



OTE, a.s., was founded on 18 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 shareholders' rights.

OTE's operations reaffirm the Company's significant position on the electricity and gas markets both in the Czech Republic and across Europe.

Core operations comprise:

- evaluation and financial settlement of imbalances between contracted and metered supply and consumption of electricity and gas;
- organization of the short-term electricity market and the short-term gas market and, in cooperation with the transmission system operator, organization of the balancing market with regulation energy;
- 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 for renewable energy sources;
- issuance of guarantees of origin of electricity from renewable energy sources and combined heat and power;
- performing the function of a national administrator of the Union registry for emission 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;
- REMIT – Regulation (EU) No. 1227/2011 of the European Parliament and of the Council on Wholesale Energy Market Integrity and Transparency – trade data reporting.

OTE has been actively engaged in professional organizations and their working groups in the Czech Republic and abroad AEM, 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 those markets for all market participants.

In connection with Commission Regulation (EU) No. 2015/1222, the Market Operator has scored a significant success by obtaining the status of "Nominated Electricity Market Organizer" (NEMO), which is visible evidence of years of work on the development of the organized electricity market in the Czech Republic, and all a commitment and motivation for further expansion of the integrated day-ahead market and the creation of an integrated intraday electricity market.

OTE has been certified by ACER as the Registered Reporting Mechanism (RRM) in accordance with Regulation (EU) No. 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency (REMIT). The certification is a necessary prerequisite for the provision of reporting services to market participants.

The Company's registered capital totals CZK 500 million.

Volumes of electricity and gas registered in the OTE system in 2018

electricity	sale	purchase
block market	17 GWh	17 GWh
day-ahead market	20,809 GWh	18,724 GWh
intraday market	550 GWh	550 GWh
bilateral transactions (internal nominations)	95,054 GWh	95,054 GWh
export/import	24,310 GWh	10,431 GWh

gas	sale	purchase
intraday market	3,059 GWh	3,059 GWh
bilateral transactions (internal nominations)	266.3 TWh	266.3 TWh
export/import	89.3 TWh	173.2 TWh
injection/withdrawal	32.3 TWh	32.6 TWh

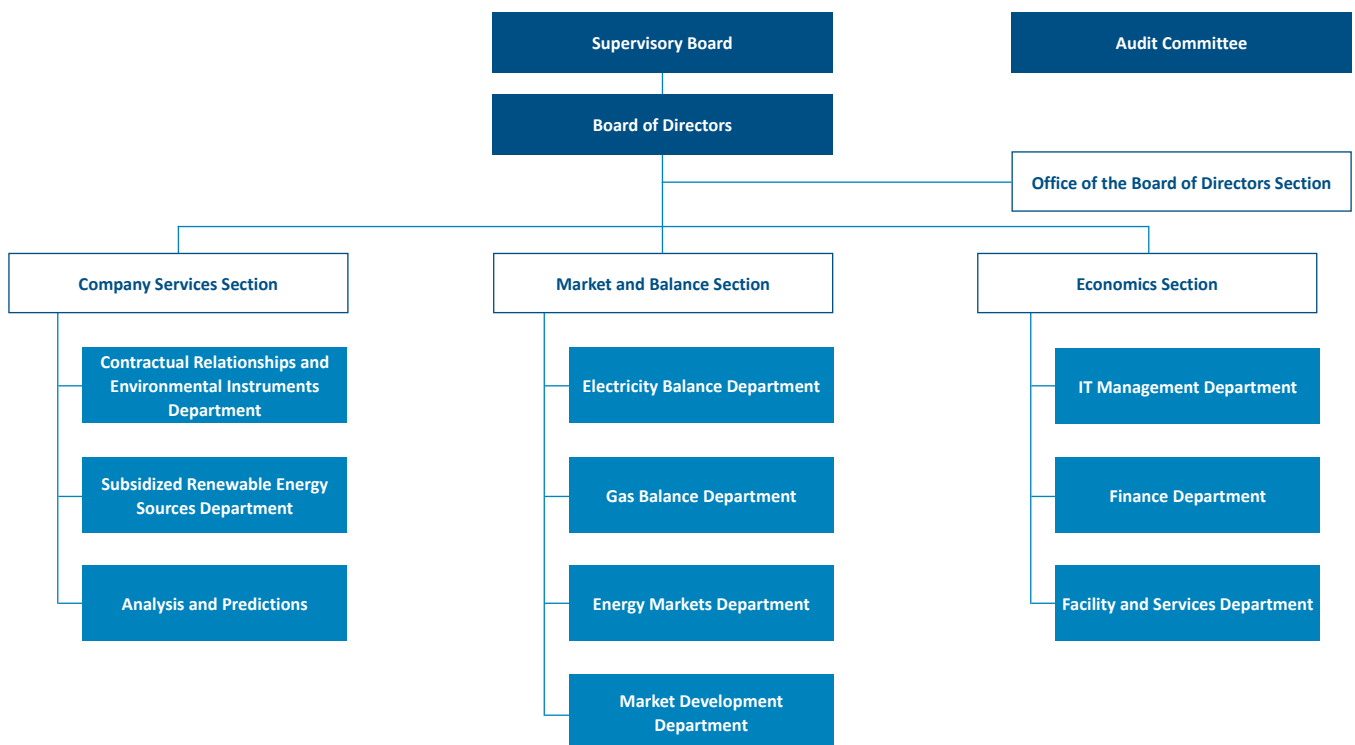




OTE at a glance

OTE									
Settlement of imbalances power sector	Organized electricity markets	Long-term balance and statistics	Guarantees of origin of electricity	Emission allowances registry	Settlement of imbalances gas sector	Organized gas markets	Supported energy sources	Reporting of trade data	Nominated Electricity Market Operator (NEMO)
2002	2002	2002	2005	2005	2010	2010	2013	2015	2015

Organisation scheme at 1 April 2019



Electricity market participants in 2018

type of participant	number at 31 December 2018	year-on-year change
balance responsible party	118	+8
supplier	115	+14
participant with access to BMR	56	+2
provider of AS	26	-2
distribution system operator	260	-4
transmission system operator	1	0

Gas market participants in 2018

type of participant	number at 31 December 2018	year-on-year change
balance responsible party	97	0
supplier	103	+12
distribution system operator	65	-2
transmission system operator	1	0
gas storage facility operator	4	0





ALLOWANCES

Key information

OTE, a.s., performs the function of a national administrator of the Union registry for emission trading that ensures accurate accounting of the issue, holding, transfer and cancellation of emission allowances and Kyoto units. OTE has performed this administration on the basis of the authorization of the Ministry of the Environment since 2005.

