

OTE, a.s.

Key Information

OTE, a. s. was founded on 18th April, 2001 by the Czech Republic's government which is the Company's sole shareholder. The Ministry of Industry and Trade is entrusted by the government to exercise the shareholder's rights. In the Czech Republic, it mainly performs the role of market operator, nominated market organizer, entity issuing guarantees of origin of energy and National Administrator of the Union registry for emissions trading.

The registered capital of the company is CZK 1 billion.

OTE's operations reaffirm the Company's significant position on the electric and gas market, on the market for environmental instruments and the market for greenhouse gas emission allowances, both in the Czech Republic and across Europe. The company has been active in the electricity market since 2002 and in the gas market since 2010.

Core operations comprise:

- evaluation and financial settlement of imbalances between contracted and metered supply and consumption of electricity and gas
- the organization of the short-term electricity market and the short-term gas market and the performance of the activities of the NEMO pursuant to Commission Regulation (EU) 2015/1222
- processing and exchange of data and information related to the electricity and gas markets through the Centre of Data Services, 24 hours a day, 7 days a week
- administration of support payments to supported energy sources
- issuance of guarantees of origin for all types of electricity, for advanced biomethane and other, for heat from renewable energy sources, heat from nuclear sources and hydrogen
- performing the function of a national administrator of the Union registry for emissions trading
- provision of technical support for change of electricity and gas supplier in customer points of delivery
- preparation of monthly and yearly reports on the electricity market and the gas market in the Czech Republic

- preparation of reports on projected electricity and gas consumption and the method of ensuring balanced electricity and gas supply and demand
- trade data reporting pursuant to Regulation (EU) No. 1227/2011 of the European Parliament and of the Council on Wholesale Energy Market Integrity and Transparency (REMIT)

The market operator is in response to Commission Regulation (EU) 2015/1222, determined as The Nominated Electricity Market Operator (NEMO).

OTE has been certified by ACER as the Registered Reporting Mechanism (RRM) in accordance with REMIT. The certification is a necessary prerequisite for the provision of reporting services to market participants.

OTE also performs the role of the National Administrator of the Union registry for emissions trading and the role of the auctioneer of the allowances. It is the entity that issues guarantees of origin and ensures their registration.

OTE has been actively engaged in professional organizations and their working groups in the Czech Republic and abroad CIGRE, EUROPEX, Price Coupling of Regions (PCR), Association of Issuing Bodies (AIB).

The Company's goal is to promote liberal and transparent principles on the electricity and gas markets, participate in formulating rules governing these markets, and ensuring free and equal access to them for all market participants.

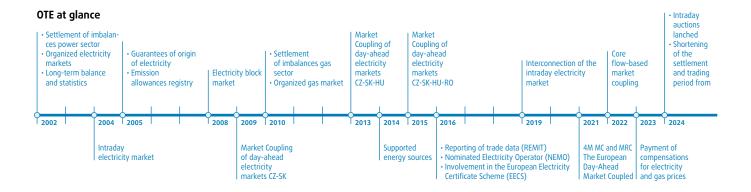
Volumes of electricity and gas registered in the OTE system in 2024

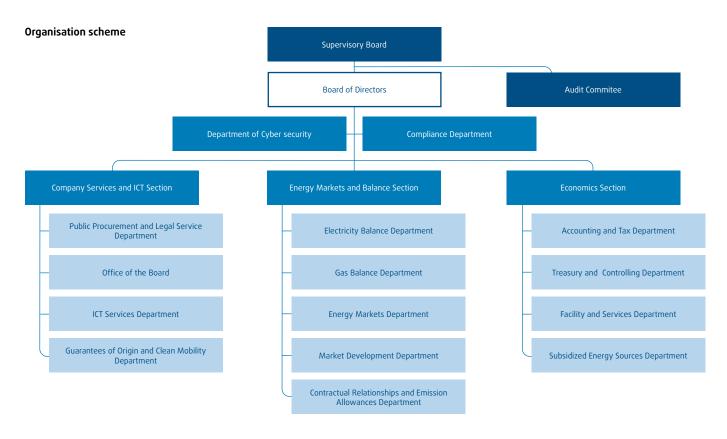
Electricity	Sale	Purchase
Day-ahead Market	24,389 GWh	18,441 GWh
Intraday Market (including cross-border exchanges)	3,744 GWh	3,293 GWh
Bilateral transactions (internal nominations)	44,887 GWh	44,887 GWh
Export/import	16,112 GWh	9,666 GWh

Gas	Sale	Purchase
Intraday Market	3,743 GWh	3,743 GWh
Bilateral transactions (internal nominations)	174,638 GWh	174,638 GWh
Export/import	2,250 GWh	64,728 GWh
Injection/Withdrawal	19,735 GWh	29,394 GWh

OTE, a.s.

Key Information





Electricity and Gas Market Participants in 2024

Type of participant – electricity market	Number on 31st December 2024	Year-on year change
Balance responsible party	151	+7
Supplier	206	-2
Balancing energy provider	54	+14
Distribution system operator	271	+2
Transmission system operator	1	0

Type of participant – electricity market	Number on 31st December 2024	Year-on year change
Balance responsible party	141	+8
Supplier	87	-2
Distribution system operator	71	0
Transmission system operator	1	0
Gas storage operator	5	+1





Greenhouse Gases Emission Allowances

Key Information

OTE, a. s., performs the function of a national administrator of the Union Registry for emissions trading that ensures accurate accounting of the issuance, holding, transfer and cancellation of emission allowances. OTE has performed this administration first on the basis of the authorization of the Ministry of the Environment since 2005, later pursuant to Act No. 383/2012 Coll., on the Terms of Greenhouse Gas Emission Allowance Trading.

