



PannErgy Plc.

QUARTERLY PRODUCTION REPORT  
for 2022 Q4

and

fulfilment of the EBITDA plan for 2022, and  
the EBITDA plan for 2023

**13 January 2023**

## Introduction

PannErgy Plc. publishes a production report on a quarterly basis, presenting green energy production and utilisation. In the report, PannErgy presents the green heat sales figures of its key geothermal energy production systems in the reporting period, and additional useful information. Each year, the production report for the fourth quarter is supplemented with a preliminary, quarterly heat sales plan for the following year (Figure 2) and the preliminary annual EBITDA plan (Chapter II), the values of which are either confirmed or adjusted, as appropriate, at the Company's annual General Meeting.

### I. Consolidated production information

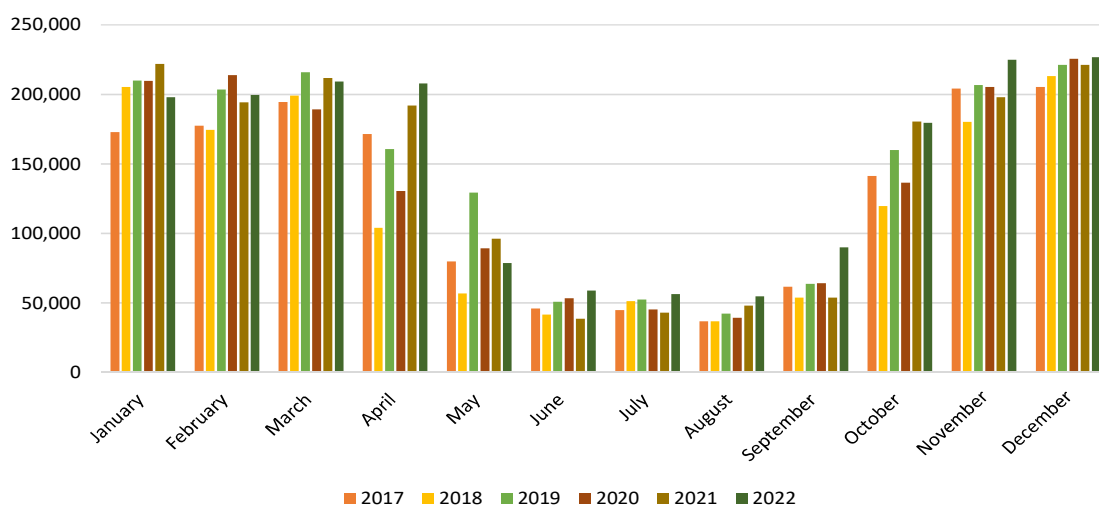


Figure 1

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	2021	2022	2022 PLAN	2023 PLAN
January	172 758	205 199	209 999	209 678	221 966	197 923		
February	177 533	174 300	203 484	213 855	194 173	199 600		
March	194 634	199 090	215 693	189 195	211 762	209 267		
<b>Q1</b>	<b>544 925</b>	<b>578 589</b>	<b>629 176</b>	<b>612 728</b>	<b>627 901</b>	<b>606 790</b>	<b>646 020</b>	<b>627 259</b>
April	171 294	104 033	160 548	130 407	192 053	207 861		
May	79 700	56 758	129 300	89 190	96 333	78 637		
June	45 936	41 641	50 780	53 394	38 595	58 955		
<b>Q2</b>	<b>296 930</b>	<b>202 432</b>	<b>340 628</b>	<b>272 991</b>	<b>326 981</b>	<b>345 453</b>	<b>315 549</b>	<b>322 084</b>
July	44 865	51 247	52 406	45 297	42 919	56 299		
August	36 709	36 794	42 415	39 205	48 023	54 838		
September	61 502	53 650	63 731	64 096	53 870	90 033		
<b>Q3</b>	<b>143 076</b>	<b>141 691</b>	<b>158 552</b>	<b>148 598</b>	<b>144 812</b>	<b>201 170</b>	<b>163 654</b>	<b>193 174</b>
October	141 270	119 652	159 888	136 460	180 427	179 453		
November	204 045	180 263	206 686	205 417	197 872	224 871		
December	205 251	213 267	221 248	225 688	221 198	226 770		
<b>Q4</b>	<b>550 566</b>	<b>513 182</b>	<b>587 822</b>	<b>567 565</b>	<b>599 497</b>	<b>631 094</b>	<b>626 790</b>	<b>647 180</b>
<b>Total</b>	<b>1 535 497</b>	<b>1 435 894</b>	<b>1 716 178</b>	<b>1 601 882</b>	<b>1 699 190</b>	<b>1 784 507</b>	<b>1 752 012</b>	<b>1 789 697</b>

