DTEK Energy in action

BRIEF ON KEY BUSINESS ISSUES

#4/2022, 31.01.2022 Kyiv

DTEK Renewables expands into the EU with acquisition of wind project in Romania

In December 2021, DTEK Renewables agreed to acquire a 60 MW wind development project in eastern Romania. The project will be implemented in conjunction with a local developer. It is expected to begin construction by the end of 2022 and be fully operational by the end of 2023. Eastern Romania has higher than average wind speeds, contributing to attractiveness of wind generation in the region. The transaction is expected to close in Q3 2022, subject to fulfillment of several project development milestones and receiving necessary anti-monopoly approvals.

This investment represents an attractive opportunity for DTEK to start its expansion into the EU by entering the growing Romanian renewables market. The unprecedented rise in demand for renewable power in Europe, supported by decarbonization policies and regulations, presents an opportunity for DTEK to grow internationally. DTEK's existing technical expertise in construction of large-scale wind and solar projects, as well as established partnership relations with key equipment manufacturers allows DTEK Renewables to play a strong role in Europe's overall energy transition.

Ukraine's readiness for the heating season

As of January 27th, 17 TPP and CHPP units were out of operation due to a lack of fuel and 3.5 units were under emergency repair. At state-owned Centrenergo, ten out of 18 power units reported a lack of fuel, six power units are in operation, one is undergoing scheduled repair and one is under emergency repair. Energoatom is operating 14 NPP units, with a total load of 12.4 GW.

As of January 31st, coal stocks at Ukrainian TPPs' warehouses amount to 657 thousand tonnes. The increase since January 1st totals 217 thousand tonnes (+49%). In terms of companies, coal stocks are as follows:

- 502 thousand tonnes accumulated in the warehouses of DTEK TPPs (+217 thousand tonnes or +76% compared to January 1st);
- 123 thousand tonnes accumulated in the warehouses of Centrenergo TPPs (+8 thousand tonnes or +7% compared to January 1st);
- 32 thousand tonnes accumulated in the warehouses of Slovianska TPP of Donbasenergo (-8 thousand tonnes or -20% compared to January 1st).

Emergency repairs of NPP units and DTEK securing the UPS during peak loads

Throughout the past week, DTEK supported the United Power System of Ukraine (UPS) during the peak of consumption and capacity shortages.

On January 25th, two NPP units were in emergency repair: Unit No.1 of Khmelnytska NPP and Unit No.4 of Zaporiz'ka NPP. Accordingly, the NPP load during the day decreased from 12.4 GW to 10.4 GW. Two units of Burshtyn TPP worked to balance the load and an additional unit of Kryvoriz'ka TPP was used. Also to compensate for the lacking 2 GW of NPP capacity, hydro power plants were used. HPP production increased by 93.8% (to 46.6 mln kWh). Production at thermal power plants on January 25th increased by 25.4% compared to January 24th (to 156.1 mln kWh).

Also on January 25th, Ukrenergo activated emergency assistance from the power system of Belarus to the UPS of Ukraine from 10:00 to 14:00 and from 16:00 to 17:00 with a total volume of 650 MWh. Ukrenergo

also activated Slovak imports in Burshtyn Island (from 8: 00 to 14:00) totalling 300 MWh due to the fact that one Burshtyn TPP unit was working to secure the UPS of Ukraine.