Records of allowances are maintained in specific national accounts, operator holding accounts, aircraft operator holding accounts and trading accounts.

Pursuant to Act No. 383/2012 Coll., on the Terms of Greenhouse Gas Emission Allowance Trading, as amended, all participants that have been included in the EU Emissions Trading System (EU ETS) are required to open a Registry account. Participants in the Emissions Trading System are operators of stationary installations with a permit for greenhouse gas emissions, aircraft operators whose operating licences have been issued in the Czech Republic or who are under the administration of the Czech Republic in accordance with the list of aircraft operators published by the European Commission, maritime operators and fuel suppliers with a fuel supply permit. Both above mentioned permits are issued by the Ministry of the Environment. The Czech Republic did not register any maritime operators under its administration in 2024. Fuel suppliers are a new sector for which a separate Emissions Trading System, called ETS2, will be introduced. This will include fuel combustion in the building segment, road transport sector and other industrial activities yet not included in the current ETS.

Any natural person or legal entity may open a trading account, including installation operators and aircraft operators that have already established holding accounts.

EU Emission Trading System (EU ETS) was established pursuant to Directive 2003/87/EC. Pursuant to Commission Delegated Regulation (EU) No. 2019/1122, all Member States are required to use the standardized Union Registry launched in 2012, which replaced the EU Member States' national registries.

The Union Registry can be accessed from the https://www.povolenky.cz

As of 31st December, 2024, there were 235 operator holding accounts, 55 trading accounts and 8 aircraft operator holding accounts. These accounts belong to a total of 203 entities. Some of these entities have more than one account in the Registry.

In 2024, 853 transactions took place in the Registry, during which a total of 138,958,624 allowances changed accounts. The statistics include all transfer transactions made between account holders in the Union Registry and in Switzerland with general and aviation European allowances. Multiple unit types can be transferred in one transaction. No Swiss allowances were transferred in 2024.

The reason for the transaction and the actual prices of allowances are neither evaluated nor traded in the Registry. Emission trading takes place, for example through bilateral or exchange trades.

The deadline for installation operators and aircraft operators to comply with the legal obligation to "submit verified emissions for the year" 2023 was 15th April, 2024. The total amount of verified emissions produced from stationary installations and aircraft within EU ETS in 2023 was 46,934,736 tonnes of $\rm CO_2$, $\rm N_2O$ and PFC, which is 10,371,100 tonnes fewer year-on-year. In 2024, the deadline for surrendering the allowances in the amount of verified tonnes of greenhouse gas emissions in the previous year, was moved from 30th April to 30th September. The total of five operators of stationary installations have not fulfilled this obligation to submit the allowances in full.

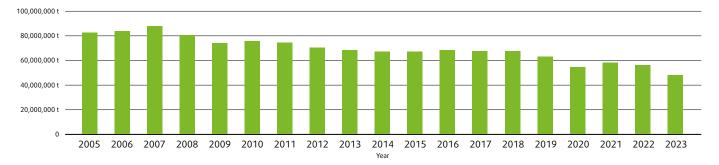
Trends of reduction of emissions covered by the EU ETS system in the Czech Republic are demonstrated in the figure below on data from the Union Registry between 2005 and 2023.

Distribution of numbers and volumes of transactions by unit types

in 2024 Unit type	Unit volume	Number of transactions*
European Allowances	136,767,355	813
European Aviation Allowances	2,191,269	49
Total	138,958,624	853

^{*} multiple unit types can be transferred in one transaction

Emission trends of CO₂, N₂O and PFC covered by the EU ETS in the Czech Republic



Guarantees of Origin

Key Information

A guarantee of origin of energy provides proof from which source, by which production device, in which period and volume the energy was generated. It allows to demonstrate to final customers the origin of the consumed energy. For this purpose OTE operates the Registry of Guarantees of Origin (EZP).

Legal Framework and Operator Obligations

The Market Operator was assigned the obligation to issue guarantees of origin upon written request of producers of electricity under Act No. 180/2005 Coll. The implementation of Act No. 165/2012 Coll. (POZE) resulted in a fundamental change in the administration of guarantees of origin in 2013, where the guarantees of origin can since then be issued in response to requests of producers of electricity only electronically. From 1st January, 2023, an amendment to POZE expanded guarantees of origin to all kinds of electricity generation, biomethane, advanced biomethane, heat from renewable sources, heat from nuclear facility and hydrogen. Decree No. 328/2022 Coll. then sets out procedures, conditions and methods to verify data necessary for issuance, transfer, recognition and cancellation of guarantees of origin and their content requirements.

Registry of Guarantees of Origin (EZP) run by the operator

Holders of license for electricity, gas or heat production, for heat distribution or electricity, gas or hydrogen trade may apply for access to the EZP system. All information on the EZP and on establishing access to it is available from the website https://www.ote-cr.cz/en/gos and allowances/quarantees-of-origin/important-information

Thanks to the legislative amendment, in 2023 for the first time the guarantees of origin were also issued for heat, as well as guarantee of origin for electricity, from nucleal facility, which was in 2024 followed by first time issuance of guarantees of origin for biomethane.