Figure 2

Table of consolidated volume of heat sold (GJ) and relevant target data

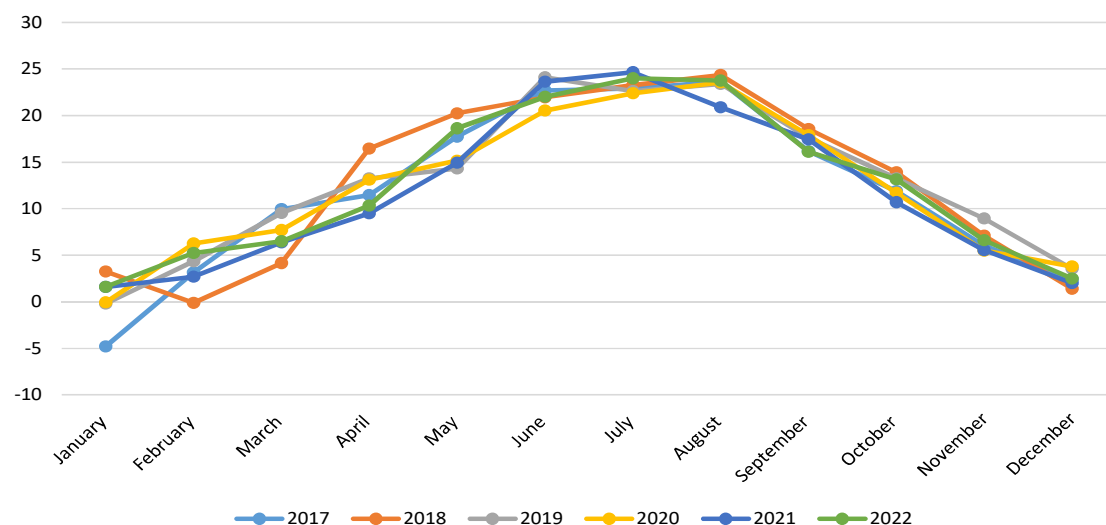


Figure 3  
Average temperatures in 2017–2022

The weather in the period under review represented a Group-level heating potential comparable to the corresponding period in 2022 and to the average of recent years.

A comparison of the 2022 Q4 heat sales figures with the average values of the same period in historical years indicates that PannErgy accomplished record heat sales in the period under review, exceeding the base period value by 5.3%. PannErgy also exceeded the quarterly target by approximately 0.7%. This outstanding performance was primarily due to appropriate weather conditions and the Group's ongoing investments into increasing efficiency, operational safety and capacity expansion.

**In consideration of the information presented in this production report, PannErgy projects the overperformance of the consolidated HUF 3,250–3,350 million EBITDA target range published previously (30 March 2022) for the 2022 business year. Management expects consolidated EBITDA for 2022 to be in the range of HUF 3,600-3,650 million. The improvement in EBITDA is primarily attributable to reliable operation in 2022 Q4, strong sales data, efficient operations and regulated pricing that reflects the Company's cost increases.**

## **II. Fulfilment of the EBITDA plan for 2022 and EBITDA projection for 2023**

**The Company's management is defining a consolidated EBITDA target in the range of HUF 3,950–4,150 million under the IFRS for the business year of 2023.** The planned quarterly heat sale volumes assigned to the target are presented in the table of Figure 2.

The above 2023 EBITDA target range represents an **increase of approximately 12%** compared to the expected range of the base period, which includes, inter alia, the impact of the implemented and ongoing capacity expansion and efficiency investments, including the successful boring of the third production well of the Miskolc Project in 2023 and its expected commissioning by the end of the year, as well as the recognition of the significant increases in material and personnel

costs in the regulated pricing within the year, which have been recognised at all district heating providers and district heating producers as of 2022 Q4.

### III. Main projects

#### Miskolc Geothermal Project

(Miskolci Geotermia Kft., Kuala Kft.)