Records of allowances and Kyoto units are maintained in specific contractual party accounts, operator holding accounts, aircraft operator holding accounts, person holding accounts and trading accounts.

Pursuant to Act No. 383/2012 Coll., on the Terms of Greenhouse Gas Emission Allowance Trading, operators of installations that have been included in the EU Emissions Trading System (EU ETS) and have been issued a permit by the Ministry of the Environment to emit greenhouse gas into the atmosphere are required to open a Registry account. Since January 2012 this obligation has applied also for 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.

Any natural person or legal entity may open a person holding account or 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 Regulation (EU) No. 389/2013, 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 is operated also as a consolidated registry system under the Kyoto Protocol.

The Union registry can be accessed from the website: <https://www.povolenky.cz>

In 2018 a total of 987 transactions were executed in the Registry, resulting in the transfer of 364,424,984 emission units to other accounts. The statistics comprise all transactions with emission allowances and Kyoto units.

The purpose of transactions and prices of allowances and Kyoto units are not evaluated in the Registry and the allowances/units are not traded within the system. Trading of emission units is carried out through bilateral or exchange transactions.

As at 31 December 2018 the Registry comprised 296 operator holding accounts, 28 person holding accounts, 30 trading accounts and 8 aircraft operator holding accounts.

Number of transactions and volume of transferred units in 2018

unit type	unit volume	%	number of transactions	%
allowances	362,525,706	99.48	930	94.22
kyoto units	1,899,278	0.52	57	5.78
total	364,424,984	100	987	100

Key events of 2018

30 April

The final deadline for installation operators to meet their statutory obligation and surrender allowances in the amount of verified tonnes of CO₂ emissions produced by the relevant installation in 2017. Two installation operators failed to meet the statutory obligation.

2 May

The Registry administrator issued a new version of the Terms and Conditions reflecting user comments. Changes comprised an adapted Article 1.6 – Personal Data Processing and Protection. This new version of the Terms and Conditions came into force as of 25 May 2018.

9 May

The Report on the Evaluation of Installation Operators and Aircraft Operators in relation to Compliance for 2017 at the EU level pursuant to Annex XIV(1d e)) of Commission Regulation (EC) No. 389/2013 was published. The total amount of verified emissions emitted by the installations for 2017 was 66,821,980 tonnes of CO₂, representing a decline of 456,271 tonnes of CO₂ compared to 2016.

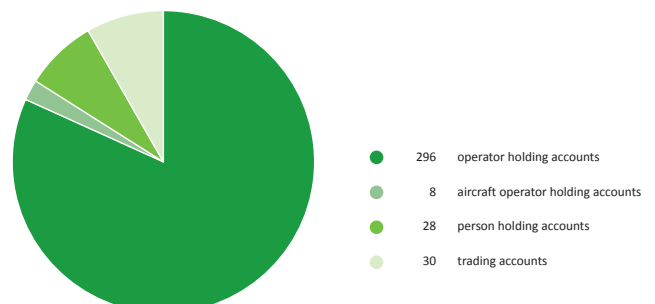
31 May

In cooperation with the Energy Regulatory Office, the average price of an emission allowance for 2017 in the amount of CZK 144.00 was published for the pur-poses of heat energy prices regulation.

29 October

The Registry administrator requested all account holders to provide documentation in the same scale as when opening an account in order to review the information submitted to open an account. Pursuant to Article 25 of Commission Regulation (EC) No 389/2013, the Registry administrator shall review at least once every three years whether the information submitted for the opening of an account remains complete, up-to-date, accurate and true, and shall request that the account holder report any changes as appropriate.

Number of opened accounts in the Registry as at 31 December 2018



GUARANTEES OF ORIGIN

Key information

A guarantee of origin of electricity from renewable energy sources and combined heat and power proves that a given quantity of electricity was generated from renewable energy sources or combined heat and power and supplied to the grid. It is used to prove the origin of electricity for a closed period. For this purpose OTE operates the Registry of Guarantees of Origin (EZP).



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 adoption of Act No. 165/2012 Coll. resulted in a fundamental change in the administration of guarantees of origin in 2013. The guarantees of origin can now be issued in response to requests of producers of electricity only electronically. Decree No. 403/2015 Coll., on guarantees of origin of electricity sets out conditions for issuance and recognition of guarantees of origin.

In 2018, 131 new account holders gained access to the Registry of Guarantees of Origin (EZP) system. A total of 3,499,533 guarantees of origin were issued for 487 active account holders, which accounts for a 20.8% year-on-year increase in the number of issued guarantees of origin. The process of cancellation of guarantees of origin transparently declared the origin of 874 GWh of consumed electricity in CR.

As the EZP system allows the issuance of guarantees of origin for electricity generation retroactively up to 12 months, it may be assumed that a portion of guarantees of origin relating to power generation in 2018 will be issued and cancelled in 2019.

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 electricity represented by the relevant number of guarantees of origin was supplied to a final consumer.

Holders of a licence for electricity generation or trading can apply for access to the EZP system. All information about access to the EZP system is available at the web page: <http://www.ote-cr.cz/poze-en/guarantees-of-origin>.