International Cooperation and Cross-border Transactions

For selected guarantees of origin, the electronic cross-border transfer is possible, thanks to the market operator's active involvement in the international Association of Issuing Bodies (AIB), The market operator became its member already in November 2013 and was also included in the international standardized European Electricity Certificate Scheme (EECS) for guarantees of origin of electricity. In 2024, the market operator expanded its activities in AIB and on

29th May it also became the (fifth) member of the Gas Scheme Group (GSG). The EECS designation therefore also applies to guarantees of origin of biomethane.

The EZP system is fully harmonized with other systems of countries associated in the AIB and allows the import and export of guarantees of origin of electricity issued in these countries, within the valid legislative framework. The cooperation of the market operator with other AIB members significantly increases the transparency of the whole system of guarantees of origin at all stages of their life cycle.

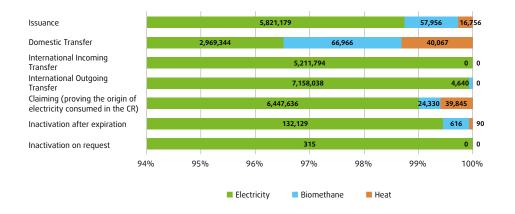
Statistics: growing interest in proving the origin of supplied energy, increase in the number of international transfers

Through the process of cancelling guarantees of origin*, the origin of approximately 6,448 GWh of energy produced from renewable or low-emission sources, and consumed in the Czech Republic, was transparently guaranteed in 2024. This represents a year-on-year increase of 32%. Together with the applied guarantees of origin of biomethane and heat, this amounts to 6,512 GWh of energy, the consumption of which was supported by applied guarantees of origin.

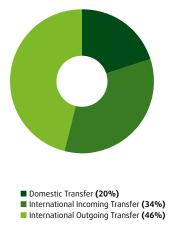
In 2024, both international incoming (by 44%) and outgoing (by 98%) transfers increased significantly. 5,895,891 guarantees of origin were issued to account holders, which represents a decrease of 24% in issued guarantees compared to 2023. While the issuance of guarantees for origin of nuclear electricity increased, the issuance of guarantees of origin for renewable electricity, especially supported ones, decreased significantly. The decline was replaced by guarantees of origin from nuclear facility and guarantees of origin from abroad, imported thanks to the connection to the AIB hub.

* Cancellation of the guarantee of origin is the process of its transfer to the cancellation account, which ends its life cycle. By the cancellation of the guarantee of origin the account holder declares that a given volume of energy represented by the relevant number of guarantees of origin was supplied to a final consumer.

Ratio of transactions carried out - by source



Ratio of GO transfers







Supported Energy Sources

Types of Support and Registration

Support for power generation is provided as green bonuses and auction bonuses for electricity or as purchase prices (feed-in-tariff). Operating aid for production of heat or biomethane is provided as green bonuses for heat or biomethane (pursuant to Act No. 165/2012 Coll., on Supported Energy Sources and amendments to certain laws).

Pursuant to the Act No. 458/2000 Coll. (Energy Act) the Market Operator is required to:

- pay electricity producers green bonuses and auction bonuses for electricity from renewable energy sources, secondary sources and combined heat and power (CHP)
- pay mandatory purchasers the difference between the feed-in tariff and the hourly price and the price for their activities
- pay heat producers green bonuses for heat
- pay green bonuses for biomethane to producers of biomethane.

Registration of support

Registration of power and heat producers and installations and registration of support is done electronically in the Market Operator's system via secure access. Producers eligible for support apply under the Terms of Act No. 165/2012 Coll.; the application procedure is set out in Decree No. 489/2021 Coll.

Records of generated volumes of electricity, heat and biomethane

Producers eligible for support for generation of electricity from renewable energy sources, secondary sources, combined heat and power, support for heat and support for biomethane record monthly volumes of generated electricity, heat and biomethane through electronic reports in the Market Operator's system.

Settlement of support

The settlement of green bonuses and auction bonuses for electricity, green bonuses for heat or green bonuses for biomethane is carried out on the basis of data included in the monthly report submitted by the relevant producer pursuant to the provisions of Act No. 165/2012 Coll. and the Market Rules of OTE, a. s., for the Electricity sector and the Market Rules of OTE, a. s., for the Gas sector.

The settlement of the feed-in-tariff applied to purchase of electricity is performed by the producer for the mandatory purchaser on the basis of metered data at the delivery point of the power-generating installation and the distribution/transmission system and on the basis of data included in the monthly report. After the mandatory purchaser has paid the producer the feed-in-tariff, the Market Operator shall reimburse the mandatory purchaser for the difference between the feed-in-tariff and the hourly price of electricity (from the day-ahead spot market organized by OTE, a. s.).

In 2024, a total amount of CZK 5 million was paid in support for 35 TJ of heat from renewable sources. Two biomethane producers laid claims for support for biomethane in the amount of CZK 4 million, in support for 5 GWh, in 2024.

