







ELECTRICITY MARKET NEWS

Forward market:

In January 2023 we could see a further decrease in prices on the futures market, mainly as a result of the favourable temperature, the lasting decrease in the price of natural gas, as well as the improving hydro situation. During the examined period the Hungarian benchmark product for 2024 was traded in the range of EUR 162-225/MWh. The trend continued in Janu-

ary compared to the baseload prices seen in December. The Hungarian 2024 benchmark price closed the month at EUR 185.78/MWh while the German 2024 annual product ended up at EUR 176.75/MWh. The difference between the two closing prices kept varying and its monthly average was 9.92 EUR/MWh.

Supply risks kept easing on the European wholesale markets, which decreased futures rates on both the Hungarian and German markets. Besides the high



gas storage levels, the expectedly higher French nuclear availability and much warmer than average weather softened the pressure on the supply side. In the Balkan region, on the other hand, the rainy January weather favourably impacted the region's hydrological situation, which meant additional pressure on market rates.

The Hungarian baseload product for February fell from 214.7 EUR/MWh to 152.69 EUR/MWh during the month and the March rate decreased from 233.47 EUR/MWh to 156.12 EUR/MWh as a downward price movement was experienced during almost the whole month.

The leading EUA Dec-23 contract has had a volatile January closing the month at EUR 93.01/t, which means a 10.8% increase by 9.04 EUR/t compared to the December closing price while the price kept moving around the region of 20 EUR/t. The correction that started in the second half of December lasted until the middle of the month. With traded volumes typically well below the average, the price fell to 77 EUR/t and the harmful emissions of electricity production were low due to the mild and windy weather. Meanwhile, the REPowerEU plan, broadly presented in the second half of December but not explained in detail, also put pressure on prices.

As for the expectations, mild weather will characterise the second half of the month after the cold weather in early February so we do not see any factor in the market now that would cause a significant rise. The price movements of the more distant period also indicate depressed prices in addition to normalising summer and winter seasonal differences.

Spot market:

In January 2023 prices fell without exception on the European day-ahead electricity markets compared to the previous month. The price of the German EPEX baseload product fell by EUR 129.03 to 117.82 EUR/MWh on a monthly basis and the average monthly price of HUPX lowered by EUR 107.94 to 148.69 EUR/MWh from December to January. The total Hungarian electricity production fell by 0.1 GWh/h to 3.4 GWh/h on a monthly basis, which is also 12.3% below the volume registered in the same period last year. The decrease is due to the decline in the production of gas-fired power plants. Domestic gas-fired production fell by 0.2 GWh/h to 0.9 GWh/h from December to January, which is short of three quarters of last January's production. (continued on next page)

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(continued from previous page) On the contrary, nuclear, lignite and renewable production all increased slightly on a monthly basis. Paks Nuclear Power Plant operated at maximum capacity utilisation with the exception of 3 days during the month. Although lignite production could increase slightly compared to December, it fell behind the production volume of last January by 16% as unit 5 of Mátra Power Plant has been under maintenance since 29th November 29 and, based on the current information, it can only return to the system by 22nd February. On the other hand, wind and solar energy production strengthened to a greater extent on a monthly basis but both remained below the normal value. In January 2023 European day-ahead electricity prices dropped significantly on a monthly basis thanks to the extremely mild weather, which

had its impact felt through the lower than average consumption and the relatively low gas prices. In the first two weeks of the month the average daily temperature was 4-6 °C above the long-term average across Europe; furthermore, only two days were registered in Hungary and in the South-East European region during the month when the temperature was below the average value. On the supply side, production developed favourably with both German and Romanian renewables remarkably strengthening compared to December while hydropower production also grew in the region. The monthly Hungarian system load continued to rise to 5134 MWh/h (+107, +2.1%) in January after December. However, it stayed below the seasonal norm by 115 MWh/h while it was significantly lower by 453 MWh/h compared to the same month



of the previous year, which is a decrease of about 8.8%. As a matter of fact, this year-onyear trend has been observed since last April. The declining consumption is basically due to the fact that the business sector and the population adapt to the drastically rising energy prices. As for the population, the more and more serious decrease in real income also plays a role, while temperatures also restrained consumption to a smaller but increasing extent. In January the monthly average temperature rose to 4.2 degrees, which was over 4.3 degrees higher than the seasonal norm and 3.2 degrees higher than in the same period of the previous year.

