Operator has completed a tender procedure for the purchase of 327 thousand remote electricity meters. The purchase enables the installation of modern meters for over 15% of customers connected to our network. Remote meters are a key component of the smart power grid being developed by ENEA Operator. Investments in a modern distribution network, including the so-called smart grid, are among the Group's key development directions.

The main consequence of changes on the energy market will be the gradual decline in the volume of energy distributed through DSO's grids. In turn, the quantity of energy produced by end users for their own needs, especially by prosumers, will increase. The changing model of the energy market and the consequences for its current players, such as distribution system operators, will also require transformation of the current regulatory model.

Ensuring energy security, active participation in the energy transformation towards zero emissions and facing up to challenges described above requires, most of all, capital expenditures on the modernization and expansion of distribution networks, which means that ensuring sources of funding for the pursuit of these plans will be of key significance.

8.1.4.3. ENEA Operator's Distribution System User Nondiscriminatory Treatment Assurance Program

During the reporting period, the Company complied with the provisions of the Compliance Program – ENEA Operator's Distribution System User Nondiscriminatory Treatment Assurance Program (hereinafter referred to as "Compliance Program") to fulfill the obligation arising from Article 9d sec. 4 of the Energy Law. Projects undertaken and executed by ENEA Operator in accordance with the Compliance Program during the reporting period gave the system users and the potential system users an equal access to the distribution system and enabled them to use the electricity distribution services on equal rules.

The monitoring of the implementation and execution of the Compliance Program is the responsibility of the Compliance Inspector, whose duties also include operational supervision of the Compliance Program's execution. The implementation and execution of the Compliance Program are supervised by the ENEA Operator Management Board as well as managers of organizational units and cells of ENEA Operator, who are responsible for implementing and supervising the observance and performance of the Compliance Program in the units managed by them. Detailed measures taken to perform the Compliance Program are found in annual reports on the performance of the Compliance Program sent to the ERO President.

8.1.4.4. Research and development and innovation carried out in ENEA Operator

ENEA Operator executed the following research and development projects in H1 2023:

1. The project entitled "eNeuron: greEN Energy hUbs for local integRated energy cOmmunities optimizatioN" carried out under the Horizon 2020 program. The goal of the project is to develop innovative tools to optimize the process of designing and operating local power systems with the main purpose of effectively integrating distributed energy sources. The outcome is to ensure effective, economical and sustainable solutions offered to entitles potentially interested in implementing such systems, including, among others, distribution network operators, local communities and individual prosumers.

2. The project entitled "DRES2Market: Technical, business and regulatory approaches to enhance the renewable energy capabilities to take part actively in the electricity and ancillary services markets", executed as part of the Horizon 2020 program. The primary goal of the DRES2Market project is to prepare a comprehensive and cost-efficient approach to facilitate the effective participation of distributed generation based on renewable energy in electricity markets and to enable the provision of balancing and storage services in accordance with market criteria – project completed.

Changes occurring in the energy market force market participants to implement a number of innovative solutions. ENEA Operator is following the same path. For this reason, ENEA Operator has in place a framework enabling both employees and external entities to suggest and jointly execute various pilot and innovative projects with the Company. The pursuit of such initiatives will provide the opportunity to jointly develop or test new innovative technical and technological solutions in real-life conditions. Such actions permit a reliable assessment of new solutions regarding technological maturity, development prospects, benefits and costs, as well as risk factors. This way ENEA Operator appreciates the potential of its employees and establishes cooperation with successive external entities. Through innovative activities and execution of research and development projects, ENEA Operator also cooperates with numerous research institutions.

8.1.4.5. Membership of ENEA Operator in international organizations

ENEA Operator is involved in international cooperation with two entities operating within the EU. One is E.DSO, or European Distribution System Operators. It is an organization that associates 39 leading distribution system operators for electricity from 24 European countries, operating within the EU structures as a voluntary association of DSOs (there are no members that are DSOns). Its purpose is, on the one hand, to influence European regulations pertaining to electricity, while on the other hand, to provide European DSOs with the possibility of mutual exchange of information and cooperation in legal, technical, technological or R&D and innovation issues.

The other is the EU DSO Entity. The organization was established by Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity; it associates all distribution system operators (including DSOns) from the member states that applied for membership. Its goal is to support the achievement and functioning of the internal market for electricity and to promote optimal management of distribution and transmission systems and to ensure their coordinated operation.

8.1.4.6. General Data Protection Regulation (GDPR)

GDPR (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC) is a legal act of the European Union, which has been in effect in all member states since 25 May 2018. These laws define the rules for processing personal data and impose certain obligations on data controllers. In its business, the ENEA Group observes the requirements of the indicated regulations, also by ensuring an appropriate level of security of personal data processing, paying particular attention to the protection of the rights and freedoms of data subjects. Pursuant to Article 37 of GDPR, ENEA Group companies appointed Data Protection Officers, who discuss important matters concerning personal data protection in the ENEA Group.

8.1.4.7. Rules for the preparation of financial statements

The condensed financial statements of ENEA S.A. and the ENEA Group included in the extended consolidated report of ENEA S.A. for the period of H1 2023 have been prepared in accordance with the requirements of IAS 34 *Interim Financial Reporting*, as endorsed by the European Union.

These condensed financial statements have been prepared based on the assumption that the Company will continue its business activity as a going concern in the foreseeable future. The Company's Management Board has not ascertained, as at the date of signing the condensed financial statements, any facts or circumstances that would indicate a threat to the Company's ability to continue its business activity as a going concern over the 12 months following the balance sheet date as a result of an intentional or induced discontinuation or a material curtailment of its existing activity. Unless indicated otherwise, the financial data presented in the statements are denominated in PLN thousand. In some instances, the numbers in tables and graphs may not add up to the stated totals, the differences being due to rounding.

8.1.4.8. Concessions

Power industry groups operate in the Polish power market on the basis of concessions granted to them. Considering the medium and long-term validity of the individual concessions, detailed information of the concessions held by each company from the ENEA Group is presented in annual reports.

8.2. Natural environment

8.2.1. Curtailing emissions of air pollutants

In accordance with the applicable EU regulations, in particular Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions – IED (integrated pollution prevention and control), new and more stringent environmental protection standards have been in force since 1 January 2016. Accordingly, all electricity generators in Poland, who predominantly use high-emission coal-firing technologies, were required to adapt their power units to the new environmental requirements. Another important amendment to the law making the environmental requirements stricter, published on 17 August 2017, was Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 laying down BAT (best available techniques) conclusions for large combustion plants in accordance with Directive 2010/75/EU of the European Parliament and of the Council (the so-called kBAT). The published BAT conclusions introduced more stringent (than in the IED) requirements for pollutants such as sulfur dioxide, nitrogen oxides and dust. The BAT-associated emission levels (so-called BAT-AELs) also apply to other substances, such as mercury, hydrogen chloride, hydrogen fluoride and ammonia. The BAT conclusions started to apply from 18 August 2021, following the 4-year adjustment period. As kBAT were appealed against by the Polish government in October 2017 and the Court of Justice of the European Union (CJEU) issued a judgment of 28 January 2021 canceling kBAT of 31 July 2017, then on 30 December 2021 "new" BAT conclusions were published (Commission Implementing Decision (EU) 2021/2326 of30 November 2021). The new conclusions are identical in content to the annulled ones, thus maintaining the continuity of the prevailing legal requirements.

In 2023, the emission fee rates increased:

SO_2: 0.58 PLN/kg in 2022 => 0.61 PLN/kg in 2023

NO_X: 0.58 PLN/kg in 2022 => 0.61 PLN/kg in 2023

Dust: 0.39 PLN/kg in 2022 => 0.41 PLN/kg in 2023

SO_2	Emissions [Mg]	Emission factor [kg/MWh]	Emission fee [PLN thousand]
Kozienice Power Plant – units 1-10			
H1 2022	2,981.5	0.482	1,729.3
H1 2023	2,232.9	0.453	1,362.0
% change	-25.1%	-6.0%	-21.2%
Kozienice Power Plant – unit 11			
H1 2022	936.8	0.301	543.3
H1 2023	846.3	0.333	516.3
% change	-9.7%	10.6%	-5.0%
ENEA Elektrownia Połaniec			
H1 2022	2,031.8	0.425	1,178.4
H1 2023	1,561.6	0.435	952.6
% change	-23.1%	2.4%	-19.2%
Białystok Combined Heat and Power Plant			
H1 2022	91.1	0.106	52.8
H1 2023	79.6	0.102	48.5
% change	-12.6%	-3.8%	-8.1%
Białystok "Zachód" Heat Plant			
H1 2022	11.5	-	6.7
H1 2023	16.2	-	9.9
% change	40.9%	-	47.8%