Sources registered in the CS OTE system

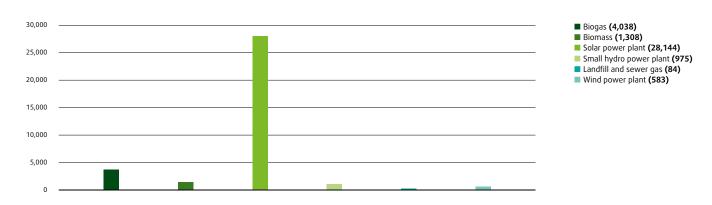
Type of source/fuel Total sources registered in CS OTE		Of which sourc	es commissioned in 2024	
	Installed capacity (MW)	Number of sources	Installed capacity (MW)	Number of sources
Photovoltaic plants	2,440.3	31,334	186.4	994
Wind power plants	353.7	231	13.3	5
Biomass	2,031.8	125	0.0	0
Biogas stations	323.6	725	0.0	0
Mine gas	42.1	32	0.0	0
Landfill and sewer gas	84.2	190	0.0	0
Other secondary sources	490.9	29	0.0	0
Small hydro power plants	356.3	2,354	0.2	8
Other sources	15,101.9	1,282	133.3	86
Total	21,224.9	36,302	333.2	1,093

Supported Energy SourcesSupport Paid by Source

Electricity from renewable energy sources (RES) and secondary sources (Sec. S), combined heat and power (CHP)

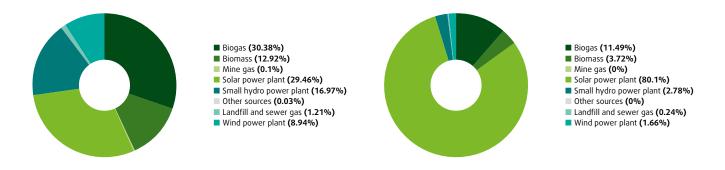
Type of Source	RES	Sec.S	CHP	Total
Supported volumes (GWh)	6,881	0	2	6,883
Paid (CZK million)	35,134	0	1	35,135

Settled support by source (CZK million)



Shares of supported volumes of RES + Sec. S + CHP by source

Shares of paid support for RES + Sec. S + CHP by source





Electricity Market

Organised Short-term Market

The organized short-term electricity market allows electricity market participants to optimize their trading positions at short notice before the delivery date (day, hours and minutes) in response to the current situation in their production or consumption portfolio.

The short-term electricity market is comprised of the following trade platforms:

- day-ahead market
- intraday market

All deals closed on the foregoing markets are also automatically added to the respective trading positions; therefore market participants do not need to perform additional registration of the executed transactions, contrary to external platforms.

Key rules governing trading on OTE's short-term markets:

- ensuring a neutral and secure environment
- support for market competition and ensuring non-discriminatory conditions for all participants
- ensuring anonymous trading and acting as a central counterparty
- hedging risks in respect of financial settlement of transactions and physical supply of the commodity
- reducing barriers preventing market entry for new participants
- distribution of market price signals
- interconnection within the single European day-ahead and intraday electricity market.

OTE is designated on the day-ahead electricity market as the Nominated Market Operator (NEMO), which ensures integrated connection of day-ahead or intraday markets according to Commission Regulation (EU) 2015/1222.

Trade platforms

Day-ahead Market

Day-ahead electricity market is based on the principle of implicit allocation of cross-border capacities (market coupling) and is organized within the pan-European day-ahead market (SDAC). Market participants' requirements for the purchase or sale of electricity by market participants for the following day are met jointly and from neighbouring market areas without the need to purchase transmission capacity, up to the amount of free transmission capacity at individual borders. On the day-ahead market, it is possible to anonymously offer or demand electricity for any hour of the day of delivery. The result is closed trades for a specified amount of electricity and a uniform price for trades for each hour of the day of delivery. In 2024, 25.72 TWh of electricity was traded on this market.

Intraday Market

Organised intraday electricity market is divided according to the type of trading into:

- Continuous Intraday Market (VDT)
- Intraday Auction (IDA)

and is organized within the pan-European intraday market (SIDC).

Since 2004, the continuous intraday electricity market has allowed market participants to continue to trade anonymous offers for trading hours on a given delivery day, up to a limit time of 5 minutes before the start of the hour of delivery or consumption. In 2024, 5.53 TWh of electricity was traded on this market.

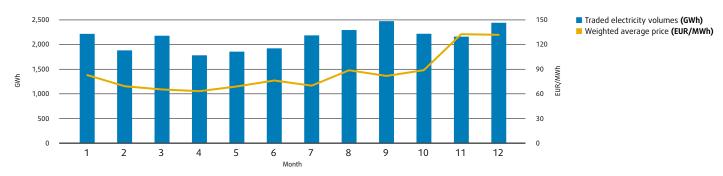
Intraday auctions (IDA) were, within SIDC, launched from the delivery date of June 14th, 2024. 0.40 TWh was traded on IDA in the Czech Republic in 2024. From mid-2025, it is planned to introduce a 15-minute trading period in addition to the hourly trading period on the intraday market.