International transactions

Following the launch of the operation of the EZP system, the Market Operator has become a member of the Association of Issuing Bodies (AIB). The Market Operator is also integrated into the European Electricity Certificate Scheme (EECS).

The EZP system is now fully harmonized with other AIB member states' systems and provides users with comprehensive services in respect of working with guarantees of origin of electricity generated from renewable energy sources and electricity from combined heat and power.

It is linked to the international communication system AIB Hub which enables holders of accounts in the EZP and AIB member systems to carry out international transactions (import/export) of guarantees of origin issued in the EU Member States. Specifically, guarantees of origin issued in the following countries may be imported and exported: Austria, Belgium, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Slovenia, Spain, Sweden and Switzerland. The list of countries is to expand as more countries join the AIB.

The Market Operator's cooperation with AIB members significantly enhances the transparency of the entire system of guarantees of origin at all stages of their life cycle.

Summary overview of transactions with guarantees of origin in 2018

transaction type	number of GOs
issuance	3,499,533
domestic transfer	2,991,204
international importing transfer	154,430
international exporting transfer	2,795,723
cancellation	874,161
withdrawal due to expiration	29,601





SUPPORTED ENERGY SOURCES

Types of support and registration

Support for power generation is provided as green bonuses for electricity or as purchase prices (feed-in-tariff). Operating aid for production of heat is provided as green bonuses for heat (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 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.

Registration of support

Registration of power and heat producers, registration of the selected type 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. 9/2016 Coll.

Records of generated electricity volumes

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

Settlement of support for electricity

The settlement of green bonuses for electricity 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 Power 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.).

Records of generated heat volumes and settlement of bonuses for heat

Producers eligible for support for heat generated from renewable energy sources record monthly volumes of generated heat through reports in the Market Operator's system. The settlement of green bonuses for heat is carried out quarterly on the basis of reports received from producers pursuant to the provisions of Act No. 165/2012 Coll. and the Market Rules of OTE, a.s. for the Power Sector.

In 2018, support was paid for 3,677 TJ of heat produced from renewable energy sources in the total amount of CZK 199 million.

Sources registered in the system CS OTE

type of source/fuel	total sources registered in CS OTE		of which sources commissioned in 2018	
	installed capacity (MW)	number of sources	installed capacity (MW)	number of sources
photovoltaic plants	2,072.0	28,567	1.0	38
wind power plants	316.9	138	8.6	4
biomass	2,938.6	144	74.8	1
biogas stations	318.2	694	0.0	0
mine and drained gas	41.1	31	0.0	0
landfill and sewer gas	54.9	174	0.2	2
other secondary sources	540.9	34	0.0	0
small hydro power plants	354.1	2,132	0.4	16
other sources	15,552.2	1,025	20.2	60
total	22,188.9	32,939	105.1	121



SUPPORTED ENERGY SOURCES

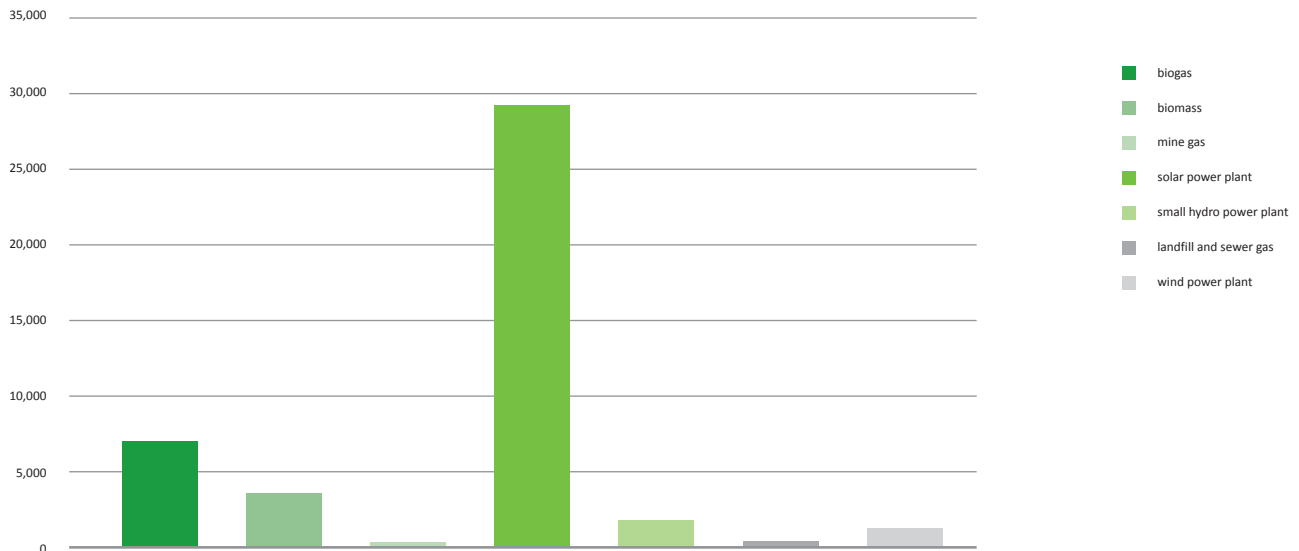
Support paid by source



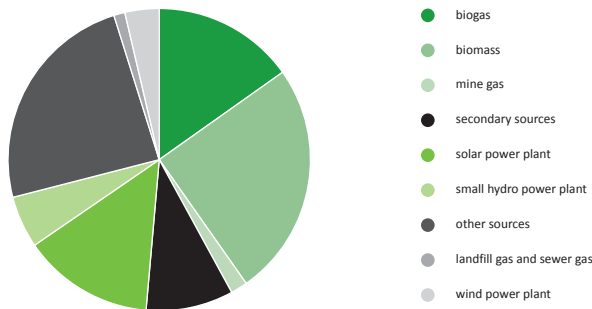
Electricity from renewable energy sources (RES) and secondary sources (Sec. S), combined heat and power (CHP), heat from renewable energy sources.