NO_x	Emissions [Mg]	Emission factor [kg/MWh]	Emission fee [PLN thousand]
Kozienice Power Plant – units 1-10			
H1 2022	3,155.9	0.510	1,830.4
H1 2023	2,561.3	0.520	1,562.4
% change	-18.8%	2.0%	-14.6%
Kozienice Power Plant – unit 11			
H1 2022	1,258.9	0.405	730.2
H1 2023	1,112.6	0.438	678.7
% change	-11.6%	8.1%	-7.1%
ENEA Elektrownia Połaniec			
H1 2022	2,442.0	0.510	1,416.4
H1 2023	1,758.8	0.490	1,072.8
% change	-28.0%	-3.9%	-24.3%
Białystok Combined Heat and Power Plant			
H1 2022	214.7	0.250	124.5
H1 2023	189.6	0.243	115.7
% change	-11.7%	-2.8%	-7.1%
Białystok “Zachód” Heat Plant			
H1 2022	2.5	-	1.5
H1 2023	9.7	-	5.9
% change	288.0%	-	293.3%

Dust	Emissions [Mg]	Emission factor [kg/MWh]	Emission fee [PLN thousand]
Kozienice Power Plant – units 1-10			
H1 2022	193.5	0.031	75.5
H1 2023	153.9	0.031	63.1
% change	-20.5%	-	-16.4%
Kozienice Power Plant – unit 11			
H1 2022	39.1	0.013	15.2
H1 2023	27.7	0.011	11.4
% change	-29.2%	-15.4%	-25.0%
ENEA Elektrownia Połaniec			
H1 2022	105.1	0.022	41.0
H1 2023	56.6	0.016	23.2
% change	-46.1%	-27.3%	-43.4%
Białystok Combined Heat and Power Plant			
H1 2022	14.4	0.017	5.6
H1 2023	9.3	0.012	3.8
% change	-36.4%	-29.4%	-32.1%
Białystok “Zachód” Heat Plant			
H1 2022	0.8	-	0.3
H1 2023	0.7	-	0.3
% change	-12.5%	-	-

CO_2	Emissions [Mg]	Emission factor [kg/MWh]	Gross electricity generation [MWh]
Kozienice Power Plant – units 1-10			
H1 2022	5,290,323.9	855	6,190,808.9
H1 2023	4,288,839.4	871	4,926,103.6
% change	-18.9%	1.9%	-20.4%
Kozienice Power Plant – unit 11			
H1 2022	2,364,984.6	761	3,109,264.6
H1 2023	1,965,051.4	773	2,541,848.6
% change	-16.9%	1.6%	-18.2%
ENEA Elektrownia Połaniec			
H1 2022	3,545,487.0	741	4,784,303.6
H1 2023	2,488,608.0	694	3,586,340.5
% change	-29.8%	-6.3%	-25.0%
Białystok Combined Heat and Power Plant			
H1 2022	161,104.0	187	262,018.8
H1 2023	137,064.0	176	231,700.7
% change	-14.9%	-5.9%	-11.6%
Białystok “Zachód” Heat Plant [1)]			
H1 2022	8,096.0	-	-
H1 2023	9,401.0	-	-
% change	16.1%	-	-
MEC Piła			
H1 2022	27,496.0	1,140	24,120.2
H1 2023	26,442.0	438	60,422.6
% change	-3.8%	-61.6%	150.5%

[1)] *The table for the Białystok “Zachód” Heat Plant does not include data on electricity generation or the emission factor as it produces only heat.*

8.2.2. Compliance with formal and legal requirements

ENEA Wytwarzanie

At the Kozienice Power Plant, a program was completed to adapt the plant to the BAT conclusions, which had been in force since 18 August 2021. As a result, the Power Plant now meets both the emission standards and the threshold emission levels (TELs). Pursuant to the Regulation of the Minister of Climate of 24 September 2020 on emission standards for certain installation types, fuel combustion sources and waste combustion or co-combustion installations (Journal of Laws of 2020, Item 1860), in relation to the installations of units 1-10 and the installation of unit 11 for emissions of all pollutants, the following conditions for deeming the emissions standards complied with apply: (i) none of the approved average monthly concentrations of substances exceeds 100% of the emission standard, (ii) none of the approved average daily concentrations of substances exceeds 110% of the emission standard, (iii) 95% of all approved average hourly concentrations of substances during the calendar year does not exceed 200% of the emission standard.

If even one of the conditions specified in items (i), (ii), (iii) is not met, there is a risk that a penalty will be imposed for each hourly exceedance counted from the beginning of the year. The kBAT requirements were implemented to integrated permits for three power installations for fuel combustion operating in the Company – units 1-10, unit 11 and a start-up boiler house. The requirements considerably tightened the acceptable levels of emitted pollutions. Apart from the prevailing average monthly standards, very reduced average annual threshold emission levels (TELs) were introduced for previously limited emissions of SO_2, NO_x, CO and dust, as well as for newly introduced limited HCl, HF, NH_3 and Hg pollutants (not applicable to the start-up boiler house). The threshold emission levels were also applied to average daily concentrations of emitted SO_2, NO_x and dust. According to the current regulations, all the TELs – both average daily and annual levels must be complied with without considering measurement uncertainties. No exceedance of the emission standards, threshold emission levels (TELs) and other formal and legal requirements was ascertained in H1 2023.

Kozienice Power Plant meets the objectives set by the national and community law (IED directive, BAT conclusions). The Power Plant operates five flue gas desulfurization (FDG) installations, which guarantee the required reduction of SO_2 emissions from flue gases of all units. All units of the Kozienice Power Plant are equipped with highly efficient electrostatic precipitators, which are upgraded on an ongoing basis in order to maintain high dust removal efficiency. All units (excluding unit 3) are also equipped with highly efficient selective catalytic NO_x reduction (SCR) installations.

ENEA Ciepło

The end of 2022 marked the expiration of the heating derogation that applied to the “Zachód” Heat Plant. Currently, the “Zachód” Heat Plant holds a new integrated permit, no. DOŚ-I.6223.1.11.2022, of 9 January 2023, which contains new terms for releasing pollutants into the environment in accordance with Directive 2010/75/EU of the European Parliament and of the Council (known as BAT).

ENEA Elektrownia Połaniec

ENEA Elektrownia Połaniec takes advantage of the derogation arising from the IED – natural derogation of 17,500 hours covering boiler 1. In total, 16,023 hours were used, including 308 hours in H1 2023.

8.3. Other information

8.3.1. Court and administrative proceedings

As at the date of this report, there are no pending proceedings regarding payables or receivables to which ENEA S.A. or any of its subsidiaries would be a party. A detailed description of the proceedings is provided in Note 25 to the “Condensed interim consolidated financial statements of the ENEA Group for the period from 1 January to 30 June 2023”.

8.3.2. Collective disputes

As at the date of publication of this report, no collective disputes are in progress in the ENEA Group.

8.3.3. Employment

As at 30 June 2023, the headcount in ENEA Group companies was 17,905 staff with employment contracts. As at 30 June 2023, the headcount in ENEA S.A. was 447 staff with employment contracts.
These figures, broken down by operating segments, are as follows:
Distribution: 5,426; Trading: 569; Mining: 5,957; Generation: 4,158; Other: 1,795.

8.3.4. Projected financial results

The ENEA S.A. Management Board did not publish any projections of its financial results for 2023.

8.3.5. Rating

On 18 April 2023, Fitch Ratings issued a statement where it changed ENEA S.A.’s rating outlook from negative to stable and affirmed the Company’s long-term foreign- and local-currency issuer default ratings at BBB, of which the Company announced in Current Report No. 19/2023. The full wording of the statement in English is available on the agency’s website at https://www.fitchratings.com/site/pr/10232150.

8.3.6. Termination/rescission of property right purchase agreements by ENEA S.A.

On 28 October 2016, ENEA S.A. made a statement of termination or rescission of long-term property right purchase agreements resulting from the certificates of origin of energy from renewable sources (the so-called green certificates). These agreements were dissolved. The reason for the Company’s termination/rescission of the individual agreements was exhaustion of all possibilities of restoring contract balance and equivalence of the parties’ performances resulting from amendments to the law. The financial consequences of dissolving the abovementioned agreements will be the avoidance by the Company of the loss being the balance of the contractual prices and the market price of green certificates.

As a result of termination notices submitted by ENEA S.A., the agreements became terminated, according to ENEA S.A.’s assessment, generally as of the end of November 2016. The contractual date of termination of each agreement resulted from the pertinent contractual terms. The reason for the termination/rescission of these agreements by the Company was the absence of their renegotiation by means of adaptation clauses, which was justified by the need to restore the contractual balance between the parties and the equivalence of their performances in the light of the regulatory amendments introduced in the meantime.