Srovnání základních parametrů jednotlivých trhů s elektřinou

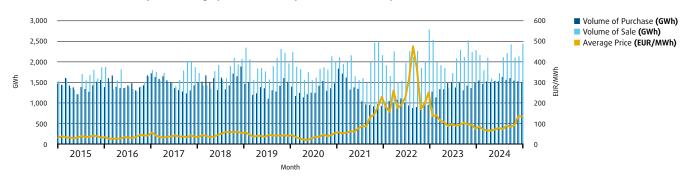
	Electricity DM	Electricity IDA	Electricity IM
Type of Market	day-ahead auction	intraday auction	continuous matching
Traded Period	1 hod.	15 min.	1 hod., 15 min.
Minimum tradable volume	0,1 MW	0,1 MW	0,1 MW
Maximum tradable volume	2 999 MW	2 999 MW	999 MW
Smallest quantity increment	0,1 MW	0,1 MW	0,1 MW
Trading currency	EUR	EUR	EUR
Minimum Price	-500 EUR/MWh	-9 999 EUR/MWh	-9 999 EUR/MWh
Maximum Price	4 000 EUR/MWh	9 999 EUR/MWh	9 999 EUR/MWh
Smallest price increment	0,01 EUR/MWh	0,01 EUR/MWh	0,01 EUR/MWh
Zero price option	ANO/YES	YES	YES
Market opens at	Unlimited	IDA1: 11:00 D-1	15:00 D-1
		IDA2: 16:00 D-1	
		IDA3: 23:00 D-1	
Market closes at	12:00 D-1	IDA1: 15:00 D-1	H-0:05
		IDA2: 22:00 D-1	
		IDA3: 10:00 D	

The organized short-term electricity market has maintained a high number of completed trades in 2024. The following charts illustrate the evolution of traded quantities and prices on the respective platforms during 2024.

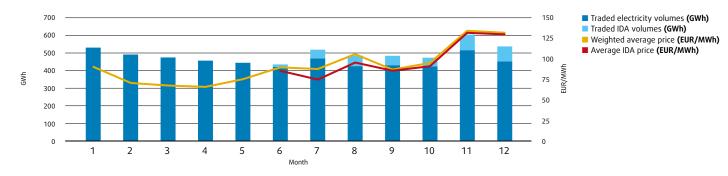
Volumes of traded electricity and average prices on the day-ahead market in specific months of 2024



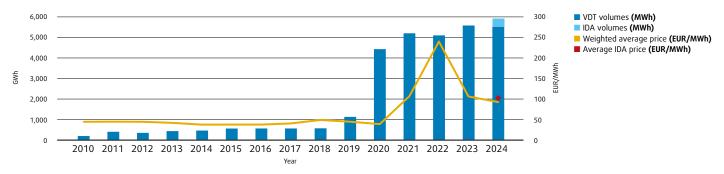
Volumes of traded electricity and average prices on the day-ahead market in specific months of 2015-2024



Volumes of traded electricity and prices on the intra-day market in the months of 2024



Volumes of traded electricity and prices on the intra-day market in 2010-2024







Electricity Market

Evaluation and Settlement of Imbalances

The balance responsible party's imbalance for every evaluation interval (15 minutes) is the sum of differences between the supplied and contracted volumes of electricity for supply and differences between the consumed and contracted volumes of electricity for consumption.

Legislation defines market participants, for which OTE settles imbalances, as "balance responsible parties" (BRP). It also sets out the method of determining the volume of imbalances of balance responsible parties. The basic rule applied to charges for all imbalances stipulates that each market participant is either responsible for its imbalances, i.e. is deemed a BRP, or it transfers imbalance responsibility to another BRP. Any electricity consumption from the power system or supply to the system must be assigned to a market participant.

Imbalance of BRP (=) the sum of production of electricity supplied to the power system (-) the sum of consumption of electricity from the power system (+) the balance of volumes of electricity purchased/ sold on organized short-term markets (+) the balance of electricity from bilateral transactions registered with OTE (+) the balance of export and import of electricity to/from abroad.

Contracted electricity volumes to supply to the power system and take from the power system are determined by the Market Operator for each 15-minute evaluation interval on the basis of registered internal nominations, results of the short-term electricity market, and contracted cross-border exchanges

Actual volumes of supplied or consumed electricity are recorded on the basis of business metering provided to the Market Operator by individual transmission and distribution operators.

System imbalance in each evaluation interval is defined as the balance of all supplies by balance responsible parties and overall

consumption of BRPs. The system imbalance equals the sum of the relevant BRP's imbalances and is covered by balancing energy.

Calculation of imbalance volumes of all BRPs and their financial evaluation is carried out in the OTE system as follows:

- every day of the year for the previous day for each evaluation interval (daily settlement of imbalances)
- after the end of the month for the previous month (monthly settlement of imbalances)
- in the 4th month after the evaluated month (final monthly settlement of imbalances)

Each BRP can access the results of the calculation via the CS OTE system https://portal.ote-cr.cz and summarized values are also posted on OTE's public website.

The transmission system operator shall provide energy to cover the system imbalance by activating ancillary services or by purchasing balancing energy from abroad. This can be accomplished either through activation within the European platforms for the exchange of balancing energy, or by ensuring the supply of energy from abroad under contracts for the operative supply of balancing energy. The total balance of imbalances and regulating energy cleared at OTE in 2020–2024 is shown in the following table.

As in previous years, in 2024 the expenditure on balancing energy used to offset the positive system imbalance was still significantly lower than the expenditure on balancing energy used to offset the negative system imbalance.

