



PannErgy Nyrt.

QUARTERLY PRODUCTION REPORT
for 2020 Q4

and

EBITDA Plan for 2021

15 January 2021

Introduction

PannErgy Nyrt. publishes a production report on a quarterly basis, presenting green energy production and utilisation. In the report, the Company presents the green heat sales figures of its key geothermal energy production systems in the reporting period, and presents additional useful information. Each year, the production report for the fourth quarter is supplemented with a preliminary, quarterly heat sale plan for the following year and with the preliminary annual EBITDA plan, the values of which are either confirmed or adjusted, as appropriate, at the Company's annual General Meeting.

I. Consolidated production information

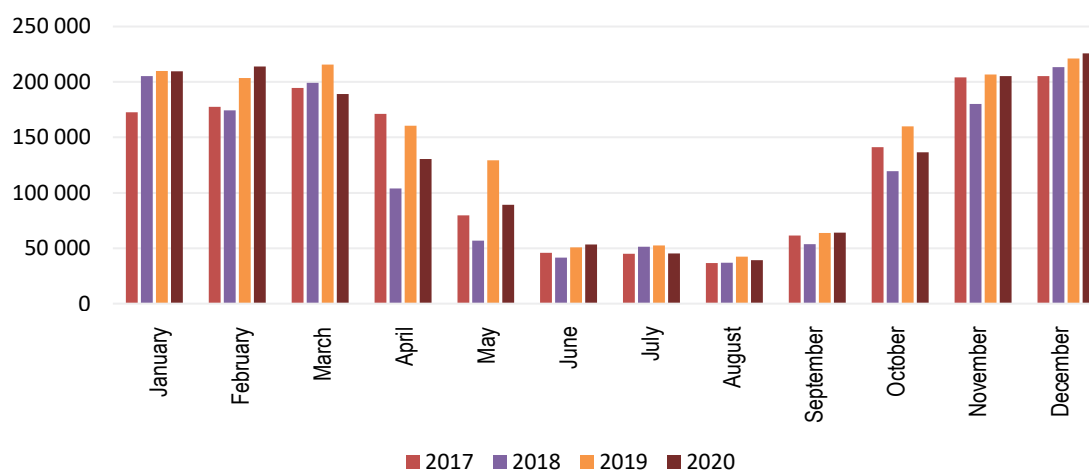


Figure 1

Consolidated volume of heat sold (GJ)

The chart presents the aggregate volume of heat sold by the Miskolc, Győr, Szentlőrinc and Berekfürdő projects, in a monthly breakdown.

	2017	2018	2019	2020	2020 TARGET	2021 TARGET
January	172 758	205 199	209 999	209 678		
February	177 533	174 300	203 484	213 855		
March	194 634	199 090	215 693	189 195		
Q1	544 925	578 589	629 176	612 728	621 403	660 769
April	171 294	104 033	160 548	130 407		
May	79 700	56 758	129 300	89 190		
June	45 936	41 641	50 780	53 394		
Q2	296 930	202 432	340 628	272 991	247 988	290 438
July	44 865	51 247	52 406	45 297		
August	36 709	36 794	42 415	39 205		
September	61 502	53 650	63 731	64 096		
Q3	143 076	141 691	158 552	148 598	164 526	160 683
October	141 270	119 652	159 888	136 460		
November	204 045	180 263	206 686	205 417		
December	205 251	213 267	221 248	225 688		
Q4	550 566	513 182	587 822	567 565	612 739	620 679
ANNUAL TOTAL	1 535 497	1 435 894	1 716 178	1 601 882	1 646 656	1 732 569

Figure 2

Consolidated volume of heat sold, in a table format (GJ)