ENEA S.A. is a party to lawsuits focused on contracts for the purchase of property rights resulting from certificates of origin for energy generated from renewable sources. Detailed information on such lawsuits is described in Note 25 of the “Condensed Interim Consolidated Financial Statements of the ENEA Group for the period from 1 January to 30 June 2023”.

8.3.7. Analyses of the transmission and collection of gaseous fuel from the transmission grid in the Kozienice Power Plant.

On 11 February 2020, ENEA Wytwarzanie and GAZ-SYSTEM signed an agreement to design the connection of Kozienice Power Plant to the GAZ-SYSTEM transmission network and obtain all necessary administrative permits. The agreement will open the process of designing a gas service connection for the Kozienice Power Plant. Expansion of the transmission system by GAZ-SYSTEM will increase its capacity to supply higher volumes of natural gas throughout Poland. This will increase the capacity for connecting industrial plants as well as individual customers to the network. Currently, GAZ-SYSTEM is in the process of developing design documentation and obtaining all necessary permits and administrative decisions for the gas connection.

In ENEA Wytwarzanie, conceptual work on the selection of technological solutions and economic analyses for the "Restoration of generation capacity of 200 MW coal-fired units in ENEA Wytwarzanie based on the gaseous fuel combustion technology" has been completed. Corporate approvals have been obtained to launch Stage 1, which entails pre-investment work, i.e. preparation of the Terms of Reference (ToR), including a model contract and update of the project's financial model (including an audit of the financial model).

On 16 March 2022 ENEA S.A. established a special-purpose vehicle ENEA ELKOGAZ with its registered office in Warsaw, in which it is the sole shareholder. The objective of the newly established company is to replace the generation capacity of 200 MW power units with gaseous fuel combustion technology. This is one of the Group's strategic investments in the process of the power company's rational transition. CCGT power units will be a low emission source of energy strengthening energy security and providing support to the generation of energy from RES during the transition phase.

On 1 May 2022, all functions and tasks carried out by ENEA Wytwarzanie under the project entitled "Restoration of the generation capacity of 200 MW coal-fired units in ENEA Wytwarzanie based on gaseous fuel combustion technology" were transferred to ENEA ELKOGAZ. The transfer was confirmed by the execution, on 24 May 2022 by and between ENEA Wytwarzanie and ENEA ELKOGAZ, of an agreement for the purchase of project assets generated by 30 April 2022.

On 18 July 2022, a tender procedure was launched on the "e-zamówienia" ["e-procurement orders"] platform of the Public Procurement Authority to select the General Contractor for the investment project. Under the procedure, the prequalification process was carried out and contractors were invited to participate in a competitive dialogue.

On 30 September 2022, the meeting opening the Competitive Dialogue under the project entitled "Restoration of generation capacity of 200 MW coal-fired units in the Kozienice Power Plant based on the gaseous fuel combustion technology". The Competitive Dialogue was conducted in three stages split into general and industrial parts and was completed on 10 July 2023. On 11 July 2023, the Terms of Reference were published. According to the assumed schedule of the project, in Q4 2023, an agreement should be concluded with the General Contractor of the combined cycle units. The underlying concept for the construction of the CCGT power units calls for new low emission sources to stabilize RES as they develop in the initial phase of the ENEA Group's efforts to achieve climate neutrality and will provide for the security of the electric power system.

8.3.8. Interest in ElectroMobility Poland S.A.

On 19 October 2016, PGE Polska Grupa Energetyczna S.A., Energa S.A., ENEA S.A. and Tauron Polska Energia S.A. founded a company by the name of ElectroMobility Poland S.A. The company's business is intended to contribute to the execution of a program aimed at building a Polish electric vehicle, marketing it on a mass sale and creating an electromobility system in Poland.

On 28 December 2022, the Extraordinary General Meeting of ElectroMobility Poland S.A. adopted a resolution to reduce the company's share capital by PLN 17,557,328.00 through a decrease in the par value of all its shares from the current amount of PLN 5,230.05 each to a new par value of PLN 4,926.29 per share. The reduction in the share capital is aimed at reducing the par value of the company's shares in order to facilitate the acquisition of capital through new share issues. The General Meeting also adopted a resolution to increase the share capital by PLN 249,999,364.92 to PLN 534,738,926.92, for the total issue price of PLN 250,000,000.00, to be contributed exclusively in cash. The issue of the new shares was effected by way of a private placement. All the new shares are ordinary registered shares. The share premium (excess of the total issue price over the total par value) was transferred to supplementary capital. The new shares were taken up and paid for by the State Treasury. On 16 January 2023, the registration court registered the share capital increase. ENEA S.A. currently holds a 2.30% stake in the company's share capital.

The State Treasury's investment in the Company guarantees the development of the Polish Electric Car project and will, above all, enable the conduct of introductory activities necessary to prepare and launch the manufacture of electric cars.

8.3.9. Activity of ENEA Innowacje

ENEA Innowacje is a company dedicated to managing the area of innovation in the ENEA Group. The company is focused on the development of innovations through investments in third-party enterprises (start-ups), but is also involved in the internal development of innovative initiatives. The business of ENEA Innowacje is aimed at pursuing the concept of a zero-carbon transformation of the electricity market globally and in Poland, which is a major challenge and will be groundbreaking for a wide range of market players in the coming years. Over the next decade, what should be expected is not only a massive technological change, but also a change in philosophy regarding the operation of the electricity market that will affect customers' decisions and choices. The innovations to be deployed within the ENEA Group will play a crucial role in the accomplishment of the broadly construed energy transformation. The core interests of ENEA Innowacje include seeking and implementing technological solutions as well as new business models in such areas as e.g. circular economy, energy storage and new RES technologies, exploitation of hydrogen and other energy carriers, electromobility, Smart Cities, Internet of Things, artificial intelligence and automation of operating and manufacturing processes. In 2022, the company, acting on behalf of the ENEA Group, launched work on the deployment of SMR (small modular nuclear reactors) technology, which may be applied in electricity generation, but also in ensuring heat supplies for heating systems.

In H1 2023, the Company continued the activities pursued in 2022, including:

- conducted ongoing intense analyses and identification of the market and technology environment, the energy sector, its competitiveness, etc.; the purpose of these analyses was to support the directions of activities and management decisions on future investments in the company's innovations, which is shown by more than a dozen signed non-disclosure agreements serving as the basis for sharing information with the entities reviewed by the company,
- identified more than a dozen key innovation initiatives and ideas in the field of production and use of alternative fuels, energy storage, pursuit of the circular economy idea, and performed in-depth analyses and assessments focused on them taking into account the potential for development and competitiveness in the ENEA Group,
- continued its activities aimed at assessing the feasibility and building new sources of electricity and heat based on the use of small modular nuclear reactor technology,
- continued and extended cooperation with additional universities and companies on the basis of letters of intent or cooperation agreements.

8.3.10. Construction of a photovoltaic farm on land owned by LW Bogdanka

The photovoltaic farm project to be developed on the land owned by LW Bogdanka will enable proper development of the mine's land and may contribute to a significant reduction of the costs of electricity powering the LW Bogdanka's technical infrastructure, while protecting the environment and using renewable technologies.

In 2020, "Feasibility study for the construction of photovoltaic farms in the areas of LW Bogdanka" was completed. Based on that document, in 2021 a procedure was launched to select a contractor for the photovoltaic farm project for the needs of the field of Bogdanka, following which a contractor was selected and a contract was signed. In 2022, the design work was performed and the required permits and decisions were required and then a tender procedure was announced to build a photovoltaic farm. In December 2022, a contractor was selected as a result of the tender procedure. In H1 2023, construction sites were delivered and support structures for photovoltaic panels were installed. On 30 July, work on the construction of the photovoltaic farm was completed.

8.3.11. Publication of the LW Bogdanka Group Development strategy for 2023-2030 with an outlook until 2040.

On 17 May 2023, LW Bogdanka S.A. published the "Development strategy of the LW Bogdanka Group for 2023-2030 with an outlook until 2040". The document outlines the key directions of development and transformation for Bogdanka. The company aims to create an innovative multi-commodity corporate group driving the green transition and securing the economic growth of the Lublin region.

The new strategy is based on 5 pillars. The first one is a strong coal foundation, based on which Bogdanka will remain the leader in efficiency in coal mining until the decommissioning of the mine. The other four are: Multi-Commodity Corporate Group, Sustainable Energy Guarantor, Green Transition, and Future of the Lublin Region.

8.3.12. Execution of the Ostrołęka C Power Plant construction project

Detailed information on the execution of the Ostrołęka C Power Plant construction project are described in Note 11 of the "Condensed Interim Consolidated Financial Statements of the ENEA Group for the period from 1 January to 30 June 2023".