The hydrological situation of the Balkan region kept improv-

ing compared to December. Although the water flow of the Danube was still above the seasonal norm in the first half of the month, it showed a falling tendency due to less precipitation. The turning point was in the middle of the month when the water flows of the rivers rose largely thanks to the continuous rainfall. By the end of the month the water flow exceeded the seasonal norm by 83-88%, which gave a serious boost to the production of Balkan hydropower plants.

As for the expectations, much milder weather is expected for the second half of February than is usual at this time, which may keep electricity prices stable through gas prices. Based on the current fundamentals, we do not expect significant volatility and a further slow decline in prices is the most likely scenario.

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OIL, NATURAL GAS AND FOREIGN EXCHANGE MARKET NEWS

No clear direction is to be seen in the oil markets at the beginning of the year. The North American West Texas Intermediate (WTI) started the year at a price of 76.93 USD/ barrel, moved between 72 and 82 during the month, and the course closed January at 78.87 in the USA. The North Sea Brent, highly important in Europe, followed a similar path: it started the year at 82.1 USD/ barrel and then settled at 84.49 at the end of January after its roller coaster ride. The Urals Europe rate, related to Russian deliveries, was priced USD

27.75 lower than Brent on average in the mentioned period. It seems that Russian oil finds its way to the European Union, though with the participation of new market players. According to the latest news, China and India have risen their purchases of Russian crude oil in the past six months, which they then process in domestic refineries and resell as their own refined oil products on the international market; thus Europe also substitutes its imports lost due to the embargo with "repackaged" Russian crude oil sourced from here and from the Middle Eastern markets. The question is how sustainable this business model is in the long term as, on the one hand, the remaining European refining capacities gradually suffer a competitive disadvantage against cheaper Asian imports due to the embargo, and, on the other hand, the old continent replaced its Russian import dependence with Asian and Middle Eastern import dependence. Another event causing tension on a regional level is that Croatians have drastically increased the transit fee of the Janaf (Adria) Pipeline coming from Croatia, which is now by far the highest in Europe. It is widely known that the Adria Pipeline is the main rival of the Friendship Pipeline passing through Ukraine in the regional supply of crude oil, playing a significant role in supplying not only Hungary but also Slovakia and the Czech Republic and even Austria with some mediation.

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Month of supply

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(continued from previous page) With the onset of the year 2023, the natural gas price kept decreasing. On the leading Dutch TTF market, the day-ahead price of natural gas fell from the level of 66.00 EUR/MWh in early January to 58.025 EUR/MWh by the end of the month. The price of the product for delivery in the next month also decreased from 71 in early January 2023 to 57.3 EUR/MWh by the end of the month. The price decrease is the result of the combined effect of several factors.

On the one hand, the filling level of European gas storage facilities is significantly higher than previously expected for this time because, thanks to the mild weather, significantly less natural gas was consumed than what was previously planned by the market players. It has to be noted that the storage facilities were filled beyond the mandatory 85% level stipulated by the European Parliament last summer at extra high prices; traders can only sell the natural gas then stored at high prices with enormous losses due to the decreasing market



Month of supply

prices and their own increased financing needs.

The forint had a good start of the year. It stood at 400.66 against the euro in early January, from where the domestic currency strengthened to 388.99 by the end of the month. The rate against the dollar travelled from 375.18 early in January to 359.18. Unfortunately, the economic situation remains doubtful.

December inflation jumped as high as 24.5% based on data from the Statistical Office (KSH). While the global price decrease of energy products highly reduced the deficit of the foreign trade balance, it remained in the negative range, reaching minus 154 million euros in December. This January Fitch changed the country's outlook from stable to negative

and Standard & Poor's (S&P) downgraded Hungary.