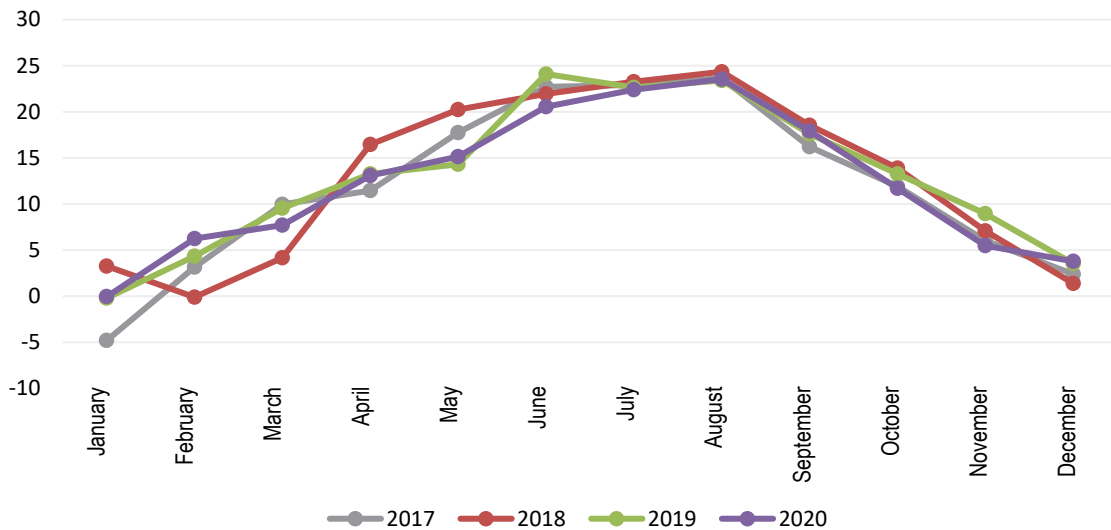


Figure 3
Average temperatures in 2017 – 2020

The 2–8°C ambient temperature range is ideal for daily geothermal heat sales during the heating season, especially when the difference between the daily minimum and maximum temperatures is as small as possible. Essentially, the monthly averages of average daily temperatures in the period under review represented a similar Group-level heating potential as in the corresponding period of 2019.

A comparison of the 2020 Q4 heat sales figures with the data of the same period in historical years indicates that the Company realised average heat sales in the review period, while it fell short of the quarterly heat sales target by around 7.4%. The shortfall can be primarily attributed to the protracted intra-year capacity expansion projects detailed below and to unscheduled repair works.

In 2020, a number of developments were carried out in the context of the Győr Geothermal Project. For the most part, their positive effect on the Company's P&L will be perceivable in 2021. Key developments include:

- a heat exchanger park with a higher throughput-capacity towards the district heating service provider and the related engineering development, which are expected to increase the annual heat input by 13–16 TJ (entry of capacity expansion: September 2020);
- as a result of the capacity expansion project of the pump-equipped production well (entry of capacity expansion: mid-November 2020) and thanks to raising the flow temperature of both production wells by 1°C and 2°C, respectively (entry of enthalpy increase: early 2021), the annual heat input is expected to increase by 50–60 TJ across the entire system.

In 2020, a number of developments were carried out in the context of the Miskolc Geothermal Project, the effect of which was already perceivable in 2020. Key developments include:

- A unit decline in electricity consumption resulting from the transformation of the engineering system beside the production wells, especially in the period outside of the heating season (operational: in January 2020);
- Reduction of the temperature fall on the heat exchanger as a result of the transformation of the heat exchanger of one of the production wells, which implies a 5–8 TJ increase in annual thermal energy transmission (operational: in October 2020).

The regulated district heating producer tariffs (heat supply tariffs) to be applied from 1 October 2020 – also applicable to subsidiaries subject to PannErgy’s district heating price regulation – were announced by the Minister for Innovation and Technology in Decree No. 32/2020 (IX. 30.), published in Volume 215 of 2020 of the Magyar Közlöny (the Hungarian Official Journal) as follows:

validity:	until 30 September 2020	from 1 October 2020
Szentlőrinci Geotermia Zrt.	HUF 3,654/GJ	HUF 3,654/GJ
Miskolci Geotermia Zrt.	HUF 2,695/GJ	HUF 2,626/GJ
KUALA Kft.	HUF 2,695/GJ	HUF 2,626/GJ
Arrabona Koncessziós Kft.	HUF 3,204/GJ	HUF 3,204/GJ

Regulated district heating tariffs were reduced by 2.6% in the case of the Miskolc subsidiaries and remained unchanged in the case of other projects.

