PannErgy Plc. and its subsidiaries Consolidated Financial Statements and Annual Report in conformity with the IFRS

2021

including Independent Auditor's Report

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

The attached pdf report is not the official report of the Company. The official version is prepared and published by the Company in XHTML-XBRL format in accordance with the legal requirements. The content of the attached pdf report is fully identical to the content of the report published in XHTML-XBRL format.

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Independent Auditor's Report

(Free translation)

To the Shareholders of PannErgy Nyrt.

Opinion

We have audited the consolidated financial statements in HU-2021-12-31.xhtml digital file of PannErgy Nyrt. and its subsidiaries (the „Group") for the year 2021 which comprise the consolidated statement of financial position as at December 31, 2021 – which shows a total assets of mHUF 26,883 –, and the related consolidated statement of recognized income, consolidated statement of other comprehensive income – which shows a net profit for the year of mHUF 897 –, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended and notes to the consolidated financial statements including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 2021 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union (the „EU IFRS"), and the consolidated financial statements were prepared in all material respects in accordance with the provisions of the effective Hungarian Act C of 2000 on Accounting (hereinafter: "the Accounting Act") relevant to the entities preparing consolidated financial statements in accordance with EU IFRS.

Basis for Opinion

We conducted our audit in accordance with the Hungarian National Standards on Auditing and the effective Hungarian laws and other regulations on audits. Our responsibilities under these standards are further described in the "The Auditor's Responsibilities for the Audit of the Consolidated Financial Statements" section of our report.

We are independent of the Group in compliance with the relevant effective Hungarian regulations and the "Rules of conduct (ethical rules) of the auditor profession and the disciplinary process" of the Chamber of Hungarian Auditors and, in respect of matters not regulated therein, the Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (the IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the same ethical requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit matters	Related audit procedures
Recognition of subsidies development purposes	
(Details in notes 4.27., 11., 29.4., 29.5 and 30.1 of the notes to the consolidated financial statements) Group recognised mHUF 283 as other income in 2021 and mHUF 3,989 reported as deferred income as at 31 December 2021. Management exercise significant judgement whether subsidies should be should be recognized as other income or deferred for the following years. Management has also assessed whether all conditions are met for compliance for conditions of subsidies and whether the deferred income covered the liabilities in case of non-compliance. Due to significant estimation by management we consider that recognised other income and deferred income relating to subsidies received for development purposes as a key audit matter.	Our audit procedures included: - we interviewed the management, - we tested the design and operational effectiveness of Group's internal controls relating to other income, - we reconciled the recognition of other income from subsidies received for development purposes to subledger of tangible fixed assets financed by subsidies, - we performed recalculation of other income based on depreciation of tangible fixed assets financed by subisidies, - we tested the post-balance sheet events.
Revenue recognition	
(Details in notes 4.23 and 6 of the notes to the consolidated financial statements) In 2021 the consolidated revenue of the Group is mHUF 6,439 and the revenue is a key performance indicator of the Group which may influence management to make sales contracts with non-ordinary, exceptional conditions. Due to the above we consider this area as a key audit matter.	Our audit procedures included: - we considered the appropriateness of Group's revenue recognition accounting policies, - we interviewed management, - we tested the design and operational effectiveness of Group's internal controls over sales cycle of the Group, - we gathered third party confirmations about revenue and receivables, - we tested the post-balance sheet events.

Other Matters

The Company's management is responsible for the presentation of the annual financial reports in accordance with the requirements of Article 3 and 4 of Commission Regulation (EU) 2019/815 of 17 December 2018 (the "ESEF Regulation"). The scope of our audit was limited to the human-readable content of the digital file containing the consolidated financial statements, which is electronically identified in our report, and does not include an examination and, accordingly, we do not express an opinion on whether the digitised information complies in all material respects with the requirements of the ESEF Regulation.

Other Information

Other information comprises the information included in the consolidated business report of the Group for 2021, which we obtained prior to the date of this auditor's report, and the consolidated annual report, which is expected to be made available to us after that date, but does not include the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information and for the preparation of the consolidated business report in accordance with the relevant provisions of the Accounting Act and other regulations. Our opinion on the consolidated financial statements provided in the section of our independent auditors' report entitled "Opinion" does not apply to the other information.

Our responsibility in connection with our audit of the consolidated financial statements is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Furthermore, in accordance with the Accounting Act, our responsibilities regarding the consolidated business report also include reviewing the consolidated business report to assess whether the consolidated business report was prepared in accordance with the relevant provisions of the Accounting Act and other regulations, if any, including the assessment whether the consolidated business report complies with the requirements of Section 95/B (2) e) and f) of the Accounting Act. Furthermore, in accordance with the Accounting Act we shall make a statement whether the information referred to in Section 95/B. (2) a)-d), g) and h) has been provided in the consolidated business report.