type of source	RES	Sec. S	CHP	total
supported volumes (GWh)	8,172	612	7,614	16,398
paid (CZK million)	43,689	116	2,124	45,930

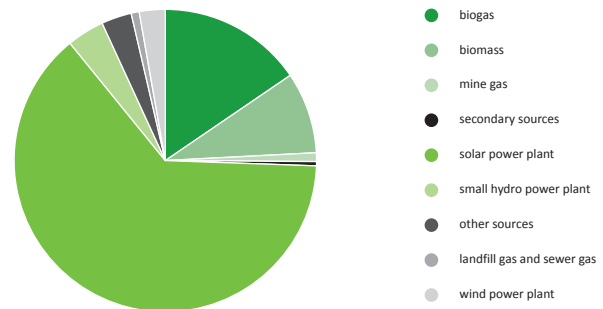
Paid support by renewable source (CZK million)



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



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



ELECTRICITY MARKET

Organized 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, hour) in response to the current situation in their production or consumption portfolio.

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

- block market,
- day-ahead market,
- intraday market,
- balancing market with regulation energy.

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,
- 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,
- reducing barriers preventing market entry for new participants,
- distribution of market price signals.

Trade platforms

Block market

The organized block electricity market allows continual trading of fixed electricity blocks on specific trading days; this applies to standard blocks of the Base type (0:00–24:00), Peak type (8:00–20:00) and Off-peak type (0:00–8:00; 20:00–24:00). The volume of electricity traded on this market in 2018 totalled 17 GWh.

Day-ahead spot market

The organized day-ahead spot electricity market, operated since 2002, has been coupled through implicit auctions with the organized day-ahead electricity market in Slovakia since 2009, the day-ahead electricity market in Hungary since 2012, and the day-ahead electricity market in Romania since 2014. This type of trading is also known as Market Coupling. Bids for the purchase or sale of electricity submitted by market participants registered in the CR, the SR, Hungary and Romania for the following day are matched jointly from the neighbouring market places without the need to acquire transmission capacity, up to the level of transmission capacity reserved for market coupling. The day-ahead spot market allows supplying or demanding electricity anonymously for every hour of the 24-hour trading day, resulting in closed deals for fixed volumes of electricity and at fixed prices for every trading hour of the trading day. The volume of electricity traded on this market in 2018 totalled 22.89 TWh.

Intraday market

The organized intraday electricity market allows market participants the continuous trading of anonymous bids at trading hours of the relevant date of delivery until the limit time of 60 minutes before the beginning of the hour of supply or consumption. The volume of electricity traded on this market in 2018 totalled 550 GWh.

Balancing market with regulation energy

The balancing market with regulation energy is operated jointly with the transmission system operator – ČEPS. It serves market participants to supply excess positive or negative electricity at a time very close to the hour of delivery (until 30 minutes prior to the specific hour). The purpose of this market is to reduce the proportion of activated regulation energy and reduce costs of ancillary services in regulation the Czech power system. The volumes of positive and negative regulation energy traded on this market in 2018 totalled 25.2 GWh and 34.7 GWh, respectively.

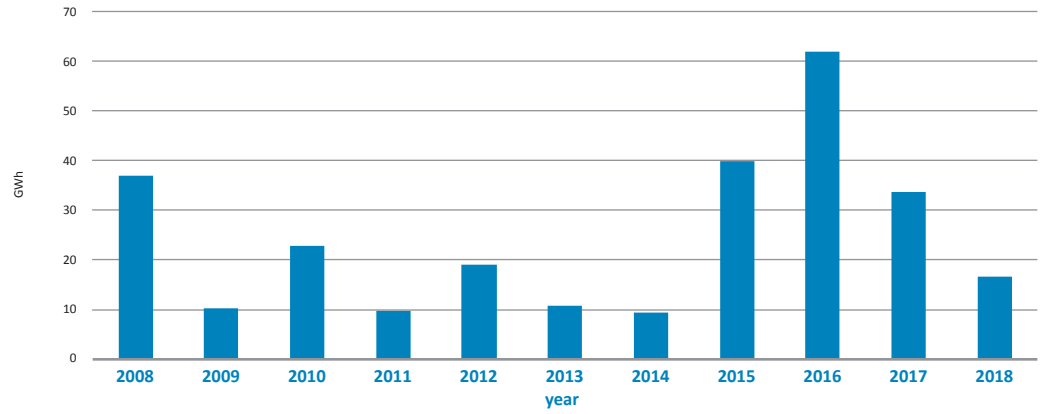
Comparison of specifics of electricity markets

	block market	day-ahead market	intraday market	balancing market with regulation energy
type of market	continuous matching	daily auction	continuous matching	continuous matching
traded period	12 or 24 hours	1 hour	1 hour	1 hour
minimum tradable volume	1 MW × 12 or 24 hours	1 MWh	1 MWh	1 MWh
maximum tradable volume	50 MW × 12 or 24 hours	99,999 MWh	99,999 MWh	99,999 MWh
smallest quantity increment	1 MW × 12 or 24 hours	0.1 MWh	0.1 MWh	0.1 MWh
trading currency	CZK	EUR	EUR	CZK
minimum price	CZK 1/MWh	EUR -500/MWh	EUR -3,500/MWh	CZK -99,999/MWh
maximum price	CZK 9,999/MWh	EUR 3,000/MWh	EUR 3,500/MWh	CZK 99,999/MWh
smallest price increment	CZK 1/MWh	EUR 0.01/MWh	EUR 0.01/MWh	CZK 1/MWh
zero price option	NO	YES	YES	NO
market opens at	9:30 D-5	unlimited	15:00 D-1	H-1:00
market closes at	13:30 D-1	11:00 D-1	H-1:00	H-0:30