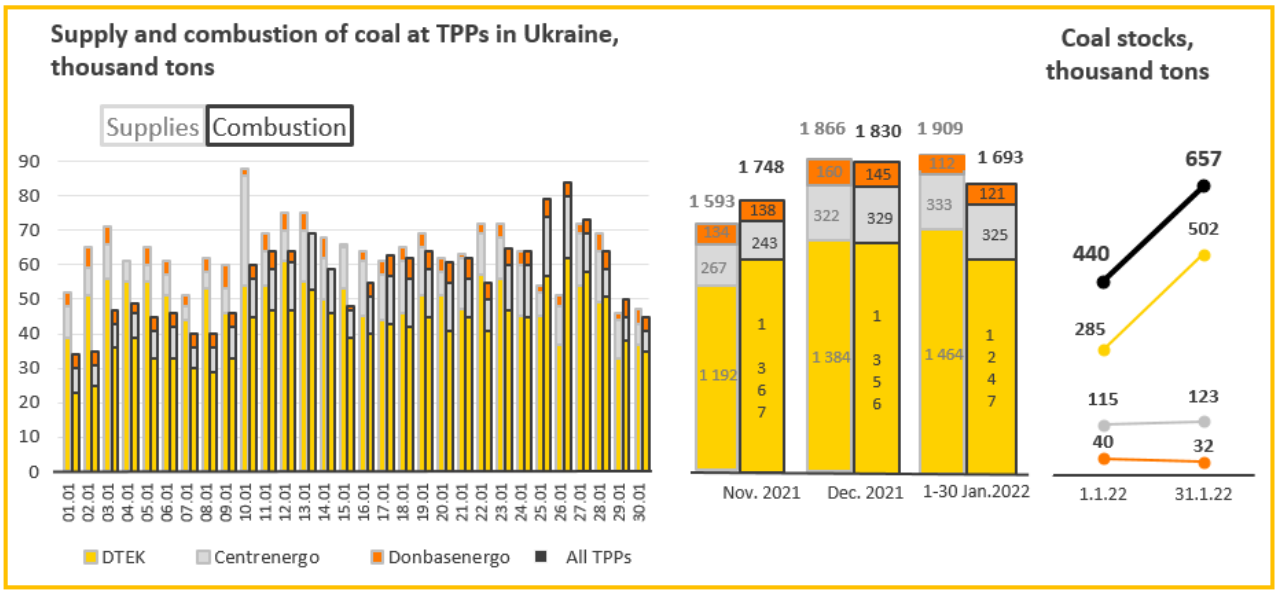
Earlier, on January 22nd, the South-Ukraine NPP put one of its units into two-day scheduled maintenance. The respective shortage of electricity was compensated by thermal generation, in particular by TPPs of DTEK Energy. Ukrenergo used one Burshtyn TPP unit (re-arranged from the Burshtyn Energy Island in the UPS of Ukraine) and Dobrotvirs'ka TPP units. On January 23rd, Burshtyn and Zaporiz'ka TPPs were used in the same way.

Coal imports

DTEK has negotiated the delivery of an additional four Panamax-class ships with imported coal. The total number of deliveries contracted by DTEK has increased to 13 ships, and the volume of imported coal has risen to 858 thou tonnes.

This is an additional power reserve during the winter heating season, when as a result of sharply increasing electricity consumption, thermal generation plays a vital role. However, the use of own-produced coal remains a priority.

The next delivery for DTEK TPPs is expected to arrive to port in the first week of February.



Coal stocks at power plants, k/mts

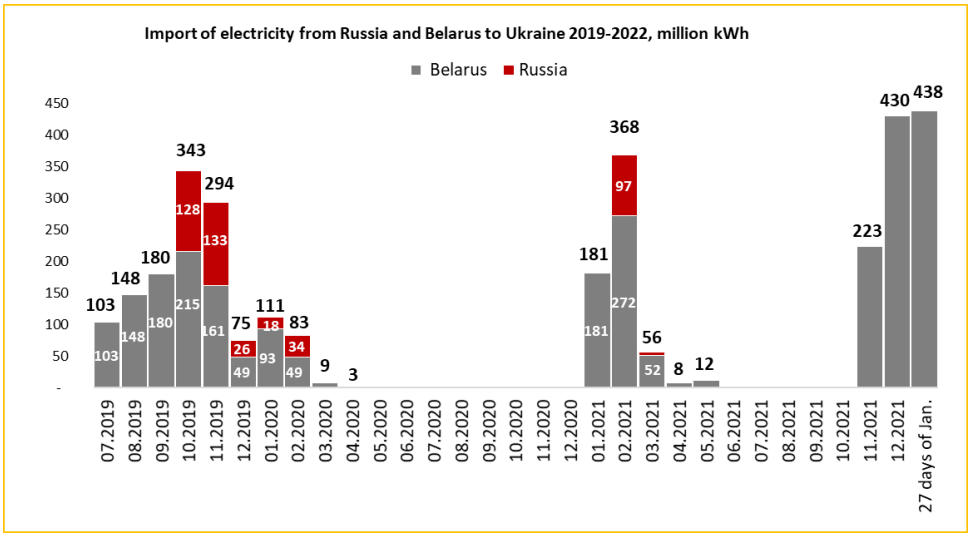
	31.01.2021	01.01.2022	31.01.2022	2022/2021 % increase	31.01.2022/ 01.01.2022, % increase	Coal reserves according to the Schedule approved by the Ministry of Energy	2022/Schedule approved by the Ministry of Energy, %	Guaranteed stocks in accordance with the Procedure for the formation of Forecast	Work without supply, days