The downward course of the dollar continues this year as the exchange rate of the American currency against the euro weakened from the initial level of 1.0662 to 1.0862 by the end of the month. The Federal Reserve (Fed), which plays the role of the US central bank, has been raising interest rates since last March, adding 25 basis points at its last session and previously 50 basis points on one occasion and by 75 basis points four times before.

The European Central Bank also raised the base interest rate of the euro zone by 50 basis points to 3 percent. Both the American and the European central banks justify their decisions to raise interest rates with their battle on inflation.



CSABA LANTOS: INFRASTRUCTURE INVESTMENTS NEEDED IN THE FIELD OF ENERGY

The government in Hungary is preparing to increase the investments required for adequate energy supply fivefold in the following seven years compared to the previous seven-year period, said the Minister of Energy in an interview with Index.



Csaba Lantos highlighted three areas where investments are essential: renewable energy sources, network developments and infrastructures to

develop flexibility. He named security of supply, affordability and sustainability as the most important tasks facing the sector. "One of our greatest dilemmas is energy sovereignty as Hungary is one of the countries most exposed to foreign supplies in Europe. We now have to move towards energy sovereignty even if it is not the most economical choice in a given period," he said.

Domestic electricity consumption is 44 TWh, approximately 70% of which is produced in Hungary but the country is largely dependent on imports. According to calculations, 68 TWh must be reached by 2030 to satisfy all needs, which represents a 55% increase in it-self.

The Minister explained that business always benefits from a predictable environment and it is an important aspect

of every investment decision. On the other hand, there are situations when extraordinary circumstances develop and it is necessary to intervene in the economy. "The economic government is reluctant to do this in the time of peace but it is enough to look around Europe to see that there was or is some kind of regulation of residential prices, discount system, support for energy almost everywhere," he said, adding that a number of countries also introduced extra profit tax. In order to maintain the utility price discount for Hungarian families up to the average consumption, they expect contributions from those with extra

profits. The income goes to the Utility Price Discount Fund, the amount of which will be increased fourfold, said Csaba Lantos.

He also mentioned that domestic gas consumption decreased by 17 percent last year, which is a serious result. More precisely, a drop of 25 percent was seen in December, already in the heating season, which shows that both households and companies are adapting and many have been able to reduce their consumption to get below the set limit. The price below the set limit will remain unchanged and the part above it will be reviewed by 30th April 30, after it is examined what can be changed and how.

The interview can be read here.

ENERGY-RELATED DOMESTIC USE OF THE RRF RECOVERY FACILITY

The Recovery and Resilience Plan of Hungary uses non-refundable funds from the Recovery and Resilience Facility (RRF) along 9 components. In the field of energy, the goal of the plan is to increase energy independence and self-reliance, strengthen the resilience of the economy, increase its preparedness for the green and digital transitions, and offset the negative effects of climate change.

ENERGY (GREEN TRANSITION)

Reforms

- Transformation of electricity regulation
- Facilitating investments into wind energy
- Simplification of the licensing procedure for investments related to renewable energy sources
- Improving the transparency and predictability of the network connection process
- Enhancing the effectiveness of energy efficiency programs: stipulating a reduction of 30% in energy consumption in the case of subsidised building renovations

Investments

- Development of the electricity network to increase the production capacity that can be connected to the network and utilises renewable energy sources
- Supporting residential solar developments and heating modernisation: increasing the renewable energy generation capacity and energy efficiency of 35,000 households
- Installation of grid energy storage facilities at transmission and distribution licensee companies and players of the energy market
- Spreading smart metering



MUNICIPAL COMPANIES MAY BE EXEMPTED FROM PENALTIES PAYABLE AFTER UNUSED NATURAL GAS

As proposed by the associations of municipal governments, the volume to be used compulsorily by companies of the municipalities will also be only 60% of the previously contracted volume of natural gas.

This uniformly increases the lower tolerance band fixed at a maximum of 25% in their contracts to 40%. As a result, in addition to other consumers, some local district heating providers will not have to pay a penalty after high volumes of unused natural gas, the Ministry of Energy announced.