Volumes (in GWh) and payments (in CZK million) - balancing energy, imbalances and settlement surpluses in 2020-2024

Volumes in GWh	2020	2021	2022	2023	2024
Balancing energy +	269	505	509	468	560
Balancing energy -	-433	-243	-459	-540	-561
Imbalance +	1,192	1,021	953	951	1,174
Imbalance-	-1,028	-1,283	-1,002	-876	-1,172

Payments in million CZK	2020	2021	2022	2023	2024
Balancing energy +	662	1,561	4,894	2,713	2 ,751
Balancing energy -	5	2	-503	576	109
Imbalance +	655	1,275	2,017	-296	754
Imbalance -	-1,539	-3,999	-7,577	-4,190	-4,229
Settlement Surplus	217	1,161	1,169	1,197	615

Imbalance and Counter-imbalance Price

Legislation defines the method of setting the price which is charged or credited to balance responsible parties for imbalances. The market operator determines the settlement price of the imbalance for each evaluation interval (15 minutes) on the basis of the prices of balancing energy or on the basis of the price of the incentive component according to the following scheme:

Determination of the settlement price of imbalance (SPI) in case of BE activation against the system imbalance (SI) direction:

Var.	Condition		Determination of SPI - settlement price of imbalance
1)	(SI <= 0) and (max. price BE+ <= LIM_{BE+})	\rightarrow	SPI = Max (BE component; IM component; SI component)
2)	(SI <= 0) and (max. price BE+ > LIM _{BE+})	→	SPI = Max (protective component of BE; IM component)
3)	(SI > 0) and (min. price BE- $>=$ LIM _{BE} -)	\rightarrow	SPI = Min (BE component; IM component; SI component)
4)	(SI > 0) and (min. price BE- < LIM _{BE-})	→	SPI = Min (protective component of BE; IM component)

LIM_{BE} – Marginal price of BE determining the transition to the system of calculation using average prices, LIM_{BE} = 20,000 CZK/MWh, LIM_{BE} = (-20,000) CZK/MWh If SPI set according to Var. 2) is higher than SPI set according to Var. 1), then SPI is set according to Var. 1) If SPI set according to Var. 4) is lower than SPI set according to Var. 3), then SPI is set according to Var. 3)

Determination of SPI if no BE has been activated:

Condition		Determination of SPI
No activation of BE	\rightarrow	SPI = the price the unrealized activation of BE

The price of the unrealized activation is determined as the average price consisting of the first bid with the highest price of negative balancing energy in the local ranking for negative balancing energy from reserves for automatic frequency and power balance and the first bid with the lowest price of positive balancing energy in the local ranking for positive balancing energy from reserves for automatic regulation of frequency and power balance.

The payment direction is determined based on the system imbalance (see the table below for payment directions regarding imbalance settlements).

Determination of the individual components used in the calculation of the settlement price of imbalance:

BE Component (Determination of the price of the delivered BE against the SI direction [CZK/MWh])

Condition		Component Value Determination
SO <= 0	\rightarrow	SPI _{MaxBE+} = maximum of the positive BE price
SO > 0	\rightarrow	SPI _{MinBE-} = minimum of the negative BE price

SI Component (Basic SI Directive [CZK/MWh])

Condition		Component Value Determination	
SO <= 0	\rightarrow	$SPI_{Directive SI} = BE_{aFRR} - \alpha * SO$	
SO > 0	\rightarrow	$SPI_{Directive SI} = BE_{aFRR} - \beta * SO$	

 α – price directive for negative SI set by ERO (5.5 CZK/MWh²) β – price directive for positive SI set by ERO (3.5 CZK/MWh²)

Intra-Day market (IM) Component (Weighted average price on IM trades [CZK/MWh])

Condition		Component Value Determination
SO <= 0	\rightarrow	$SPI_{IM} = WAP_{IM} + k$
SO > 0	\rightarrow	$SPI_{IM} = WAP_{IM} - k$
WAP _{IM} – weighted average price on Intra-Day Market (IM) trades	k – ERO price directing the IM component (250 CZK)	

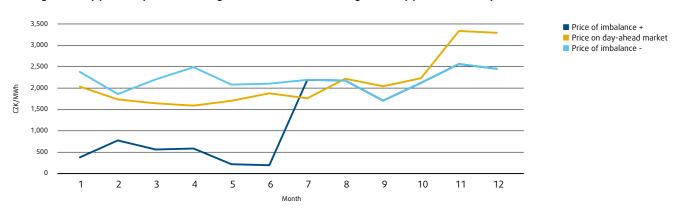
Protective component of BE (Weighted average of BE costs [CZK/MWh])

 $\underline{ SPI_{PC} = (\underline{ \zeta}C_{BE} + \text{weighted average of BE prices in the opposite direction of SI} * \underline{ \zeta} \text{imbalances of BRP against the direction of SI}) / (-\underline{ \zeta} \text{imbalance of BRP in the direction of SI})}$ $\underline{ C_{BE} - \text{activated balancing energy costs} }$ $\underline{ BRP - \text{balance responsible party} }$ $\underline{ SI - \text{system imbalance} }$

Determining the settlement price of the counter-imbalance:

On the basis of the prices of regulatory energy, the Market Operator sets, with effect from 1st July, 2024 for each evaluation interval the settlement price of counter-imbalance equal to the settlement price of the imbalance. As of 1st July 2024, the settlement prices for positive and negative imbalances are identical. A detailed description of the determination of the settlement price for imbalance and counter-imbalance is provided in Annex No. 8 to Decree No. 408/2015 Coll., on the Electricity Market Rules, as amended.

Average monthly prices of positive and negative imbalances and average monthly prices on the day-ahead market in 2024



BE_{affig} – marginal price of the standard product from reserves for power balance control with automatic activation delivered against the direction of the system imbalance (SI)





Gas Market

Organised Short-term Market

The organized short-term gas market allows gas traders to optimize their trading positions at short notice before the close of the gas day in response to the current situation in their production or consumption portfolio.