The Company fell slightly (by 2.7%) short of its planned, updated cumulative heat sales target for 2020 (see Figure 2 above) published as part of the proposals of the Annual General Meeting closing the business year of 2019. However, partly due to the positive impact of the capacity expansion and efficiency improving projects on 2020 figures, based on the processing of preliminary data, the Company has achieved its published, HUF 2,530 – 2,600 million annual **EBITDA target**; in fact, it has **outperformed** the upper limit of the target **by a few percentages**.

II. EBITDA projection for 2021

Management has defined a preliminary consolidated EBITDA target in the range of HUF 2,800 – 2,880 million under the IFRS for the business year of 2021. The planned quarterly heat sale volumes assigned to the target are presented in the table of Figure 2.

The abovementioned EBITDA target range for 2021 represents an increase of around 11% compared to the target range of the base period, primarily reflecting the effect of the previously described capacity expansion and efficiency improving projects throughout the year.

III. Main projects

Miskolc Geothermal Project

(Miskolci Geotermia Zrt., Kuala Kft.)

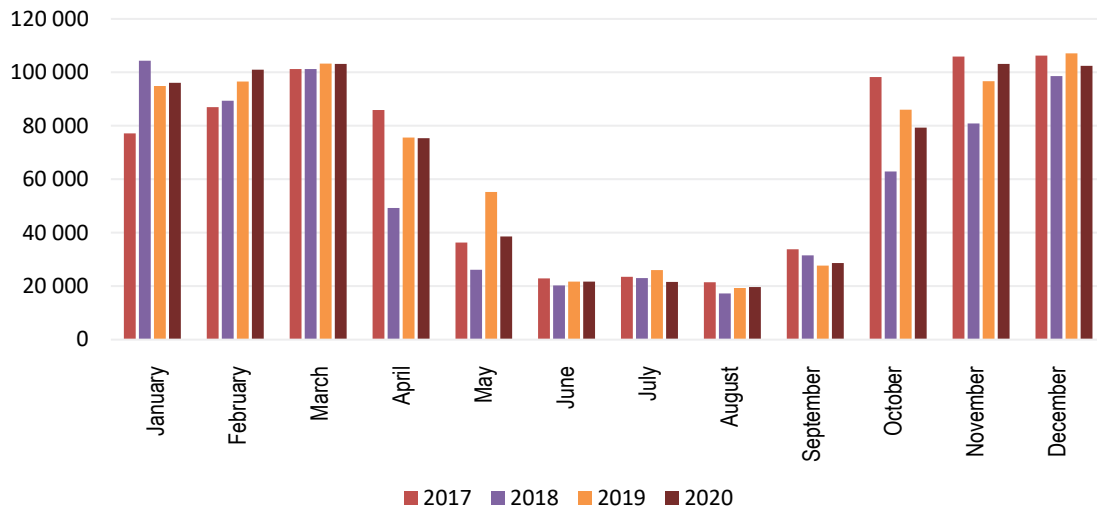


Figure 4
Volume of heat sold in Miskolc (GJ)

The Geothermal System of Miskolc sold a total of 284,890 GJ thermal energy in 2020 Q4, showing a 1.7% decline in comparison to heat sales data in 2019 Q4.

Győr Geothermal Projects

(DD Energy Kft., Arrabona Koncessziós Kft.)