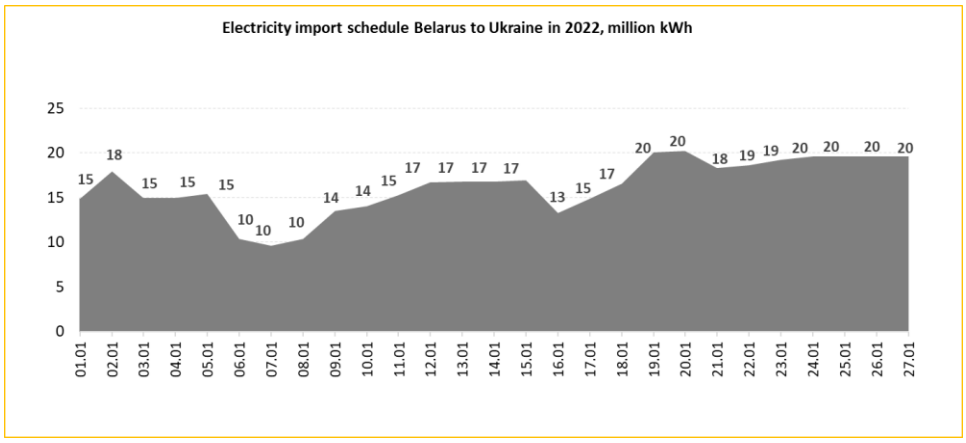
								Balance of Ukraine	
DTEK TPPs	**286**	**285**	**502**	**76%**	**76%**	**762**	**66%**	**727**	
G+DG grade:	161	265	472	193%	78%	651	72%	613	
Zaporiz'ka	*27*	*86*	*67*	*145%*	*-22%*	*137*	*49%*	*139*	*11*
Ladyzhins'ka	*21*	*8*	*81*	*280%*	*918%*	*73*	*111%*	*74*	*23*
Burshtyns'ka	*33*	*35*	*128*	*288%*	*271%*	*167*	*76%*	*162*	*9*
Dobrotvirs'ka	*17*	*12*	*12*	*-29%*	*1%*	*48*	*25%*	*43*	*3*
Kurahivs'ka	*41*	*88*	*149*	*263%*	*69%*	*149*	*100%*	*139*	*17*
Kryvoriz'ka	*4*	*21*	*17*	*325%*	*-19%*	*34*	*50%*	*23*	*7*
Prydniprovs'ka	*17*	*16*	*17*	*0%*	*6%*	*43*	*39%*	*33*	*9*
A+T grade:	125	20	31	-76%	56%	111	28%	114	
Kryvoriz'ka	*20*	*8*	*9*	*-54%*	*8%*	*53*	*17%*	*54*	*4*
Luhans'ka	*106*	*11*	*22*	*-80%*	*91%*	*58*	*37%*	*60*	*17*
Other TPPs	**155**	**155**	**155**	**0%**	**0%**	**365**	**43%**	**244**	
G+DG grade	121	120	128	6%	7%	292	44%	204	
A+T grade	34	35	27	-20%	-23%	73	38%	40	
All TPPs	**441**	**440**	**657**	**49%**	**49%**	**1 127**	**58%**	**971**	
G+DG grade	282	385	599	113%	56%	943	64%	817	
A+T grade	159	55	58	-64%	5%	184	32%	154	

Electricity imports

As of January 27th, 438 mln kWh of electricity were received from Belarus in January. In recent days, imports arrive at 20 mln kWh per day, with a baseline schedule of 600-900 MW.

In addition to commercial imports, on January 25th, due to emergency repair of two Ukrainian NPP power units, NEC Ukrenergo activated emergency assistance from the Belarusian power system totalling 650 MWh (described in more detail above in the section about emergency repairs of NPP units).





Electricity market update

Day-ahead market

The cost of the baseload product in the United Power System of Ukraine (UPS) this week decreased by 4% (-3.2 EUR/MWh) and amounted to 79.7 EUR/MWh. The average daily trading volume on the Day-ahead market (DAM) this week amounted to 139.7 mln kWh, which is 4.3% lower (-6.3 mln kWh) than last week. This week's daily prices ranged from a minimum of 69.2 EUR/MWh on January 25th to a maximum of 88.1 EUR/MWh on January 21st. DAM prices fell as a result of an unusual decline in demand and demand transition to the Intraday Market, amid rising supply of cheap DAM orders. Thus, last week 50% of accepted DAM bids made applications at a dumping price below 1000 UAH/MWh (31 EUR/MWh). Night hours, which had the largest reduction in demand, closed on the DAM with a record low level of 298-776 UAH/MWh (9-24 EUR/MWh). As a result, the volume on the Intraday market in the UPS of Ukraine increased almost fivefold: from the average for the first 20 days of January of 8 mln kWh per day, up to 39 mln kWh per day.

In the energy island of Burshtyn TPP, the baseload price this week decreased by 0.7% (-0.5 EUR/MWh) to 78.5 EUR/MWh. The price again decreased in EUR terms due to local currency weakening. The average daily trading volume increased by 5.7% (+1.2 mln kWh) to 21.5 mln kWh.