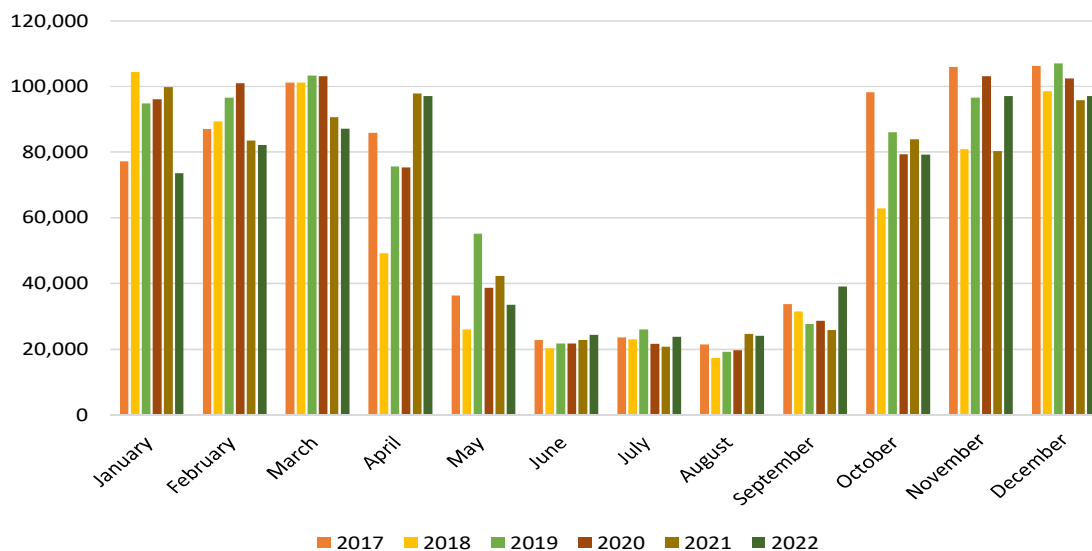


Figure 4  
Volume of heat sold in Miskolc (GJ)

The Geothermal System of Miskolc sold a total of 273,325 GJ of thermal energy in 2022 Q4, which is in line the average of the corresponding period of previous years, and is 5.1% higher than the heat sales achieved in the same period of 2021, mainly due to the impact of prolonged service failure during the base period.

#### Győr Geothermal Projects

(DD Energy Kft., Arrabona Koncessziós Kft.)

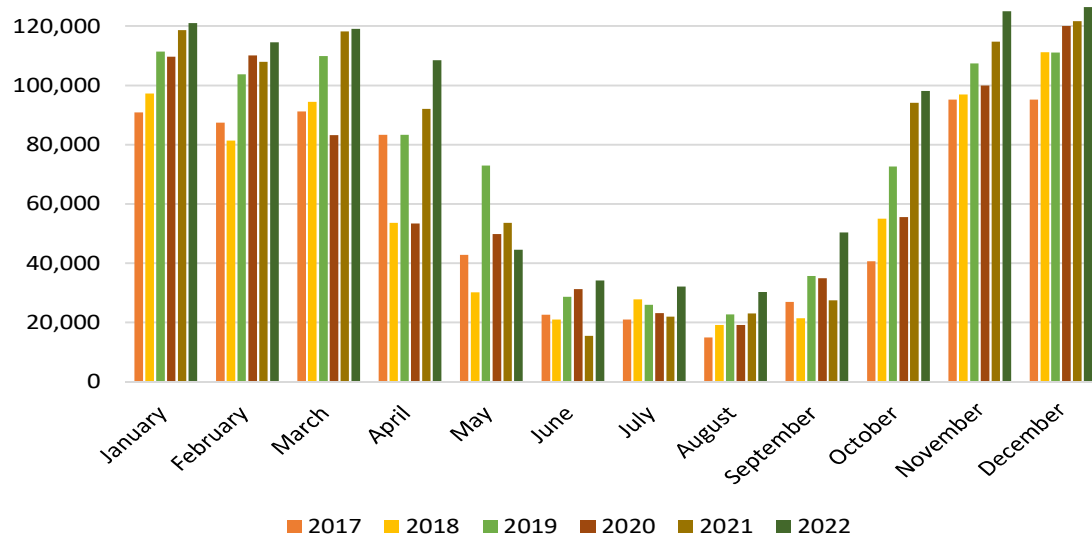


Figure 5  
Volume of heat sold in Győr (GJ)

The Geothermal System of Győr sold a historic seasonal record volume of 349,530 GJ of thermal energy in 2022 Q4, representing a rise of 5.8% year-on-year. The primary reasons for the increase were the investment activity in recent periods, appropriate weather conditions, as well as the Company's previously disclosed commercial agreement with GYŐR-SZOL Zrt. that ensures priority to geothermal energy.

**Total annual heat sold in Győr in 2022 exceeded 1 million GJ (1,004,165 GJ) for the first time in PannErgy's history.**

#### Geothermal Heating Facility of Szentlőrinc

(Szentlőrinci Geotermia Kft.)