8.3.13. National Energy Security Agency

On 1 March 2022, the Council of Ministers adopted the document "Transformation of the power sector in Poland. Spin-off of coal assets from companies with a State Treasury shareholding" ("Transformation Program"). The document was created in order to adapt power industry groups to the challenges of transformation in accordance with the directions laid down in "Poland's Energy Policy until 2040" (PEP2040). The Transformation Program presents a concept of spinning off, from the corporate groups of each utility company, assets associated with the generation of electricity in conventional coal-fired units ("coal assets"). The objectives of the Transformation Program envisage, among other outcomes, the integration of the coal assets within a single entity, specifically PGE Górnictwo i Energetyka Konwencjonalna S.A. ("PGE GiEK"), which is a subsidiary of PGE S.A. and will ultimately run its business under the name of Narodowa Agencja Bezpieczeństwa Energetycznego (National Energy Security Agency, "NABE"). The role of NABE will be to secure energy security through stable deliveries of power produced from coal. The spin-off of coal-fired generation assets will allow power industry groups to focus on accelerating investments in low- and zero-carbon energy sources and industrial infrastructure.

In Q2 2023, the ENEA Group continued to carry out tasks associated with the spin-off of coal-fired generation assets to the State Treasury in accordance with the updated schedule of establishment of NABE.

The Group carried out work related to internal ownership and reorganization changes. One of such activities was the spin-off of ENEA Trading sp. z o.o. (under Article 529 §1(4)) of the Commercial Company Code), as a result of which, in accordance with the Demerger Plan of ENEA Trading sp. z o.o. of 29 July 2022, the demerger was effected through a spin-off and transfer of certain assets and liabilities of ENEA Trading sp. z o.o. in the form of an Organized Part of the Enterprise to ENEA Power & Gas Trading sp. z o.o. on 3 April 2023.

In order to ensure the continuation of business by the spun-off companies after their incorporation into the NABE structures, negotiations with financial institutions in this area were conducted.

In Q2 2023, valuations of the generation companies spun off into NABE were completed.

On 14 July 2023, the Company received from the State Treasury a proposal for non-binding documents summarizing the transaction terms for the acquisition by the State Treasury of shares in ENEA Wytwarzanie sp. z o.o. and shares in ENEA Elektrownia Połaniec S.A. held by ENEA S.A., along with their subsidiaries. Subsequent steps included negotiations with the Buyer to agree on and sign documents between the State Treasury and the Company.

On 10 August 2023, the ENEA S.A. Management Board and the State Treasury, represented by the Minister of State Assets, signed documents summarizing the transaction terms for the acquisition by the State Treasury of all shares in ENEA Wytwarzanie sp. z o.o. and shares in ENEA Elektrownia Połaniec S.A. held by ENEA S.A., along with their subsidiaries, in order to establish NABE. A resolution approving the signing of these documents was adopted by the ENEA S.A. Management Board on the same morning.

The signed documents do not constitute an offer or commitment to enter into any contract, but form a basis for the submission of an application by the Minister of State Assets to the Prime Minister for the acquisition of all shares in ENEA Wytwarzanie sp. z o.o. and shares in ENEA Elektrownia Połaniec S.A.

In connection with the signing of these documents, assuming the transaction value presented in the proposal is upheld, the Group currently does not identify a potential loss at the consolidated level on the sale of the coal assets to NABE and, as a consequence, does not see the need to post any impairment losses.

8.3.14. Political and economic situation in Ukraine

Detailed information on the political and economic situation in Ukraine is provided in sec. 10.3.18 of the “Management Board Report on the activity of ENEA S.A. and the ENEA Group in 2022”. As at the date of this report, the Company has not identified any significant changes in this area.

9. CSR – Corporate social responsibility

Jogging – Collecting – Helping

The "Jogging – Collecting – Helping" project has been implemented by the ENEA Group for several years now. In June 2023, we launched another edition of the project aimed at raising PLN 50,000. Employees involved in this venture, as in the previous edition, register the running distance covered by them in the application, and the points they have collected are then converted into cash. This time around, the amount raised will be spent on the needs of a selected orphanage. In the project's previous edition, ENEA Group employees covered more than 100,000 kilometers in daily activities and in triathlon, cycling or running competitions. Additional points are earned for commuting to work by bicycle and for performing several sports activities per day. As was the case with the previous edition, this one also carries some educational added value. After covering a specific number of kilometers, the participants receive a dose of knowledge about Sustainable Development Goals (SDGs).

Save energy with Krzyś the Electrician

For many years, our employees have been involved in volunteer campaigns whereby they visit schools and kindergartens to provide children with interesting information the power sector, energy generation and safe handling of electricity. The new project called "Save Energy with Krzyś the Electrician" is an extension of previous educational activities focused on saving the planet's energy resources, enabling participation in classes also for older children. Under the new project, content has been developed for pre-school children and early education students (up to 5th grade). Using the materials prepared for these classes, the Group's employees deliver the content and share their knowledge and experience with the young listeners. Using animations, they explain to children how electricity is generated, what its sources are and what threats are associated with the improper handling of electricity. They acquaint children with the rules of safe use of household electrical appliances and consolidate knowledge about energy conservation. A lesson with Krzyś the Electrician ends with solving a crossword puzzle together and the children receiving educational booklets. Classes may be conducted for preschool, early school and mid-school children.

Exempt from Theory

The ENEA Group became a partner of the nationwide contest for students called "Exempt from theory" for the fourth time. The contest participants – university and high school students, on their own or in teams – took action for the benefit of their immediate surroundings, implementing ideas and gaining practical skills and experience in the planning and management of projects. In the most recent edition, the ENEA Group's patronage was focused on projects in the field of energy and the promotion of science – "Energy in science", which has benefited nearly 300,000 participants. The best projects were awarded during the Grand Finale of "Exempt from theory", an event attended by more than 4,000 persons.

To the aid of Ukraine!

The ENEA Group continues its aid directed to refugees. It offers help with accommodation, making the centers owned by Group companies available to the citizens of Ukraine. The children and youth staying in the centers may count on support from the ENEA Foundation in relation to school supplies and other articles. The Foundation also helps with essential daily necessities, such as clothing and cleaning supplies, or other items requested by the centers' administrators, as the need arises.

"Wielkopolska Struggle and Resistance"

In an effort to care for historical memory, ENEA S.A. along with the Society for Educational Projects prepared a project called "Wielkopolska Struggle and Resistance" focused on the history of Poland's Wielkopolska region in 1939-1945. The project included the preparation of a multimedia presentation and teaching materials to facilitate the conduct of classes by teachers. The project was inaugurated with an educational and historical conference for teachers from Wielkopolskie Voivodship focused on the heroism and sacrifice of soldiers, scouts and residents of Wielkopolska who resisted terror despite the ruthless extermination policy carried out by the occupation authorities. 120 schools from Wielkopolskie Voivodship were invited to participate in the project an integral component of which was a conference for teachers. Educational materials were also prepared for students of 7th and 8th grades of elementary schools and all types of secondary schools. The materials were prepared in accordance with the current core curriculum for Polish schools. At the end of the project, a competition will be held for students of 7th and 8th grades of elementary schools across Poland.

ENEA Academy of Talent

February marked the end of the fourth edition of the ENEA Academy of Talent scholarship program. Students and organizations who demonstrated initiative were once again offered the opportunity to win additional funding to develop their ideas, passions and interests. Out of 700 applications, 56 students of primary and secondary schools and 25 schools and organizations made it to the finals of the fourth edition of ENEA Academy of Talent. Their ideas for talent development were evaluated by a jury and Internet users. PLN 3,000 scholarships were won by 43 students. 20 schools and organizations will receive grants of PLN 10,000 each, which they will use to organize additional activities and projects to support the development of young people. A total of nearly PLN 330,000 was donated to support education and young talents.

10. Non-financial reporting

Responsible management practices

Non-Financial Statement of the ENEA Group for 2022

In March 2023, in performance of the obligation imposed by the Accounting Act of 29 September 1994 implementing Directive 2014/95/EU of the European Parliament and of the Council into the Polish legal order, the ENEA Group published the "Non-Financial Statement of ENEA Group for 2022" as a separate but at the same time integral part of the annual "Management Board Report on the activity of ENEA S.A. and the ENEA Group in 2022".

The Statement contains a concise description of the entity's business model, key non-financial performance indicators related to its operations and a description of the policies applied by the entity in relation to issues including social relations, employees, natural environment, respect for human rights and counteracting corruption, and a description of the outcomes of the application of these policies.

The Statement contains a description of material risks related to the entity's operations that may exert an adverse impact on the said issues, including risks related to the entity's products or relations with the external environment, and a description of their management.

In the Statement, for the first time, the Group reports, in relation to several companies, data on scope 3 greenhouse gas emissions, that is other indirect CO_2 emissions generated throughout the company's value chain.