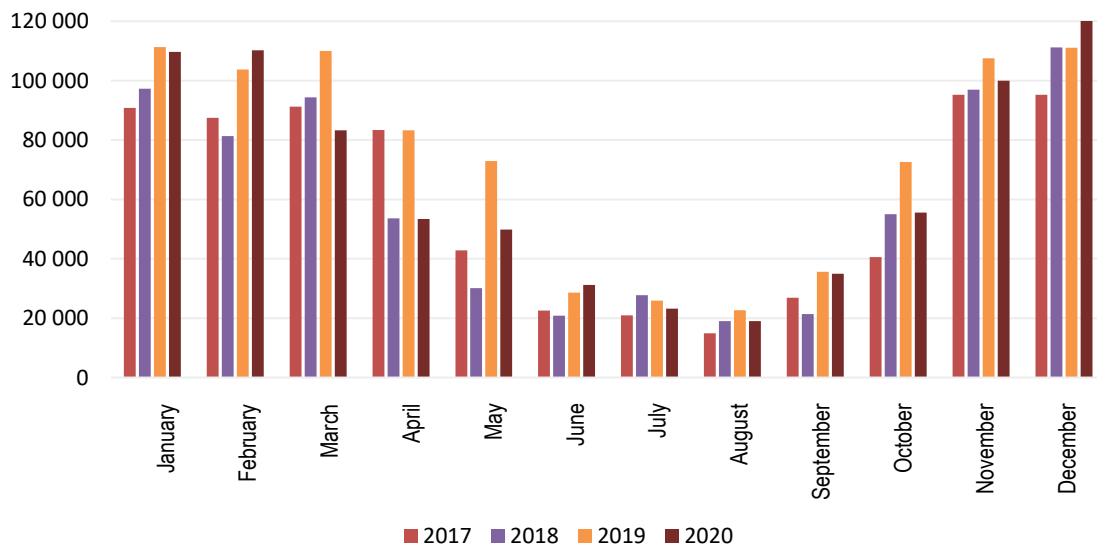


Figure 5
Volume of heat sold in Győr (GJ)

The Geothermal System of Győr sold a total of 275,528 GJ thermal energy during 2020 Q4, representing a 5.3% decline year-on-year. The shortfall can be primarily attributed to the protracted capacity expansion projects described above and to unscheduled repair works. The district heating service provider in Győr, Győr-Szol Zrt., commenced intermittent district heating

services on 1 October, but after a few days the service was temporarily discontinued due to improving weather conditions.

Geothermal Facility of Szentlőrinc

(Szentlőrinci Geotermia Zrt.)

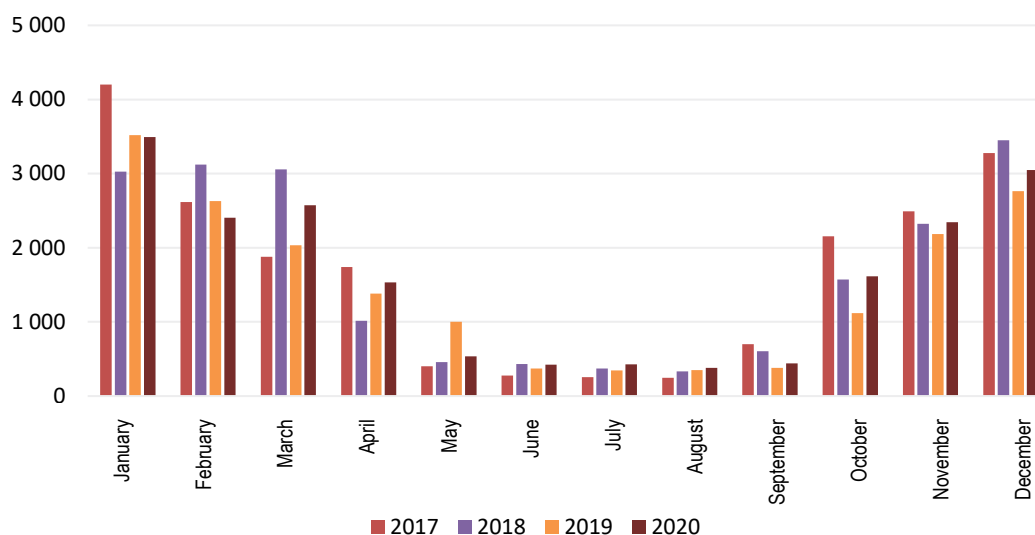


Figure 6
Volume of heat sold in Szentlőrinc (GJ)

In Szentlőrinc, the volume of heat sold was 7,011 GJ, 16% higher than in the base period. The Geothermal Facility of Szentlőrinc can fully meet the heat demand of the local district heating system on its own; thus the weather sensitivity of the geothermal heat input is significantly higher than that of district heating systems with complex heat resources.

IV. Miscellaneous

PannErgy for the prevention of climate change

In line with global efforts, Hungary intends to take resolute action against climate change. The key energy sector action plan for these efforts is the new National Energy Strategy (NES) published in January 2020, which replaced a similar strategy published in 2011. The NES presents the future of the Hungarian energy sector for the period until 2030 and, at the same time, it provides an outlook for the decade following that period. The NES takes into consideration the requirement of the European Union, namely, that the economies of EU Member States must become climate-neutral, overall, by 2050.