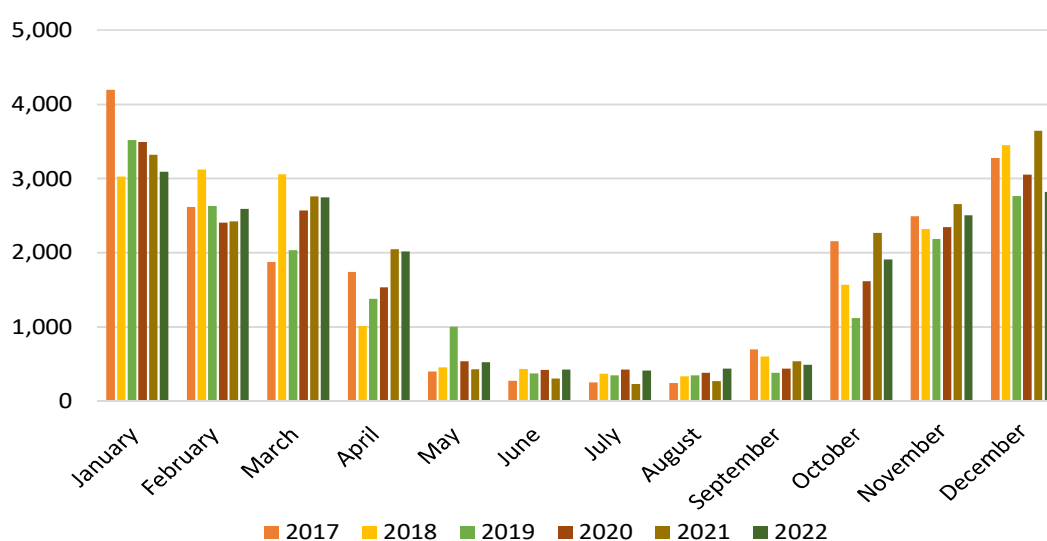


Figure 6

Volume of heat sold in Szentlőrinc (GJ)

In Szentlőrinc, the volume of heat sold in the period under review was 15.6% lower than in the baseline period (7,235 GJ). 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 geothermal heat input and the sensitivity of end-user heat consumption to changes in the current energy crisis are significantly higher than that of district heating systems with complex heat resources. The decrease in the quarter under review is also due to these reasons.

The Company informs the public that from 2023 onwards, only projects with a sales performance of more than 5% of consolidated sales revenue will be detailed in this chapter. Accordingly, the Szentlőrinc Project is excluded from the group of major projects presented.

#### IV. Miscellaneous

##### Change in PannErgy's regulated district heating producer tariffs

In Decree No. 20/2022. (IX. 30.) TIM of the Minister for Technology and Industry, published in Volume 159 of 2022 of the Hungarian Official Journal (Magyar Közlöny), the Minister announced the regulated district heat production tariffs (heat supply tariffs) effective as from

1 October 2022 also applicable to subsidiaries subject to PannErgy's district heating price regulation, then in Decree No. 8/2022. (XII. 28.) EM of the Minister for Energy (the "Decree"), published in Volume 219 of 2022 of the Hungarian Official Journal (Magyar Közlöny), the Minister announced the regulated district heat production tariffs (heat supply tariffs) effective as from 1 January 2023 also applicable to subsidiaries subject to PannErgy's district heating price regulation, which tariffs PannErgy has presented in the form of extraordinary information at its official places of disclosure.

The Company drew the public's attention to the fact that, in addition to the date of the start of validity, no date for the end of validity has been specified in the Decree in respect of the above heat supply tariffs valid as of 1 January 2023. Therefore, in respect of the validity of the regulated heat tariffs announced, for district heating fees to separately managed institutions and other users, the Company takes as a reference period the three quarterly periods published by the Ministry for Energy, i.e. the period of validity until 30 September 2023.

The Company also informed the public that the material increase in regulated heat tariffs is mainly due to the official recognition of the more than 4.5-fold increase in the price of electricity required for geothermal heat generation and, therefore, these have a limited impact on the improvement of the Company's profitability.

#### Impact of climate change and the European energy crisis 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, taking the average over a horizon of several years, the perspectives of input into district heating systems seem favourable. The reason is that the daily geothermal heat sales can be maximised even when outside temperatures are above freezing point during the heating season. At the same time, the potential decrease in 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 changes in demand for heat in those heating systems stemming from climate change have 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 currently utilised, which is expected to further reduce sensitivity to ambient temperature changes.

Radically increased hydrocarbon prices, supply uncertainties as well as significant carbon dioxide emission quota costs have further increased the competitiveness of geothermal energy, making its relevance undisputable.

The most important areas for potentially 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; and
- technical, energy and R&D projects aimed at the improvement of heat production efficiency.

In addition to combating climate change, PannErgy also makes a significant contribution to reducing Hungary's and Europe's fossil fuel dependency, which is even more exacerbated by the ongoing armed conflicts.

**PannErgy Plc.**

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