Moreover, in the Statement, the Group discloses for the first time the share of its activities compliant with the EU Taxonomy and for the second time the share of activities qualifying for the EU Taxonomy, arising from the obligation imposed by Regulation (EU) 2020/852 of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment, commonly known as the EU Taxonomy.

The data presented in the Statement have been developed based on the most recent version of the Core option of (non-financial) Global Reporting Initiative (GRI) Standards 2021.

ESG report of the ENEA Group for 2022

In May 2023, the ENEA Group continued its annual practice of sustainability reporting in the form of an online platform. To this end, it published its ESG report for 2022 as an elaborated version of the description of activities taken in 2022, building up on the "Non-financial statement of the ENEA Group for 2022", and their outcomes aimed at minimizing the environmental impact of the Group's operations while enhancing its favorable impact on the social environment.

The report also provides a response to emerging global challenges, such as the climate crisis, energy crisis and humanitarian crisis in the context of Russia's aggression against Ukraine.

As was the case with the ESG Report for 2021, the most recent edition's primary point of reference is the "ENEA Group Development Strategy until 2030 with an outlook to 2040", the pursuit of which, consistent with the goals of Poland's energy transition, is aimed at enabling the Group to attain climate neutrality by 2050, while continuously increasing in value. The report also pays much attention to the development of own renewable energy sources and the indispensable expansion and upgrade of distribution grids, all in the broader context of "ENEA's Green Change", as manifested in the ongoing research and development programs and the management of climate change-related risks and opportunities. The descriptions of the activities carried out and of the goals pursued are accompanied by detailed numerical data, in particular those concerning greenhouse gas emissions, partially calculated for the first time using the location-based method also for Scope 3, or disclosures of the percentage of business consistent with the EU Taxonomy, also published for the first time.

The "ESG report of the ENEA Group for 2022" refers to the expectations formulated in the Supplement on reporting climate-related information (2019/C 209/01) to that Directive, the Regulation (EU) 2020/852 of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment, the public view of the European Securities and Markets Authority (ESMA) on the supervisory priorities for periodic reports of issuers for 2022 in respect of non-financial reporting, the Task Force on Climate-related Financial Disclosures (TCFD) recommendations on climate-related financial disclosures and in the ESG reporting guidelines of the Warsaw Stock Exchange.

The "ESG report of the ENEA Group for 2022" was prepared in accordance with the most recent version of the Global Reporting Initiative's international reporting standards – GRI Standards 2021.

The content of the ESG Report was also approved by the ENEA S.A. Supervisory Board.

The ENEA Group's ESG Report is available at the following address: https://raport2022.esg.enea.pl/

11. Appendices

Appendix 1 – Statement of profit and loss of ENEA Operator in H1 2023

[PLN 000s]	H1 2022	H1 2023	Change	% change
Revenue from sales of distribution services to end users	1,586,393	2,217,785	631,392	39.8%
Revenue from additional fees	2,189	2,570	381	17.4%
Revenue from non-invoiced sale of distribution services	42,595	32,747	-9,848	-23.1%
Clearing of the Balancing Market	282	45,485	45,203	16,029.4%
Revenue from connection fees	36,150	64,065	27,915	77.2%
Revenue from illegal electricity consumption	4,547	3,670	-877	-19.3%
Revenue from other services	14,719	15,836	1,117	7.6%
Revenue from sales of distribution services to other entities	10,657	15,233	4,576	42.9%
Revenue from sales of goods and materials	574	747	173	30.1%
Net revenue from sales	**1,698,106**	**2,398,138**	**700,032**	**41.2%**
Compensation	0	222,607	222,607	100.0%
Revenue from sales and other income	**1,698,106**	**2,620,745**	**922,639**	**54.3%**
Amortization and depreciation	343,236	354,913	11,677	3.4%
Employee benefit costs	287,477	323,412	35,935	12.5%
Consumption of materials and supplies and cost of goods sold	20,711	22,802	2,091	10.1%
Purchase of energy for own needs and network losses	255,769	796,297	540,528	211.3%
Costs of transmission services	231,586	320,048	88,462	38.2%
Other third-party services	141,138	161,844	20,706	14.7%
Taxes and charges	138,921	133,544	-5,377	-3.9%
Tax-deductible expense	**1,418,838**	**2,112,860**	**694,022**	**48.9%**
Other operating revenue	37,571	44,020	6,449	17.2%
Other operating costs	45,296	58,293	12,997	28.7%
Profit/(loss) on change, sale and liquidation of property, plant and equipment and right-to-use assets	(1,418)	10	1,428	100.7%
Operating profit / (loss)	**270,125**	**493,622**	**223,497**	**82.7%**
Finance costs	70,377	180,735	110,358	156.8%
Finance income	25,765	6,089	-19,676	-76.4%
Profit / (loss) before tax	**225,513**	**318,976**	**93,463**	**41.4%**
Income tax	45,086	67,949	22,863	50.7%
Net profit / (loss) for the reporting period	**180,427**	**251,027**	**70,600**	**39.1%**
EBITDA	**613,361**	**848,535**	**235,174**	**38.3%**

Key EBITDA drivers for ENEA Operator in H1 2023 (up by PLN 235.2 million):

(+) an increase in revenue from sales of distribution services to end users by PLN 844 million, driven mainly by higher rates in the approved tariff for 2023
(-) an increase in costs of transmission and distribution services (balance) by PLN 84 million, caused mainly by an increase in the rates of fixed and variable fees in settlements with PSE S.A. and neighboring DSOs
(-) an increase in costs of purchasing electricity to cover the balancing difference (balance) by PLN 495 million, chiefly as a result of an increase in wholesale prices with delivery in 2023
(+) higher revenues from grid connection fees by PLN 28 million, resulting predominantly from a greater number of RES facilities connected in the current year in the 2nd, 3rd and 4th connection groups.
(-) higher operating costs by PLN 53 million resulted mainly from higher employee benefit costs and third-party service expenses
(-) lower result on other operating activities by PLN 5 million resulting largely from the updated provisions for grid assets and higher revenue from the removal of network infrastructure collisions

Appendix 2 – Statement of profit and loss of ENEA Operator in Q2 2023

[PLN 000s]	Q2 2022	Q2 2023	Change	% change
Revenue from sales of distribution services to end users	767,318	1,106,773	339,455	44.2%
Revenue from additional fees	1,163	1,196	33	2.8%
Revenue from non-invoiced sale of distribution services	28,461	-25,724	-54,185	-190.4%
Clearing of the Balancing Market	701	34,893	34,192	4,877.6%
Revenue from connection fees	21,852	32,095	10,243	46.9%
Revenue from illegal electricity consumption	1,675	1,676	1	0.1%
Revenue from sales of other services	7,201	7,738	537	7.5%
Revenue from sales of distribution services to other entities	4,938	7,653	2,715	55.0%
Revenue from sales of goods and materials	261	408	147	56.3%
Net revenue from sales	**833,570**	**1,166,708**	**333,138**	**40.0%**
Compensation	0	100,977	100,977	100.0%
Revenue from sales and other income	**833,570**	**1,267,685**	**434,115**	**52.1%**
Amortization and depreciation	174,789	179,157	4,368	2.5%
Employee benefit costs	140,003	162,794	22,791	16.3%
Consumption of materials and supplies and cost of goods sold	10,655	10,168	-487	-4.6%
Purchase of energy for own needs and network losses	120,959	370,333	249,374	206.2%
Costs of transmission services	120,591	143,801	23,210	19.2%
Other third-party services	71,853	90,375	18,522	25.8%
Taxes and charges	70,616	67,189	-3,427	-4.9%
Tax-deductible expense	**709,466**	**1,023,817**	**314,351**	**44.3%**
Other operating revenue	17,119	22,680	5,561	32.5%
Other operating costs	4,325	16,399	12,074	279.2%
Profit/(loss) on change, sale and liquidation of property, plant and equipment and right-of-use assets	(1,180)	(4,972)	-3,792	-321.4%
Operating profit / (loss)	**135,718**	**245,177**	**109,459**	**80.7%**
Finance costs	39,654	86,387	46,733	117.9%
Finance income	25,228	3,210	-22,018	-87.3%
Profit / (loss) before tax	**121,292**	**162,000**	**40,708**	**33.6%**
Income tax	24,303	29,311	5,008	20.6%
Net profit / (loss) for the reporting period	**96,989**	**132,689**	**35,700**	**36.8%**
EBITDA	**310,507**	**424,334**	**113,827**	**36.7%**

Key drivers of the change in ENEA Operator's EBITDA in Q2 2023 (up by PLN 113.8 million):