In recent weeks a number of articles have voiced the complaints of district heating providers as several municipalities reported that MVM obliged them to pay penalties due to the natural gas saved. As it happens, the trader may charge a contractual penalty if natural gas consumption differs from the volumes in the contracts since MVM Next has to purchase, store and transport the gas before it is consumed. On the other hand, Next contacted several district heating providers in autumn to see if they wished to change their contracted natural gas volumes and modified the contracts if requested.

As a result of the current law amendment based on the proposal of municipal government associations, local companies will now be allowed to consume less than the contracted volumes by up to 40%.

For example, the decision may also exempt local district heating providers from the penalty payable after contracted but unconsumed gas.

CABLING PROGRESSES WELL IN THE MOUNTAIN REGIONS

The network investment strategy of MVM Émász pays special attention to replacing overhead cables with underground cables, especially in certain mountainous areas of Hungary, such as the Bükk and Mátra Mountains.



We can remember how almost the whole country experienced gale-force wind of above 100 km/h in early February.

The trees falling on electric lines, broken branches and broken poles caused wires to break in many places, which led to service outages. Under extreme weather circumstances, especially in mountainous areas, it is more difficult and breakdowns. The primary goal of replacing overhead lines with underground cables, which has now been implemented in a

derground cables, which has now been implemented in a significant part of the central and eastern regions of the Northern Mountain Range, is exactly to ensure consumes' uninterrupted supply of electricity and reduce the number of breakdowns occurring in

the network connecting settlements. These investments are also important from an environmental aspect as a considerable area is returned to nature with underground cables installed in place of overhead lines and we can also avoid the electrocution incidents affecting birds that occur on the free overhead cable network. The government has declared the investments to be of high priority for the national economy. MVM Émász has built the underground cable network

between the towns of Bükkszentkereszt and Répáshuta, Lillafüred and Ómassa, as well as Mexikóvölgy and Bükkszentkereszt under the Bükk project. As for the Mátra project, the network has been placed underground between Mátraszentimre and Mátrakeresztes, on the Parád-Parádsasvár section, and finallv between Mátrafüred and Kékestető. A network of outstandingly high availability has been established in the two projects.



CHARGING BECOMES CHEAPER AT MULTIPLE MOBILITI CHARGING POINTS

Thanks to its falling costs, MVM Mobiliti Kft. will ensure the charging of electric cars cheaper at most of its public charging stations from 3rd February 2023. Charging now costs more than 20 percent less at a number

of charging stations in public areas and municipal charging points.

Detailed and up-to-date information can be found in the Mobiliti application and on the website (www.mobiliti.hu).





Since 1st January 1 MAVIR's experts have used a changed

methodology to plan the size of reserve capacity needed

Traditionally, the size of the necessary reserve was calculated on the basis of the system load, i.e. the expected changes in electricity consumption as any imbalances were typically results of changes on the consumers' side. However, with the dynamic rise of weather-dependent renewables, primarily that of solar energy production, uncertainty on the source side, in oth-

to maintain system balance.

er words the production side, has increased significantly and the resulting imbalances have become determining. Accordingly, MAVIR used a temporary calculation based on source and consumption uncertainties in the reserve sizing until 31st December 2022. However, in line the relevant

MORE EFFECTIVE RESERVE SIZING, LOWER COSTS

rules of the European Commission, system operators gradually have to switch to calculation based on probability, which uses the statistical distribution of the imbalances that occur as its basis.

As of 1st January 2023 MAVIR transformed its methodology accordingly. Based on the data of the past two years, in addition to a number of other factors, such as the weather conditions, it is basically the probability of the occurrence of imbalances that serves as the basis for reserve sizing. The primary advantage of the new planning methodology is that it makes the determination

of the level of the necessary reserve capacities more effective. It means a kind of fine-tuning that makes it possible for MAVIR to allocate reserves only for the period and in the volume actually needed. In the first month it is expected that it will be possible to reduce the amount of purchased reserves by around 30%, which means that the cost of system-level services will be significantly reduced so ultimately all electricity consumers will benefit from the methodological change, informs us the website of the system controller.