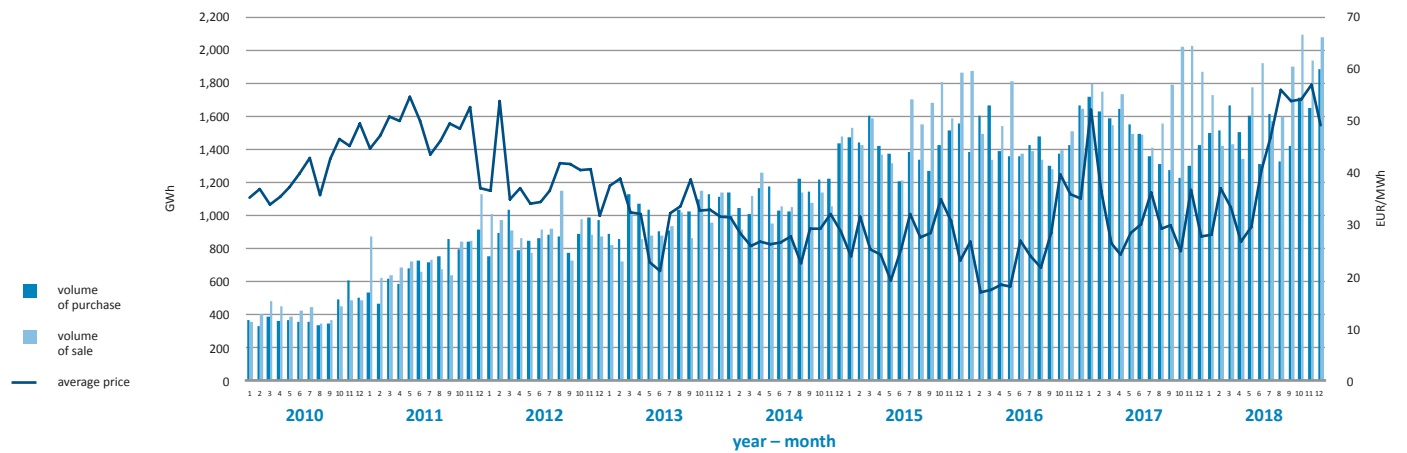


The volume of deals closed on the organized short-term electricity market grew in 2018. The charts below show the trend in traded volumes and prices at respective platforms in 2018.

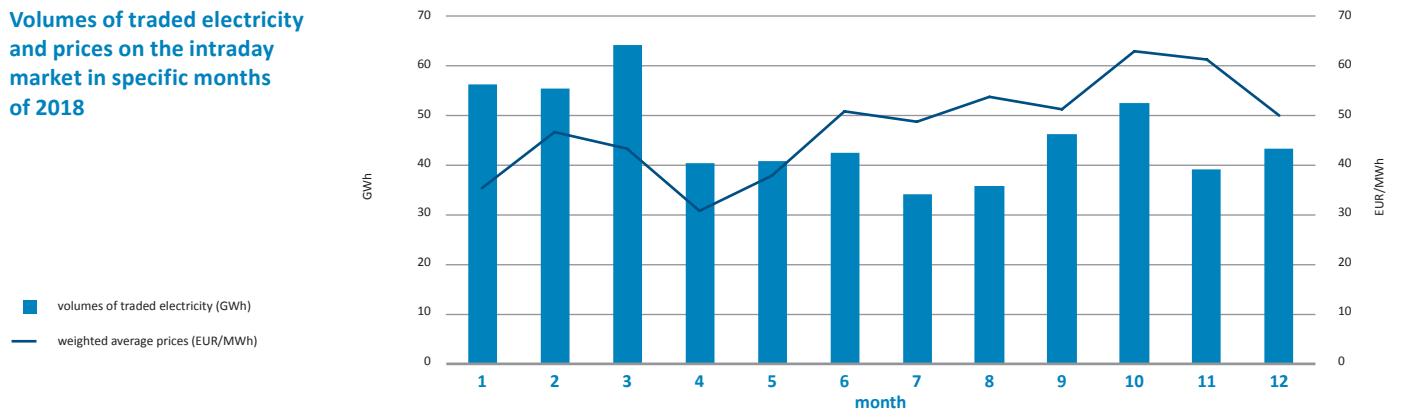
Trend in volumes of electricity traded on the block market in 2008–2018



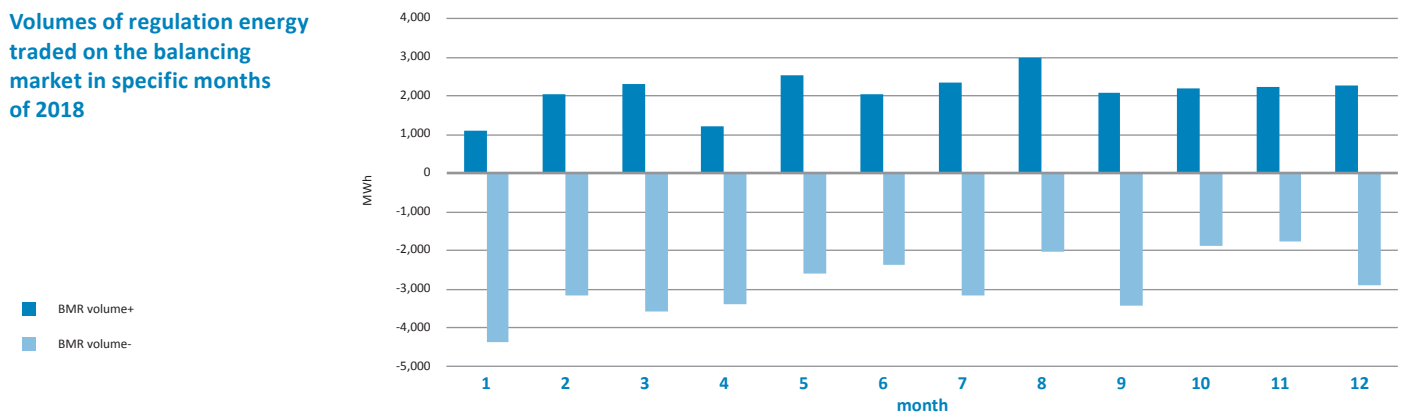
Volumes of traded electricity and average prices on the day-ahead market in specific months of 2010–2018



Volumes of traded electricity and prices on the intraday market in specific months of 2018



Volumes of regulation energy traded on the balancing market in specific months of 2018



ELECTRICITY MARKET

Evaluation and settlement of imbalances

The balance responsible party's imbalance for every trading hour 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 BPR = the sum of production supplied to the power system – the sum of consumption 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 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 trading hour 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.