(+) an increase in revenue from sales of distribution services to end users by PLN 386 million, driven mainly by higher rates in the approved tariff for 2023
(-) an increase in costs of transmission and distribution services (balance) by PLN 20 million, caused mainly by an increase in the rates of fixed and variable fees in settlements with PSE SA and neighboring DSOs
(-) an increase in costs of purchasing electricity to cover the balancing difference (balance) by PLN 215 million, chiefly as a result of an increase in wholesale prices with delivery in 2023
(+) revenues from grid connection fees up by PLN 10 million
(-) higher operating costs by PLN 37 million resulted mainly from higher employee benefit costs and third-party service expenses
(-) lower result on other operating activities by PLN 10 million resulting largely from the updated provisions for grid assets and higher revenue from the removal of grid infrastructure collisions

Appendix 3 – Statement of profit and loss of ENEA Wytwarzanie in H1 2023

[PLN 000s]	H1 2022	H1 2023	Change	% change
Revenue from sales of electricity	3,959,078	7,875,973	3,916,895	98.9%
generation license	3,810,087	7,721,834	3,911,747	102.7%
trading license	123,779	113,749	-10,030	-8.1%
Regulatory System Services	25,212	40,390	15,178	60.2%
Revenue from the Capacity Market	316,529	332,845	16,316	5.2%
Revenue from sales of heat	7,086	11,891	4,805	67.8%
Revenue from sales of other products and services	2,933	2,070	-863	-29.4%
Revenue from sales of goods and materials	16,633	20,862	4,229	25.4%
Net revenue from sales	**4,302,259**	**8,243,641**	**3,941,382**	**91.6%**
Revenue from leases and operating subleases	258	485	227	88.0%
Revenue from sales and other income	**4,302,517**	**8,244,126**	**3,941,609**	**91.6%**
Amortization and depreciation	122,493	128,877	6,384	5.2%
Employee benefit costs	148,850	192,781	43,931	29.5%
Consumption of materials and supplies and cost of goods sold	3,025,359	5,484,676	2,459,317	81.3%
Purchase of energy for subsequent sale	454,886	561,820	106,934	23.5%
Transmission services	1	0	-1	-100.0%
Other third-party services	63,139	91,176	28,037	44.4%
Taxes and charges	40,108	1,264,158	1,224,050	3,051.9%
Tax-deductible expense	**3,854,836**	**7,723,488**	**3,868,652**	**100.4%**
Other operating revenue	12,038	12,910	872	7.2%
Other operating costs	8,968	15,270	6,302	70.3%
Change in provision related to onerous contracts	-193,683	0	193,683	100.0%
Profit/(loss) on change, sale and liquidation of property, plant and equipment and right-to-use assets	74	(1,172)	-1,246	-1,683.8%
Impairment loss/(reversal of impairment loss) on non-financial non-current assets	(1,737)	(1,134)	603	34.7%
Operating profit / (loss)	**258,879**	**518,240**	**259,361**	**100.2%**
Finance costs	73,747	112,524	38,777	52.6%
Finance income	41,134	1,621	-39,513	-96.1%
Profit / (loss) before tax	**226,266**	**407,337**	**181,071**	**80.0%**
Income tax	72,199	79,834	7,635	10.6%
Net profit / (loss) for the reporting period	**154,067**	**327,503**	**173,436**	**112.6%**
EBITDA	**379,635**	**645,983**	**266,348**	**70.2%**

ENEA Wytwarzanie – key EBITDA drivers in H1 2023 (up by PLN 266.4 million):

(+) generation margin up by PLN 868.6 million
(+) Balancing Market repurchase margin up by PLN 402.1 million
(+) in H1 2022, establishment of a provision for onerous contracts in the amount of PLN 193.7 million
(+) trading margin up by PLN 87.1 million
(+) revenue from the Capacity Market up by PLN 16.3 million
(+) revenue from Regulatory System Services up by PLN 15.2 million
(-) PLN 1,224.3 million contribution to the Price Difference Fund
(-) fixed costs up by PLN 76.8 million
(-) other drivers down by PLN 15.5 million

Appendix 4 – Statement of profit and loss of ENEA Wytwarzanie in Q2 2023

[PLN 000s]	Q2 2022	Q2 2023	Change	% change
Revenue from sales of electricity	2,110,405	3,843,538	1,733,133	82.1%
generation license	2,036,271	3,822,781	1,786,510	87.7%
trading license	60,211	0	-60,211	-100.0%
Regulatory System Services	13,923	20,757	6,834	49.1%
Revenue from the Capacity Market	156,584	162,713	6,129	3.9%
Revenue from sales of heat	2,065	5,412	3,347	162.1%
Revenue from sales of other products and services	1,515	1,279	-236	-15.6%
Revenue from sales of goods and materials	9,736	11,594	1,858	19.1%
Net revenue from sales	**2,280,305**	**4,024,536**	**1,744,231**	**76.5%**
Revenue from leases and operating subleases	142	246	104	73.2%
Net revenue from sales and other income	**2,280,447**	**4,024,782**	**1,744,335**	**76.5%**
Amortization and depreciation	59,935	65,120	5,185	8.7%
Employee benefit costs	75,343	106,609	31,266	41.5%
Consumption of materials and supplies and cost of goods sold	1,634,596	2,590,331	955,735	58.5%
Purchase of energy for subsequent sale	223,101	305,920	82,819	37.1%
Transmission services	1	0	-1	-100.0%
Other third-party services	41,161	48,141	6,980	17.0%
Taxes and charges	20,929	574,765	553,836	2,646.3%
Tax-deductible expense	**2,055,066**	**3,690,886**	**1,635,820**	**79.6%**
Other operating revenue	9,308	5,250	-4,058	-43.6%
Other operating costs	6,000	6,840	840	14.0%
Change in provision related to onerous contracts	-193,683	0	193,683	100.0%
Profit/(loss) on change, sale and liquidation of property, plant and equipment and right-of-use assets	70	(1,182)	-1,252	-1,788.6%
Impairment loss/(reversal of impairment loss) on non-financial non-current assets	(1,737)	(1,134)	603	34.7%
Operating profit / (loss)	**36,813**	**332,258**	**295,445**	**802.6%**
Finance costs	38,735	57,249	18,514	47.8%
Finance income	39,230	401	-38,829	-99.0%
Profit / (loss) before tax	**37,308**	**275,410**	**238,102**	**638.2%**
Income tax	35,917	53,217	17,300	48.2%
Net profit / (loss) for the reporting period	**1,391**	**222,193**	**220,802**	**15,873.6%**
EBITDA	**95,011**	**396,244**	**301,233**	**317.1%**

ENEA Wytwarzanie – key EBITDA drivers in Q2 2023 (up by PLN 301.2 million):

(+) generation margin up by PLN 426.7 million
(+) Balancing Market repurchase margin up by PLN 260.4 million
(+) in Q2 2022, establishment of a provision for onerous contracts in the amount of PLN 193.7 million
(+) trading margin up by PLN 12.6 million
(+) revenue from Regulatory System Services up by PLN 6.8 million
(+) revenue from the Capacity Market up by PLN 6.1 million
(-) PLN 554.1 million contribution to the Price Difference Fund
(-) fixed costs up by PLN 43.3 million
(-) other drivers down by PLN 7.7 million

Appendix 5 - Statement of profit and loss of ENEA Elektrownia Połaniec in H1 2023

[PLN 000s]	H1 2022	H1 2023	Change	% change
Revenue from sales of electricity	2,235,958	3,413,571	1,177,613	52.7%
generation license	1,890,218	3,083,894	1,193,676	63.2%
trading license	336,579	305,774	-30,805	-9.2%
Regulatory System Services	9,161	23,903	14,742	160.9%
Revenue from the Capacity Market	125,059	132,758	7,699	6.2%
Revenue from certificates of origin	200,260	164,269	-35,991	-18.0%
Revenue from sales of heat	37,855	37,746	-109	-0.3%
Revenue from sales of other products and services	2,785	3,972	1,187	42.6%
Revenue from sales of goods and materials	1,985	11,129	9,144	460.7%
Excise duty	24	33	9	37.5%
Revenue from sales and other income	**2,603,878**	**3,763,412**	**1,159,534**	**44.5%**
Amortization and depreciation	49,786	53,991	4,205	8.4%
Employee benefit costs	41,594	69,765	28,171	67.7%
Consumption of materials and supplies and cost of goods sold	1,725,711	2,813,186	1,087,475	63.0%
Purchase of energy for subsequent sale	345,847	253,620	-92,227	-26.7%
Transmission services	182	285	103	56.6%
Other third-party services	118,953	138,299	19,346	16.3%
Taxes and charges	18,726	262,629	243,903	1,302.5%
Tax-deductible expense	**2,300,799**	**3,591,775**	**1,290,976**	**56.1%**
Other operating revenue	5,993	14,470	8,477	141.4%
Other operating costs	921	2,749	1,828	198.5%
Change in provision related to onerous contracts	-253,249	0	253,249	100.0%
Operating profit / (loss)	**54,902**	**183,358**	**128,456**	**234.0%**
Finance costs	11,947	30,959	19,012	159.1%
Finance income	5,587	551	-5,036	-90.1%
Dividend income	1,778	172	-1,606	-90.3%
Profit / (loss) before tax	**50,320**	**153,122**	**102,802**	**204.3%**
Income tax	9,120	31,425	22,305	244.6%
Net profit / (loss) for the reporting period	**41,200**	**121,697**	**80,497**	**195.4%**
EBITDA	**104,688**	**237,349**	**132,661**	**126.7%**