MVM Next

COMPROMISE REACHED ON THE ENERGY EFFICIENCY DIRECTIVE

The members of the European Parliament's Committee on Environment agreed on the energy efficiency directive.

The aim of the package is to achieve net zero emissions from buildings by 2050. Under the agreement, buildings would be classified from A (net-zero) to G according to their eneray efficiency. G would be the moving average of the 15% of the worst performing buildings in the given member state. All public buildings would have to

be renovated to at least rating E by 2027 and rating D by 2030. As for residential buildings, all of them should be brought to level E by 2030 and to level D by 2033. The representatives will vote on the draft agreement on 9th February and then it will be put to a plenary vote in March. Source: MVM Knowledge Centre



ENERGY-EFFICIENT BUILDING RENOVATION IN PRACTICE

The Hungarian Association of Environmentally Responsible Building (HuG-BC) will hold two practical training sessions on the subject of energy-efficient building renovation during March.

The free online training offers knowledge and tools applicable in practice so that the number and efficiency of energy renovations of multifamily buildings implemented in Hungary can increase. Participants can expect examples based on daily experiences regarding technical solutions, savings and collaboration opportunities. Professionals interested in renovation management or the preparation of decision-making can also benefit from the training.

On 9th March Thursday from 9:00 a.m. to 12:30 p.m. the issues of energy-efficient building renovation will be discussed from the aspect of buildings of traditional structure built after 1945.

On 23rd March Thursday from 9:00 a.m. to 12:30 p.m. the lecturers will demonstrate what tools are available in daily practice and to support decisions in the case of buildings constructed using industrial technology.

On both occasions the following will be among the topics:

- What are the steps of building energy renovation from a technical point of view; what is their correct order; what should be paid attention to? (Solutions of architecture and mechanical engineering)
- Energy efficiency as a financing and savings option. What possibilities lie in e.g. the Energy Efficiency Obligation System (EKR) and the ESCO-type financing model?

Both trainings are free but registration is compulsory.



Magyar Környezettudatos Építés Egyesülete Hungary Green Building Council

More information and registration:

9th March: Online training on the possibilities of energy renovation of buildings built after 1945 (hugbc.hu)

23rd March: Online training on the possibilities of energy renovation of buildings built with industrial technology (hugbc.hu)



CZIFFRA FESTIVAL 2023

Cziffra Festival offers something exciting every month in the first half of 2023.

In 2023 MVM is once again the main sponsor of Cziffra György Festival. The special feature of the festival is that, in addition to the traditional European classical music concerts that we can call more convenient, visitors can also expect performances that can qualify as real rarities. Music is coupled with multiple art forms as well as branches of science and these encounters lead to the birth of truly special performances. The cooperation with MVM is for the opening months of the year-long series of events from February to May so twelve performances will be held in concert halls in Budapest, Zalaegerszeg and Brussels. Naturally, the concert series is again hallmarked by the name of the festival's founder, János Balázs, the Kossuth Prize-winning pianist. Besides him, the most excellent domestic and foreign performers will take the stage, including pianist **Sandro de Palma,** dulcimer player **Kálmán Balogh** and violinist **Barnabás Kelemen.**

In March music and science meet in the House of Hungarian Music: the program continues with a conversation between Széchenyi and Bolyai award-winning brain researcher Tamás Freund and pianist János Balázs. In April there will be a bar evening with Hot Jazz Band, as well as Lajos Sárközy and his band; singer Kati Kovács will recall the "fabulous times" but the audience can also listen to a Brahms night and a Liszt marathon. Actress Judit Halász will be the quest of the concert of János Balázs for children in May.

Further information: https://cziffrafesztival.hu









BALÁZS JÁNOS

KOVÁCS KATI

SANDRO DE PALMA



KELEMEN BARNABÁS

LACKFI JÁNOS

HALÁSZ JUDIT

JEGYEK KAPHATÓK A CZF.JEGY.HU OLDALON.

MŰVÉSZETI VEZETŐ BALÁZS JÁNOS ZONGORAMŰVÉSZ



cziffrafesztival.hu