In our opinion, the consolidated business report of the Group for 2021 corresponds to the consolidated financial statements of the Group for 2021 and the relevant provisions of the Accounting Act in all material respects. The information referred to in Section 95/B. (2) a)-d), g) and h) of the Accounting Act has been provided.

As the Group is not subject to additional requirements under any other regulation in connection with the consolidated business report, we have not formulated an opinion on this matter.

In addition to the above, based on the information obtained about the Group and its environment, we must report on whether we became aware of any material misstatements in the other information and, if so, on the nature of such material misstatements. We have nothing to report in this regard.

When we read the consolidated annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the International Financial Reporting Standards as adopted by the European Union, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

The auditor's responsibilities for the audit of the consolidated financial statements

Our objectives during the audit are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue, on the basis of the above, an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Hungarian National Standards on Auditing and the effective Hungarian laws and other regulations on audits will always detect a material misstatement when it exists. Misstatements can arise from fraud or error, and they are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the Hungarian National Standards on Auditing and the effective Hungarian laws and other regulations on audits, we exercise professional judgment and maintain professional scepticism throughout the audit.

We also:

- ✓ Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ✓ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- ✓ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- ✓ Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify the opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- ✓ Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- ✓ Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in the Group's internal control that we identify during the audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

In compliance with Article 10 (2) of Regulation (EU) No. 537/2014 of the European Parliament and the Council, we provide the following information in our independent auditor's report, which is required in addition to the requirements of International Standards on Auditing:

Appointment of the Auditor and the Period of Engagement

We were appointed as the auditors of PannErgy Nyrt by the General Meeting of Shareholders on 16 April 2021 and our uninterrupted engagement has lasted since 28 April 2017.

Consistence with the Additional Report to the Audit Committee

We confirm that our audit opinion on the consolidated financial statements expressed herein is consistent with the additional report to the Audit Committee of the PannErgy Nyrt., which we issued on 17 March 2022 in accordance with Article 11 of Regulation (EU) No. 537/2014 of the European Parliament and the Council.

Provision of Non-audit Services

We declare that no prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No. 537/2014 of the European Parliament and the Council were provided by us to the Group. In addition, there are no other non-audit services which were provided by us to the PannErgy Nyrt. and and its controlled undertakings and which have not been disclosed in the consolidated financial statements/ in the consolidated business report.

The engagement partner on the audit resulting in this independent auditor's report is the signatory of the report.

Budapest, 22 March 2022

Free translation Hungarian version is signed
Venilia Vellum Könyvvizsgáló és Adótanácsadó Kft.
Company registration no: 01-09-566797
Auditor registration no: 000340
IFRS qualification: IFRS000115
Issuer qualification: K000045
Address: 1026 Budapest, Szilágyi Erzsébet fasor 79.
Name of Authorized representative: Bukri Rózsa
on behalf of Venilia Vellum Ltd. and as a statutory registered auditor
Registration number of statutory registered auditor: 001130
IFRS qualification: IFRS000042
Issuer qualification: K000002

This is a translation of Hungarian original – in case of any differences the Hungarian original is prevails.

PannErgy Plc. and its subsidiaries

Consolidated financial statements prepared in conformity with the IFRS

31 December 2021

Budapest, 22 March 2022

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note no.	31 December 2021	31 December 2020
		HUF Mn	HUF Mn
Goodwill	15	678	678
Other intangible assets	15	1,779	1,790
Tangible assets	16	18,992	19,054
Investment properties	16	113	159
Marketable properties	16	-	-
Other invested financial assets	17	103	575
Financial assets (concession assets)	18	1,085	1,136
Receivables from deferred taxes	33	183	240
Long-term receivables	19	-	2
Total fixed assets		**22,933**	**23,634**
Inventories	21	7	29
Trade receivables	22	1,414	1,717
Other receivables	23	704	417
Prepaid income taxes	33	23	10
Securities	24	526	260
Liquid assets	35	1,276	666
Total current assets		**3,950**	**3,099**
TOTAL ASSETS		**26,883**	**26,733**
Subscribed capital	25	421	421
Reserves without comprehensive income for the year	27	13,507	12,274
Comprehensive income for the year (attributable to the shareholders of the Company)	34	897	236
Reserve for repurchased treasury shares	26	-4,845	-3,184
Minority shareholdings	28	-	-
Total equity		**9,980**	**9,747**
Long-term loans, leases	29	10,000	10,453
Other long-term deferred incomes	29, 4	3,704	3,987
Provisions	31	-	-
Total long-term liabilities		**13,704**	**14,440**
Trade payables	36	704	815
Short-term credits	30	363	107
Short-term part of long-term credits	30	1,233	1,133
Short-term part of other long-term deferred revenues	30, 1	285	240
Other short-term liabilities	32	614	251
Total short-term liabilities		**3,199**	**2,546**
TOTAL LIABILITIES AND EQUITY		**26,883**	**26,733**