ENEA Elektrownia Połaniec – key EBITDA drivers in H1 2023 (up by PLN 132.7 million):

System Power Plants Segment (EBITDA down by PLN 85.3 million):
(-) PLN 182.9 million contribution to the Price Difference Fund
(-) generation margin down by PLN 150.2 million
(-) fixed costs up by PLN 24.1 million
(-) other drivers down by PLN 12.3 million, including a cost adjustment related to 2022
(+) in H1 2022, establishment of a provision for onerous contracts in the amount of PLN 195.0 million
(+) Balancing Market repurchase margin up by PLN 60.3 million
(+) revenue from Regulatory System Services up by PLN 14.7 million
(+) revenue from the Capacity Market up by PLN 7.7 million
(+) trading margin up by PLN 6.5 million

RES Segment (EBITDA up by PLN 276.3 million):
(+) RES energy production margin up by PLN 305.9 million
(+) in H1 2022, establishment of a provision for onerous contracts in the amount of PLN 58.2 million
(-) PLN 59.2 million contribution to the Price Difference Fund
(-) Green Unit’s margin on sales of green certificate inventories down by PLN 21.6 million
(-) fixed costs up by PLN 5.2 million
(-) other variable expenses up by PLN 1.8 million

Heat Segment (EBITDA down by PLN 58.3 million)
(-) lower heat margin by PLN 58.1 million due to: PLN -43.9 million higher coal costs, PLN -16.0 million higher CO_2 cost, PLN +1.9 million higher heat selling price
(-) other drivers down by PLN 0.2 million

Appendix 6 – Statement of profit and loss of ENEA Elektrownia Połaniec in Q2 2023

[PLN 000s]	Q2 2022	Q2 2023	Change	% change
Revenue from sales of electricity	1,138,993	1,727,148	588,155	51.6%
generation license	977,889	1,517,502	539,613	55.2%
trading license	156,497	195,967	39,470	25.2%
Regulatory System Services	4,607	13,679	9,072	196.9%
Revenue from the Capacity Market	62,089	64,680	2,591	4.2%
Revenue from certificates of origin	117,264	76,353	-40,911	-34.9%
Revenue from sales of heat	18,550	18,688	138	0.7%
Revenue from sales of other products and services	1,446	2,128	682	47.2%
Revenue from sales of goods and materials	1,021	7,042	6,021	589.7%
Excise duty	10	15	5	50.0%
Revenue from sales and other income	**1,339,353**	**1,896,024**	**556,671**	**41.6%**
Amortization and depreciation	25,669	27,349	1,680	6.5%
Employee benefit costs	21,736	35,437	13,701	63.0%
Consumption of materials and supplies and cost of goods sold	931,382	1,465,307	533,925	57.3%
Purchase of energy for subsequent sale	164,727	150,011	-14,716	-8.9%
Transmission services	86	133	47	54.7%
Other third-party services	62,404	72,856	10,452	16.7%
Taxes and charges	9,910	52,830	42,920	433.1%
Tax-deductible expense	**1,215,914**	**1,803,923**	**588,009**	**48.4%**
Other operating revenue	4,534	5,369	835	18.4%
Other operating costs	424	1,745	1,321	311.6%
Change in provision related to onerous contracts	-253,249	0	253,249	100.0%
Operating profit / (loss)	**(125,700)**	**95,725**	**221,425**	**176.2%**
Finance costs	6,640	16,494	9,854	148.4%
Finance income	4,697	203	-4,494	-95.7%
Dividend income	1,778	172	-1,606	-90.3%
Profit / (loss) before tax	**(125,865)**	**79,606**	**205,471**	**163.2%**
Income tax	-24,706	15,655	40,361	163.4%
Net profit / (loss) for the reporting period	**(101,159)**	**63,951**	**165,110**	**163.2%**
EBITDA	**-100,031**	**123,074**	**223,105**	**223.0%**

Key drivers of the change in ENEA Elektrownia Połaniec's EBITDA in Q2 2023 (down by PLN 223.1 million):

System Power Plants Segment (EBITDA up by PLN 73.9 million):
(+) in Q2 2022, establishment of a provision for onerous contracts in the amount of PLN 195.0 million
(+) Balancing Market repurchase margin up by PLN 49.5 million
(+) revenue from Regulatory System Services up by PLN 9.1 million
(+) revenue from the Capacity Market up by PLN 2.6 million
(-) generation margin down by PLN 124.3 million
(-) PLN 30.7 million contribution to the Price Difference Fund
(-) fixed costs up by PLN 14.6 million
(-) other drivers down by PLN 12.2 million, including a cost adjustment related to 2022
(-) trading margin down by PLN 0.5 million.

RES Segment (EBITDA up by PLN 179.7 million):
(+) RES energy production margin up by PLN 166.6 million
(+) in Q2 2022, establishment of a provision for onerous contracts in the amount of PLN 58.2 million
(-) Green Unit's margin on sales of green certificate inventories down by PLN 30.9 million
(-) PLN 10.6 million contribution to the Price Difference Fund
(-) fixed costs up by PLN 3.2 million
(-) other variable expenses up by PLN 0.4 million

Heat Segment (EBITDA down by PLN 30.5 million)
(-) lower heat margin by PLN 30.2 million due to: PLN -23.1 million higher coal costs, PLN -7.9 million higher CO_2 cost, PLN +0.9 million higher heat selling price
(-) other drivers down by PLN 0.3 million

12. Glossary of terms and abbreviations

This is a glossary of terms and abbreviations used in this report. Definitions and calculation methodologies of alternative performance measures are the same as the definitions and calculation methodologies of the same measures used in the activity reports / additional information forming part of ENEA Group's previous periodic reports. Some of the definition may are also included in the glossary of terms and abbreviations available on the Company's website at https://ir.enea.pl/slownik.

Information on the individual measures calculated for respective reporting periods is monitored on a regular basis and presented in the Company's successive periodic reports. The presented measures are typical ratios used in financial analysis with special consideration of the industries, in which the ENEA Group operates.

Financial ratios	Description
CAPEX	Capital expenditures on property, plant and equipment, intangible assets and right-to-use asset
Current receivables turnover in days	Average balance of trade and other receivables x days / Revenue from sales and other income
Trade and other payables turnover in days	Average balance of trade and other payables x days / Cost of products, goods and materials sold
Inventory turnover in days	Average balance of inventories x days / Cost of products, goods and materials sold
Net debt / EBITDA	(Loans, borrowings and non-current and current debt securities + non-current and current finance lease liabilities + non-current and current financial liabilities measured at fair value - cash and cash equivalents - non-current and current financial assets at fair value - non-current and current debt financial assets measured at amortized cost - other current investments) / EBITDA LTM
EBITDA	Operating profit (loss) + depreciation and amortization + impairment losses on non-financial non-current assets
EBITDA LTM	EBITDA for the last 12 months
EBIT	Operating profit (loss)
External financing	Sum of the following items of the Statement of cash flows: Loans and borrowings received, Issue of bonds, Repayment of loans and borrowings, Redemption of bonds
Operating expenses	Depreciation and amortization; Employee benefit costs Consumption of materials and supplies and cost of goods sold; Purchase of energy and gas for subsequent sale; Transmission services; Other third-party services; Taxes and charges
Cost of goods and materials sold	Consumption of materials and supplies and cost of goods sold; Purchase of energy for resale; Transmission services; Other third-party services; Taxes and charges; Excise duty
Fixed costs	Costs that are independent of the electricity production volume. These costs include: payroll costs and charges, depreciation and amortization, costs of consumption of materials and supplies, costs of third-party services, costs of taxes and charges
Own costs	Direct and indirect selling costs of ENEA S.A., ENEA Trading i ENEA Power&Gas Trading
Margin on heat	Margin on sales of heat calculated as the difference between revenue from sales of heat and its variable production costs
Margin on trading	Difference between revenue from sales and cost of electricity purchased in trading operations
Margin on RES energy production	Margin on sales of energy and production of green certificates from the Green Unit, calculated as the difference between revenue from sales of energy and from the valuation of certificates produced and the variable costs of producing them
Margin on the Balancing Market	Difference between revenue from sales and cost of electricity purchased on the Balancing Market
Margin on generation	Difference between revenue from sales of electricity produced and revenue from certificates, and the variable costs related to production of that electricity
Margin on licensed activity	Indicator incorporating revenues and costs related to business activity involving distribution of electricity to customers located in a specific area. Those include primarily: revenue from sales of distribution services to end users, costs of transmission and distribution services, costs of electricity purchased to cover the balancing difference and for own needs, revenue from grid connection fees for connection to ENEA Operator's grid.
Green Unit's margin on sales/remeasurement of green certificate inventories	Margin on the sale of green certificates from the Green Unit calculated as a difference between revenue from sales and the cost of sales of the certificates, which takes into account the updated inventories of green certificates, i.e. the updated average weighted price of the inventory of certificates to market price in case their market price drops significantly
Coverage of non-current assets with equity	Equity / Non-current assets
Operating profitability	Operating profit (loss) / Revenue from sales and other income
Return on equity (ROE)	Net profit (loss) for the reporting period / Equity
Return on assets (ROA)	Net profit (loss) for the reporting period / Total assets
Net profitability	Net profit (loss) for the reporting period / Revenue from sales and other income
EBITDA profitability	EBITDA / Revenue from sales and other income