System imbalance (SI) in each trading hour 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 regulation 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 preceding day for every trading hour,
- after the end of the month for the preceding month (real monthly imbalances),
- the fourth month after the evaluated month (final monthly imbalances).

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

The transmission system operator acquires regulation energy for compensating system imbalances by activation of ancillary services, purchases on the balancing market with regulation energy, and purchases of regulation energy abroad. The following table shows the total balance of volumes of imbalances and regulation energy settled by OTE in 2014–2018, including corresponding payments.

Similarly to prior years, the costs of regulating energy used to offset positive system imbalances were still significantly lower than the costs of regulating energy used to offset negative system imbalances in 2018.

Volumes (in GWh) and payments (in CZK million) – regulation energy, imbalances and settlement surpluses in 2014–2018

volumes in GWh	2014	2015	2016	2017	2018
regulation energy +	279 GWh	284 GWh	265 GWh	246 GWh	280 GWh
regulation energy -	-390 GWh	-418 GWh	-375 GWh	-365 GWh	-312 GWh
imbalance +	1,111 GWh	1,138 GWh	1,075 GWh	1,171 GWh	1,098 GWh
imbalance -	-1,000 GWh	-1,003 GWh	-964 GWh	-1,049 GWh	-1,066 GWh

payments in CZK million	2014	2015	2016	2017	2018
regulation energy +	CZK 691 million	CZK 732 million	CZK 699 million	CZK 601 million	CZK 701 million
regulation energy -	CZK 9 million	CZK 5 million	CZK 2 million	CZK 1 million	CZK 8 million
imbalance +	CZK 596 million	CZK 509 million	CZK 584 million	CZK 614 million	CZK 756 million
imbalance -	CZK -1,683 million	CZK -1,739 million	CZK -1,686 million	CZK -1,569 million	CZK -1,809 million
settlement surplus	CZK 387 million	CZK 493 million	CZK 400 million	CZK 354 million	CZK 360 million



ELECTRICITY MARKET

Imbalance and counter-imbalance price

Legislation defines the method of setting the price which is charged or credited to balance responsible parties for imbalances. Since 2007 this price has been derived from the system imbalance and the sale price of regulation energy used for system imbalance offset.



Following minor modifications implemented in 2007–2011, since 2011 imbalance price has been calculated as follows:

- the imbalance price is the highest sale bid price of regulation energy supplied at the respective trading hour; if the resulting price is lower than the price set by the ERO price decision, the ERO price shall apply,
- in the event no regulation energy was provided at some of the trading hours, the imbalance price set in the ERO price decision shall apply.

The correlation curve of the imbalance price with the system imbalance volume is annually confirmed by the ERO’s price decision applicable for the relevant year. In 2017 and 2018, the correlation curve of the imbalance price for each trading hour is calculated as follows:

- for a negative and zero system imbalance (SI) using the following formula:
 $C = 2,350 + 5.5 \times |SO|$ [CZK/MWh; MWh];
- for a positive system imbalance (SI) using the following formula:
 $C = 1 + 3.5 \times |SO|$ [CZK/MWh; MWh].

In the event the system imbalance is negative, the **settlement price of the imbalance** equals the imbalance price (calculated from the sale price of regulation energy or the supply curve in the ERO price decision). In the event the system imbalance is positive, the settlement price of the imbalance equals the negative value of the imbalance price.

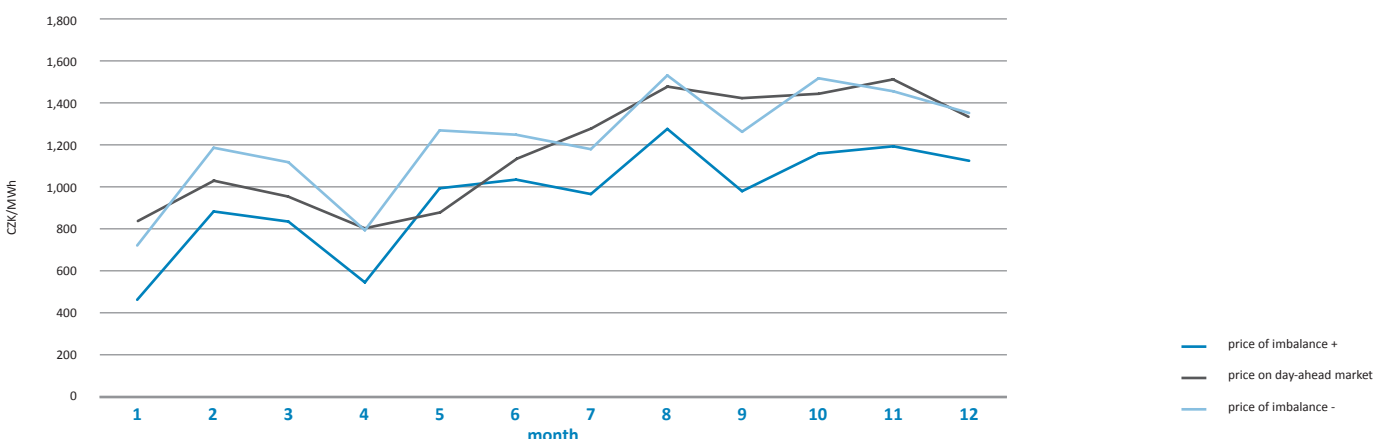
As of 1 January 2010, the **counter-imbalance price** (BRP’s imbalance in an opposite direction to system imbalance) has been tied more closely to the price of regulation energy. The settlement price of the “counter-imbalance” is the weighted average of prices of activated regulation energy.