The short-term gas market is comprised of the following trade platforms:

■ Intraday gas market

Other short-term markets:

■ Unused flexibility market

Key rules governing trading on OTE's short-term markets:

- ensuring a neutral and secure environment
- support for market competition and ensuring non-discriminatory conditions
- provision of market-related information
- ensuring anonymous trading and acting as a central counterparty
- hedging risks in respect of financial settlement of transactions and physical supply of the commodity

Trade Platforms

Intraday gas market

Since 2010 the organized intraday gas market allows gas market participants continuous trading in the day before the gas day of delivery, as well as during a gas delivery day. Only balance responsible parties the transmission system operator, and gas storage operators can trade on this market under the terms laid down in the Energy Act and the Market Rules. The intraday gas market opens at 9:00 on the day preceding the gas day on which gas is delivered.

In 2024, a total of 3,743 GWh of gas was traded on the intraday gas market. The weighted average price of gas traded on the intraday market in this period amounted to EUR 37.61 EUR/MWh. 141 gas traders were registered to trade on this market.

Transactions are executed in the EUR currency and the trading unit is also one gas day. Financial settlement of the transactions is carried out in EUR or CZK. Delivery point of traded gas is virtual trading point of the Czech Republic (VTP CZ), operated by OTE.

Unused flexibility market

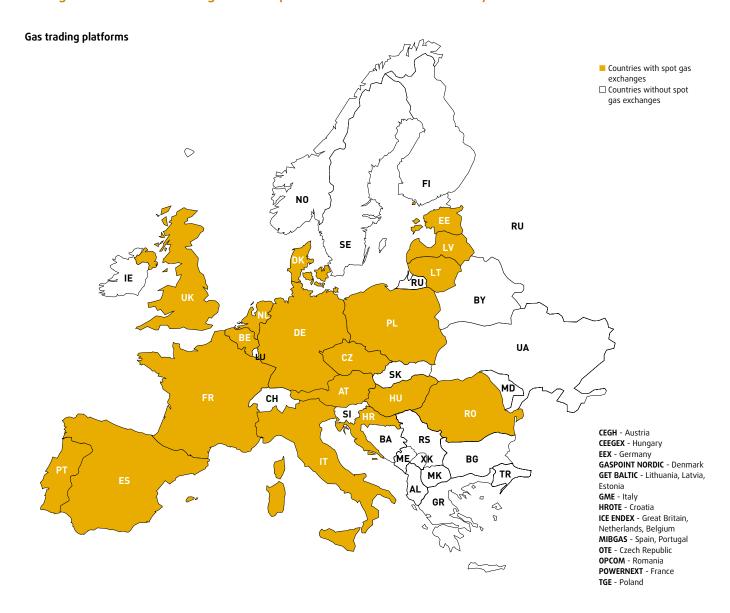
Balance responsible parties may anonymously buy and sell available positive or negative unused flexibility on the unused flexibility market. The market is organized in CZK currency daily for the preceding gas delivery day on the basis of auction principle (matching curves are used to set a marginal prices and traded volumes of positive and negative unused flexibility).

Short-term Markets in the gas sector

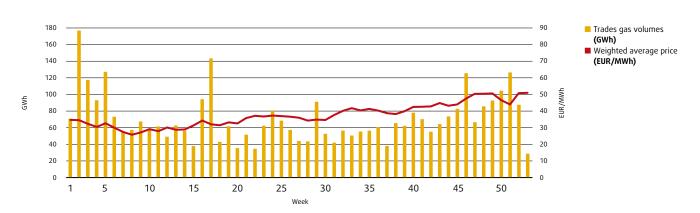
	Intraday gas market	Unused flexibility market
Type of market	Continuous matching	auction principle
Trade period	*1 day	*1 day
Minimum tradable volume	0.1 MWh	0.001 MWh
Maximum tradable volume	99,999.9 MWh	undefined
Smallest quantity increment	0.1 MWh	0.001 MWh
Trading currency	EUR	CZK
Delivery point	VTP CR	VTP CZ
Minimum price	0.01 EUR/MWh	0.01 CZK/MWh
Maximum price	4,000 EUR/MWh	99,999 CZK/MWh
Smallest price increment	0.01 EUR/MWh	0.01 CZK/MWh
Zero price option	NO	NO
Market opens at	9:00 D-1	13:00 D+1
Market closes at	5:00 D+1	13:45 D+1

^{*}Gas day is defined from 6:00 a.m. to 6:00 a.m. of the following day.

The organized intraday gas market is attractive not only for balancing the traders' positions, but also during sudden climatic changes or complications in the transmission system.



Volumes of traded gas and average prices on the intra-day gas market in the weeks of 2024





Gas Market

Evaluation and Settlement of Imbalances

OTE has carried out evaluation and settlement of imbalances on the gas market since 2010 pursuant to the Energy Act. Legislation defines market participants for which OTE settles imbalances as Balance Responsible Parties (BRP) and sets out the method of determining volumes of imbalances pertaining to BRPs.

Imbalances of BRPs are evaluated as follows:

- daily for each preceding gas day (daily imbalances)
- after the end of the month for the previous gas month (monthly imbalances)
- after completed receipt of adjusted data, i.e. the fourth month following the evaluated month (final monthly imbalances)

Daily imbalance of BRP = the sum of gas supplied to the gas system from gas production facilities – the sum of gas consumption by customers of the relevant BRP from the gas system + the balance of gas purchased/sold on organized short-term markets + the balance of bilateral contracts registered with OTE + the balance of gas injection and withdrawal into/from gas storage facilities nominations + the balance of export and import to/from abroad.