Adjusted first contribution margin	Margin on retail trading of electricity and gaseous fuel earned by ENEA S.A., presented together with wholesale sales of ENEA Trading and ENEA Power&Gas Trading adjusted for presentation by other conditional factors, such as: revenues and costs from sales and purchases of CO_2 emission allowances, valuation of CO_2 contracts, forward transactions for energy and gas presented in operating activities.
Result on other operating activities	Result on the following items: Other operating revenue, Other operating costs, Profit/loss on a change, sale and liquidation of property, plant and equipment
Current liquidity ratio	Current assets / Current liabilities
Total debt ratio	Total liabilities / Total assets
Change in working capital	An item of the consolidated statement of cash flows

Abbreviation/term	Description
ACER	Agency for the Cooperation of Energy Regulators
AMI	Advanced Metering Infrastructure, advanced metering and billing systems with two-way metering and billing
Capacity auction	A mechanism introduced by the Capacity Market Act of 8 December 2017 (Journal of Laws 2020, Item 247). In capacity auctions, electricity producers offer the operator a capacity obligation for the duration of a delivery period, which means that they undertake to maintain readiness in the delivery period to deliver the specified electric power output to the system and to deliver the specified electric power output to the system in emergency periods
BAT	Best Available Techniques – a document drawing conclusions on best available techniques for the installations concerned and indicating the emission levels associated with the best available techniques
CBAM	Carbon Border Adjustment Mechanism
CDS (Clean dark spread)	Difference between revenue from sales of electricity produced and the variable costs related to production of that electricity (unit CO_2 cost and unit cost of coal including transportation)
Baseload price (BASE)	Contract price for delivery of the same volume of electricity in each hour of the day
CfD	Contract for Difference
COREPER	Committee of Permanent Representatives (a body consisting of permanent representatives of European Union member states to the Council in Brussels at the rank of ambassadors and their deputies)
CO_2	Carbon dioxide
CSR (Corporate Social Responsibility)	Corporate Social Responsibility. Responsibility of an organization for the impact exerted by its decisions and actions on society and the environment; it is ensured by transparent and ethical conduct, which: – contributes to sustainable development, including wellbeing and health of the society, – takes stakeholder expectations into account, – complies with the applicable law and consistent with international standards of conduct, – is integrated with the organization's activities and is practiced in its relations.
CSIRE	Central Energy Market Information System
IED	Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 concerning industrial emissions. It tightens the standards for emissions of sulfur dioxide, nitrogen oxides and dust from combustion plants
EUA	EU Emission Allowance - emission allowance under the European Emissions Trading System
EU ETS European Emissions Trading System	Market for carbon dioxide emission allowances. It forms the foundation of EU policy to combat climate change and aims to reduce greenhouse gas emissions in a cost-effective and economically efficient manner
GWh	Gigawatt-hour
GJ	Gigajoule
HF	Hydrogen fluoride
Hg	Mercury
ICE	Platform for trading EU CO_2 Emission Allowances (EUAs) and Certified Emission Reduction units (CERs) on the futures market
ICT	Information and Communication Technologies (ICT).
IRGIT	Izba Rozliczeniowa Giełd Towarowych S.A.
Stakeholder	A person or group of persons interested in decisions or activities of an organization. A stakeholder is anyone who influences an organization and anyone influenced by it.
FGD	Flue gas desulphurization and heavy metal reduction installation.
ITRE	Committee on Industry, Research and Energy of the European Parliament
Combined heat and power generation	A technological process of simultaneous generation of electricity and useful thermal energy in a CHP plant
Polish Power System (KSE)	A collection of devices used to generate, transmit, distribute, store and use electricity, connected together in a functional system supporting continuous and uninterrupted supply of electricity in Poland.

LULUCF	Political agreement in the matter of increasing the contribution of the Land Use, Land-Use Change and Forestry sector.
Mg	Megagram, or a ton.
MSR	Market Stability Reserve (for EU ETS allowances)
MWe	Megawatt of electrical power
MWh	Megawatt-hour (1 GWh = 1,000 MWh)
MW_t	Megawatt of thermal power
NABE	National Energy Security Agency
NH_3	Ammonia.
Nm^3	Normalized cubic meter of gas, i.e. the number of cubic meters that the gas would occupy in normal conditions.
LV	Low voltage grid supplying individual users with 50 Hz alternating current at 230 V phase voltage.
NO_x	Nitrogen oxides
Transmission System Operator (TSO)	Polskie Sieci Elektroenergetyczne S.A., a company wholly-owned by the State Treasury, which owns highest voltage grids and therefore is the operator of the power transmission system.
OIRE	Energy Market Information Operator
DSO	Distribution System Operator
DSOn	A Distribution System Operator, whose distribution network has no direct connection with the TSO's transmission network.
RES	Renewable energy sources
PJ	Petajoule
PMOZE	Property rights under certificates of origin for energy from renewable sources
PSCMI1	Reflects the price level of class 20-23/1 fine steam coal in sales to commercial and industrial energy sector.
Prosumer	A person who generates electricity from renewable energy sources for own needs using a micro-installation, capable of storing energy and transferring surplus energy to the power grid
PV	Photovoltaics
DAM	Day-Ahead Market (DAM) has been operating since 30 June 2000. It is a spot electricity market in Poland. Since the beginning of quotation, DAM prices are a benchmark for energy prices in bilateral contracts in Poland. The DAM is intended for the companies that want to actively and safely close their electricity purchase/sales portfolios on an ongoing basis at particular hours of the day
REPowerEU	The European Commission's plan to reduce Europe's dependence on Russian fossil fuels before 2030.
Balancing Market	Technical market operated by TSOs. Its objective is to ensure real-time balancing of demand for electricity and its production in the Polish Power System (NPS)
SPOT market	Cash market (spot)
Forward market	Electricity market where forward products are listed
SAIDI	System Average Interruption Duration Index – index of the system average duration of a long and very long interruptions (expressed in minutes per Customer)
SAIFI	System Average Interruption Frequency Index – indicator of the system average frequency of long interruptions in energy supply (expressed in the number of interruptions per Customer)
SCR (Selective Catalytic Reduction)	Catalytic flue gas denitrification installation – it operates based on the principle of reduction of nitrogen oxides to atmospheric nitrogen on the surface of a catalyst, using substances containing ammonia.
SMR	Small Modular Reactors
Smart Grid	Smart electrical grids, which feature communication between all the participants on the energy market, in order to supply energy services at lower costs, enhance efficiency and integrate dispersed energy sources, including renewable energy sources.
MV	Medium voltage grid, in which the phase-to-phase voltage ranges from 1 kV to 60 kV
SO_2	Sulfur dioxide
EU Taxonomy	Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment
POLPX	Polish Power Exchange
TNAC	Total Number of Allowances in Circulation (pertains to EU ETS allowances)
TWh	Terawatt-hour
ERO	Energy Regulatory Office
Energy Law	The Energy Law Act of 10 April 1997
HV	High voltage grid. An electric power transmission grid, in which the phase-to-phase voltage ranges from 60 to 200 kV (in Poland: 110 kV). This grid is used to transmit electricity over large distances.
RAB	Regulatory Asset Base

Signatures of the Management Board

Date of approval and publication of the Management Board Report on the Activity of the ENEA Group in H1 2023: 13 September 2023

Signed by:

President of the Management Board	Paweł Majewski
Management Board Member for Financial Matters	Rafał Mucha
Management Board Member for Operational Matters	Marcin Pawlicki
Management Board Member for Commercial Matters	Jakub Kowaleczko
Management Board Member for Corporate Matters	Dariusz Szymczak
Management Board Member for Strategy and Development	Lech Żak