If the direction of the BRP’s imbalance is identical to the system imbalance direction, the BRP is charged an amount equalling the product of the BRP’s imbalance and the settlement price as a fee for the imbalance caused by the respective BRP. If the direction is opposite, the BRP is credited an amount equalling the multiple of the settlement price of the counter-imbalance and the value of the BRP’s counter-imbalance.

system imbalance (MWh)	BRP’s imbalance (MWh)	settlement price (type)	imbalance price (CZK/MWh)	who pays who (direction)
positive +	positive +	imbalance	negative -	BRP is charged for imbalance
positive +	negative -	counter-imbalance	negative -	BRP is credited for imbalance
negative -	positive +	counter-imbalance	positive +	BRP is credited for counter-imbalance
negative -	negative -	imbalance	positive +	BRP is charged for counter-imbalance

Progressive imbalance prices (in relation to the volume of system imbalances) and the difference between the imbalance price and the counter-imbalance price provide a sufficient incentive for balance responsible parties to minimize their imbalances and to place any electricity surplus or shortage thereof on the balancing market with regulation energy.

Average monthly prices of positive and negative imbalances and average monthly prices on the day-ahead market in 2018



GAS MARKET

Organized 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

The organized intraday gas market allows gas market participants continuous trading in the day before the gas day of delivery, as well as in the course of a gas day of delivery. 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 2018, a total of 3,059 GWh of gas was traded on the intraday gas market. The average price of gas traded on the intraday market in 2018 amounted to EUR 23.88/MWh. 99 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 market clearing prices and traded volumes of positive and negative unused flexibility).

Short-term markets in the gas sector

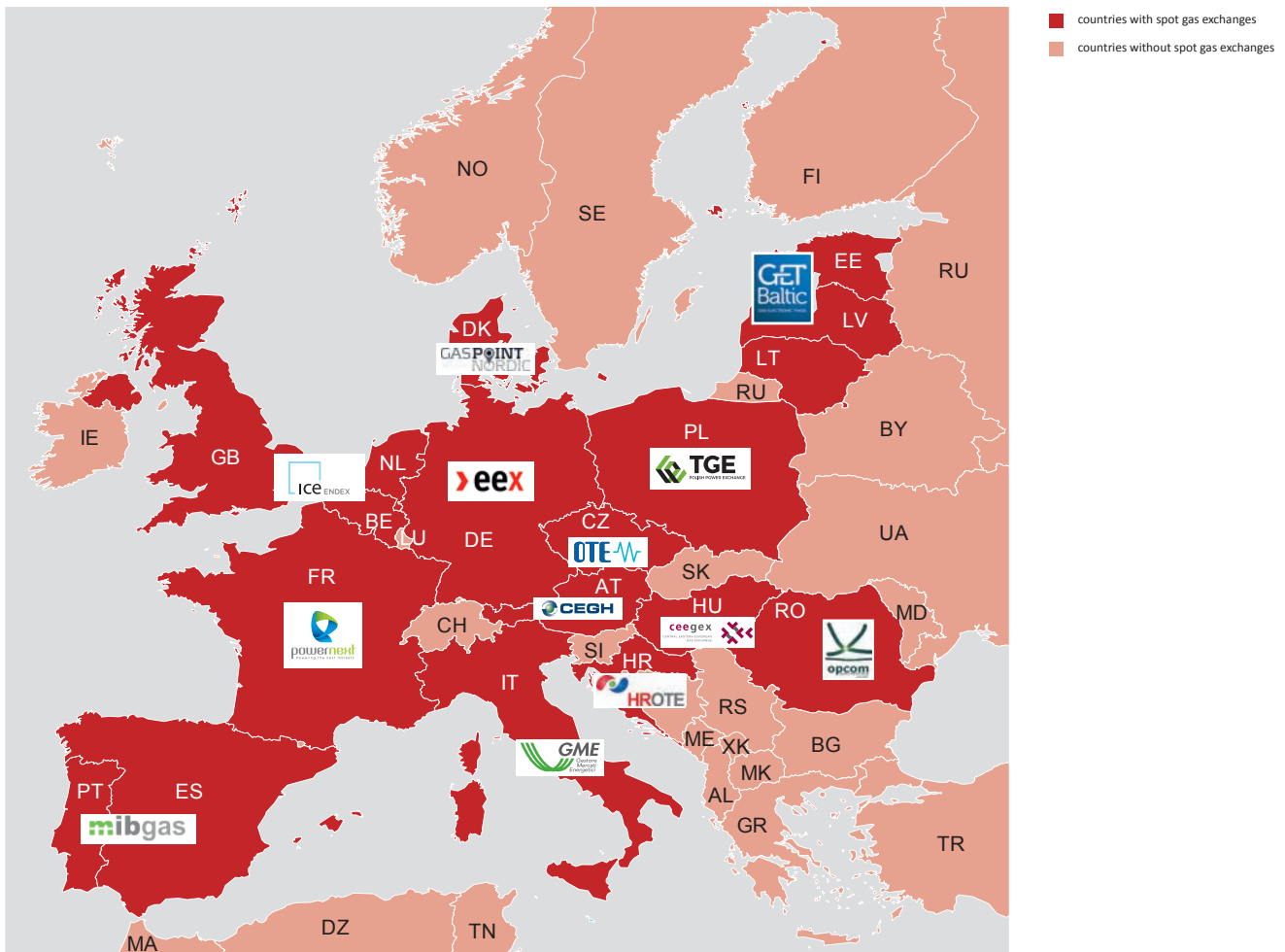
	intraday gas market	unused flexibility market
type of market	continuous matching	auction principle
traded period	*1 day	*1 day
minimum tradable volume	0.1 MWh	0.001 MWh
maximum tradable volume	99,999.9 MWh	not defined
smallest quantity increment	0.1 MWh	0.001 MWh
trading currency	EUR	CZK
delivery point	VTP CZ	VTP CZ
minimum price	EUR 0.01/MWh	CZK 0.01/MWh
maximum price	EUR 4,000/MWh	CZK 99,999/MWh
smallest price increment	EUR 0.01/MWh	CZK 0.01/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 to 6:00 of the following day.