System imbalance of the entire gas system on the relevant gas day equals the sum of all traders' imbalances on the same gas day (including gas traders with transit contracts that are not BRPs).

Each BRP will have a flexibility account and a balance account of imbalances (hereinafter the aggregated account of imbalances) registered in the OTE system. The initial balance of the aggregated account of imbalances of a BRP for the relevant gas delivery day is the balance of the BRP' aggregated account of imbalances after the previous gas day. It can be said that the balance of the BRP's aggregated account of imbalances corresponds to the quantity of gas that the relevant BRP is to supply to the gas system or take from the gas system to make its gas balance in the gas system equal zero.

The final balance of the aggregated account of imbalances of a BRP at the end of the gas day is defined as the sum of the initial balance of the BRP's aggregated account of imbalances at the beginning of the gas day and the daily imbalance of the BRP provided the sum is within the flexibility limit of the respective BRP.

In the event the balance of the aggregated account of imbalances of a BRP exceeds the flexibility limit of that BRP and the BRP fails to purchase unused flexibility of another BRP, the excess amount equals the daily imbalance quantity of the BRP and this amount is settled financially at a unit price.

The final balance of the aggregated account of imbalances of a BRP is thus the sum of the initial balance of the aggregated account of imbalances of the BRP at the beginning of the gas day, daily imbalances of the BRP and the daily imbalance quantity of the BRP, while respecting the convention for positive/negative signs.

To determine the amount of unit price for managing the daily imbalance quantity of the balance responsible party (applicable price), the following rules apply:

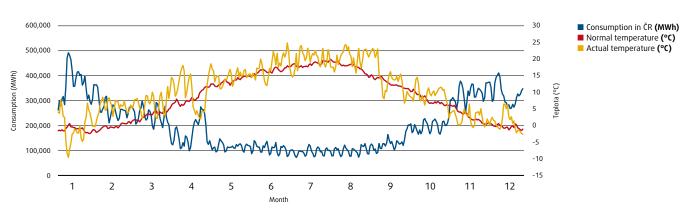
For negative daily imbalance quantity, the higher of the two prices below shall be applied in EUR:

- The highest price of the purchase of the transmission system operator on organized markets associated with a balancing action if such price exists
- Weighted average daily price for the gas day according to the OTE Index for the relevant day, increased by 2%–5% according to the volume of system imbalance

For positive daily imbalance quantity, the lower of the two prices below shall be applied in EUR:

- The lowest price of the sale of the transmission system operator on organized markets associated with a balancing action if such price exists
- Weighted average daily price for the gas day according to the OTE Index for the relevant day, reduced by 2% – 5% according to the volume of system imbalance.

Gas consumption during 2024 compared to its actual and normal temperature



Gas Market

Linepack Flexibility Service

The Linepack flexibility service is the only tool allowing balance responsible parties to make use of the inherent capability of the gas system, which is Linepack variation with no impact on the smooth and secure operation of the gas system.

Flexibility

The gas system allows for using a Linepack flexibility service. It facilitates oscillations of trading positions of balance responsible parties within the set flexibility limit so that no additional costs of offsetting gas imbalances are incurred unless these limits are exceeded. The flexibility service is provided free to those balance responsible parties that have a reserved capacity at border points or at gas storage points (unless the allocation rule ensuring equality of nomination and allocation is applied at these points for the relevant gas day), and those balance responsible parties responsible for imbalances at specific customer points of delivery. The size of the provided flexibility is primarily derived from the size of the reserved capacities at points with continuous measurement of type A and B or alternatively at consumption points with non-continuous measurement of type C and CM. The transmission system operator can adjust the final amount of flexibility provided daily (by activating one of the 3 reduced levels compared to the basic level) depending on the utilization of transmission capacities, when the amount of provided flexibility drops with increasing utilization of transmission capacities.

Unused flexibility

Unused flexibility of each balance responsible party is determined for the relevant gas day as the difference between the current balance of the flexibility account of the relevant balance responsible party (prior to the launch of the Unused flexibility market) and the amount of flexibility provided for the relevant day to this balance responsible party, while respecting the direction of the purchased and sold flexibility. This unused flexibility cannot exceed twice the provided flexibility for the relevant gas day.

Unused flexibility market

OTE organizes the Unused flexibility market in CZK currency on the principle of matching supply and demand curves on each gas day for the previous gas day. It is a platform that enables individual balance responsible parties to use the market approach for settling imbalances directly between them, even though they exceed the flexibility of the balance responsible party, but in view of the overall position of the gas system these imbalances do not require a balancing action of the transmission system operator. The balance responsible parties are motivated to participate in the Unused flexibility market to prevent financial settlement of the daily imbalance quantities. However, if a system imbalance (the sum of all daily imbalances of balance responsible parties) occurs that could lead to a balancing action of the transmission system operator, the rules of the Unused flexibility market ensure that such an imbalance cannot be used on the unused flexibility market (i.e. it will not be possible to acquire unused flexibility of other balance responsible parties to cover the imbalance), and the balance responsible party will pay an applicable price for this imbalance exceeding the flexibility limit.

Imbalance account with purchased unused flexibility and daily imbalance quantity