The NES is committed to decarbonisation, providing ample leeway for the further proliferation of green and other, emission-free energy production solutions. NES goals to be highlighted from the perspective of the geothermal energy production represented by PannErgy:

- reducing Hungary's gas consumption and thus, its reliance on energy imports;
- giving preference to district heating systems;
- reducing the share of natural gas sources to below 50% in district heating systems;
- increasing the utilisation of geothermal sources and urban waste in district heating systems, implementation of the Green District Heating Programme.

As a comprehensive, quantified target, by 2030 the share of renewable energy sources in gross final energy consumption should be raised to at least 21% (from 13.3% in 2017) (whereby greenhouse gas emissions will decline by around 40% compared to the level recorded in 1990).

The PannErgy Group's projects contributed to the efforts expended to preserve a more liveable environment and to combating climate change with the CO₂ emission cuts shown in Figure 7. The estimated reduction amounted to 15,835 tons in the review period, while the total aggregate volume of greenhouse gas emission saved by the PannErgy Group so far is estimated at 510,410 tons.

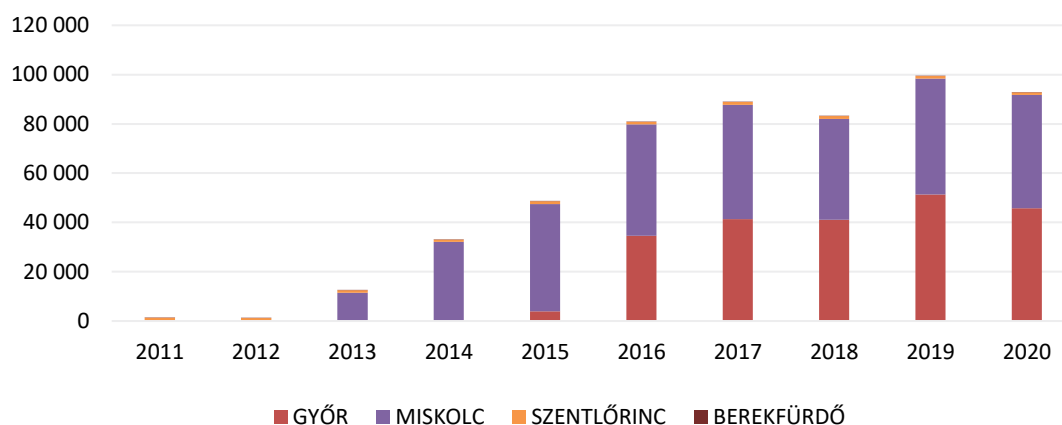


Figure 7

Volume of greenhouse CO₂ not released into the atmosphere thanks to the PannErgy Group's projects

Impact of climate change on PannErgy's heat markets

One of the tangible effects of climate change in Hungary manifests itself in the form of frequent volatile and extreme changes in weather conditions, including ambient temperatures, and a rise in the average temperature of winter months from the historically cold, steadily sub-zero range to markedly above the freezing point. These changes are not expected to have an adverse impact on the output of geothermal heat generation; in fact, the perspectives of input into district heating systems are favourable on average over a horizon of several years. The reason for this – as noted in this report – is the fact that daily geothermal heat sales are ideal in the 2–8°C temperature range during the heating season. At the same time, the potential decrease in the demand for heat during the transitional seasons may be offset or even surpassed by the growth in the potential of the increasingly mild winter periods.

The demand for energy in the large district heating systems supplied by the PannErgy Group is far greater than the amount of geothermal energy that can be fed into those systems. Accordingly, any change in the demand for heat in those heating systems stemming from the climate change has no perceivable effect on PannErgy Group, and the Company does not expect any trend-like negative effects in the future either.

The primary goal of PannErgy is to utilise its substantial uncommitted available thermal capacities – in addition to the capacities being utilised now –, which is expected to further reduce sensitivity to ambient temperature changes. The most important possible areas for utilising free thermal capacities include:

- implementation of energy efficiency and optimisation projects with existing customers;
- cold energy projects for the utilisation of the so-called ‘summer’ heat;
- connection of new customers indirectly through district heating systems or directly to the geothermal systems on the primary or the secondary (return) sides;
- technical, energy and R&D projects aimed at the improvement of heat production efficiency.

PannErgy Nyrt.

This announcement is published in Hungarian and English languages. In case of any contradiction between these two versions, the Hungarian version shall prevail.