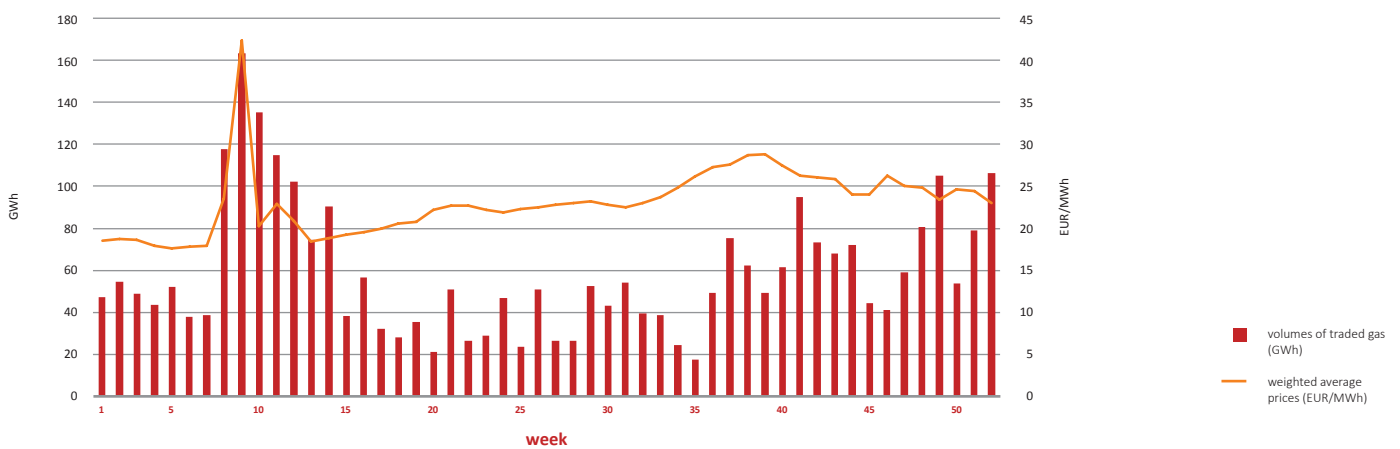


The organized intraday gas market is attractive not only for balancing the traders' positions, but also during sudden climatic changes or complications in the transmission system.

Gas trading platforms



Volumes of traded gas and average prices on the intraday gas market in specific weeks of 2018



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 withdrawal and injection 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.

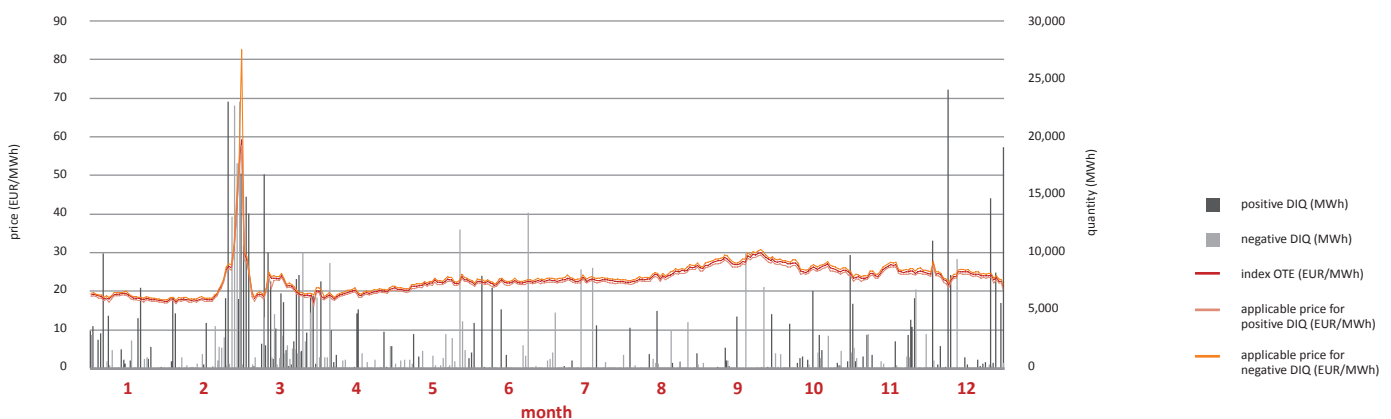
In the event the balance of the aggregated account of imbalances of a BRP exceeds the flexibility limit of that BRP and the BRP fails to purchase unused flexibility of another BRP, the excess amount equals the daily imbalance quantity of the BRP and this amount is settled financially at a unit price.

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.

Daily imbalance quantities (DIQ) and their prices in 2018



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 change 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 points of delivery. The amount of the provided flexibility is derived from the volume of the reserved capacities and their utilization, or by employing a substitute method for points of delivery with non-interval type of metering.

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.

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 will enable individual balance responsible parties to use the market approach for settling directly between them imbalances that, even though they exceed the flexibility of the balance responsible party, in view of the overall position of the gas system the imbalances do not represent a situation that would 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 the gas system requiring 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