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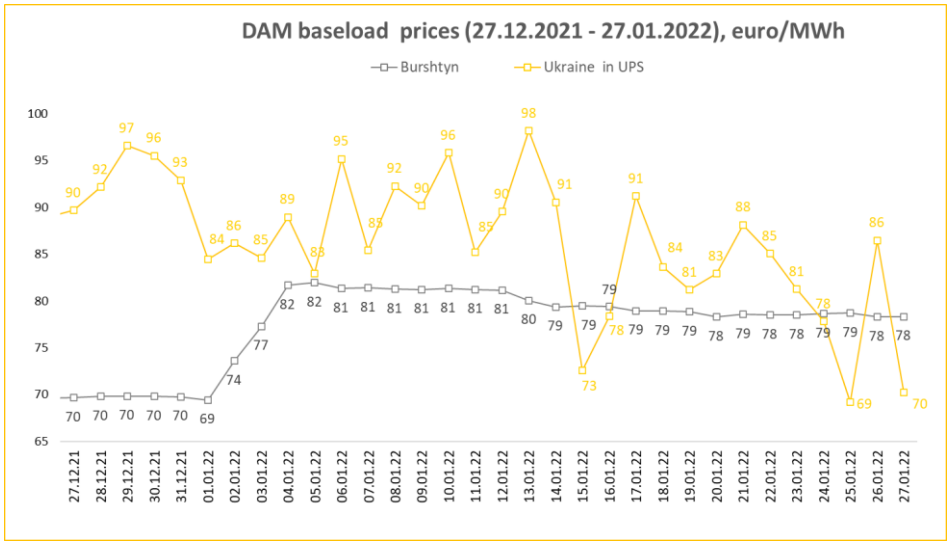
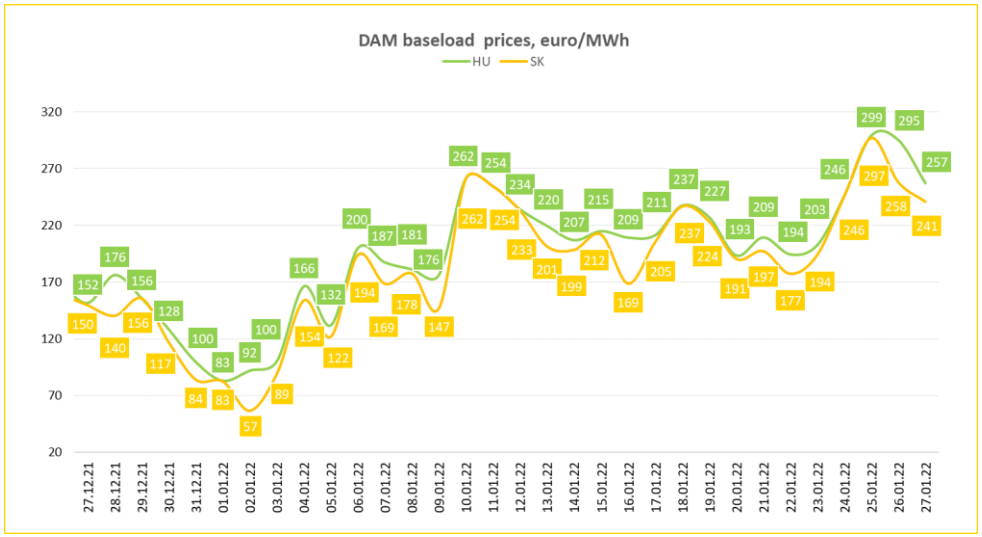


European markets

Compared to the previous week, prices in the Hungarian market resumed growth. Last week, the average spot price of the baseload amounted to 243.4 EUR/MWh, which was 29 EUR/MWh or 14% higher than the previous week. The maximum daily price was observed on January 25th at 299 EUR/MWh.



Compared to the end of last week, forward quotes are also demonstrating growth: the current cost of the forward in Hungary for electricity in February 2022 as of January 26th amounted to 237 EUR/MWh (+22 EUR/MWh), while for the 2nd quarter of 2022 quotes amounted to 201 EUR/MWh (+33 EUR/MWh). The cost of the forward in 2023 increased by 13 EUR/MWh to 140 EUR/MWh.

DTEK Grids took part in the E.DSO Session “The role DSOs - 2030”

DTEK Grids took part in the E.DSO Knowledge Sharing Session “The role of DSOs - 2030” which discussed the key trends impacting Distribution System Operators (DSOs).

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The role of DSOs in the energy system continues to rise in importance. DSO technologies open up opportunities for new players to participate in the energy market.

High RES growth rates are driving market changes such as the increasing importance of flexibility services, more in-depth transmission system operator coordination with DSOs, and development of an intelligent distribution grid infrastructure to ensure the functioning of the flexible market.

Another important trend is digital evolution and the increasing role of DSOs in data management. Data management is one of the key features of smart grid design, together with infrastructure for digitalization and automation. DSOs are being transformed into data-centric companies leading the digital transformation of the energy sector.