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

	Note no.	2021	2020
		HUF Mn	**HUF Mn**
Revenue from sales	6	6,439	5,923
Direct cost of sales	8	-4,859	-4,479
Gross margin		**1,580**	**1,444**
Gross profit ratio %		**25%**	**24%**
Gross cash flow		**3,174**	**3,059**
Gross cash flow rate %		**49%**	**52%**
Indirect costs of sales	7	-512	-501
Other revenues	11	434	379
Other expenditures	10	-219	-247
Operating profit		**1,283**	**1,075**
Operating profit rate %		**20%**	**18%**
EBITDA		**2,878**	**2,735**
EBITDA rate %		**45%**	**46%**
Financial profit	12-13	-319	-813
Profit before taxes		**964**	**262**
Income tax	33	-67	-25
Net profit for the year		**897**	**237**
of which:			
Profit/loss, attributable to Shareholders of the Company		**897**	**236**
of which: Share of non-controlling interests in the year's net profit	28	**-**	**1**
Earnings per ordinary share (HUF)			
Basic	34	54,71	14.01
Diluted	34	54,71	14.01

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME

	2021	2020
	HUF Mn	HUF Mn
Net profit for the year	**897**	**237**
Other comprehensive income		
Exchange difference from the HUF conversion of the reports of foreign subsidiaries	-	-
Exchange difference from the HUF conversion of affiliated companies and companies under common management	-	-
Marketable financial assets with deferred taxes	-	-
Cash flow hedging transactions with deferred taxes	-	-
Share from the comprehensive income of affiliated companies	-	-
Other comprehensive incomes in the period with tax implications	-	-
Total comprehensive income for the year / attributable to	**897**	**237**
of which: Shareholders of the Company	**897**	**236**
of which: Share of minority (external) shareholders in the total other comprehensive income	**-**	**1**

CONSOLIDATED STATEMENT OF CHANGES IN THE EQUITY

Description	Subscribed capital	Reserves	Treasury shares	Participation of external members	Equity
Balance as of 31 December 2019	**421**	**12,116**	**-2,355**	**32**	**10,214**
Profit for 2020	-	236	-	1	237
Changes in the participation of external members	-	-	-	-32	-32
Difference related to consolidation, company conversion	-	7	-	-	7
Share option program	-	-	-	-	-
Treasury shares	-	151	-829	-	-678
Decrease in treasury shares	-	-	-	-	-
Distribution of dividends	-	-	-	-	-
Balance as of 31 December 2020	**421**	**12,510**	**-3,184**	**-**	**9,747**
Profit for 2021	-	897	-	-	897
Changes in the participation of external members	-	-	-	-	-
Difference related to consolidation, company conversion	-	-16	-	-	-16
Share option program	-	-	-	-	-
Treasury shares	-	1,266	-1,661	-	-395
Decrease in treasury shares	-	-	-	-	-
Distribution of dividends	-	-253	-	-	-253
Balance as of 31 December 2021	**421**	**14,404**	**-4,845**	**-**	**9,980**

CONSOLIDATED STATEMENT OF CASH FLOWS

	Note no.	2021	2020
Liquid assets from operations		**HUF Mn**	**HUF Mn**
Profit before taxes		**964**	**262**
Adjustments in relation to the profit before taxes and the cash flow of business operations			
Amortization and depreciation of tangible and intangible assets	15-16.	1,595	1,616
Effect of deferred taxes	33	57	3
Income tax expenditures	33	-67	-25
Exchange gain/loss on credits	14	33	453
Impairment of tangible assets, goodwill	10, 16	-	43
Impairment losses and shortage of inventories	10, 21	-	-
Impairment losses of receivables	10, 39	1	-
Reclassification of provisions	31	-	-
Changes in the fair value of properties	11, 16	-	-
Interest payable/received	12-13	293	285
Profit on the sales of tangible assets	11	-	-
Changes in minority participations	28	-	-32
Changes in working capital elements			
Increase/decrease of inventories	21	21	-2
Income taxes paid	23	-	-
Increase/decrease of receivables	22, 23	15	-712
Increase/decrease of payables	32, 36	252	-358
Increase/decrease of prepaid income taxes	23	-12	-11
Interests received	12	2	1
Interests paid	13	-295	-285
Net liquid assets originating/used from operations		**2,859**	**1,238**
Liquid assets from investments			
Acquisition of investments in private companies	16	-	-
Increase/decrease of existing investments	16	-	-160
Acquisition of tangible and intangible assets	15-16	-1,273	-1,462
Increase in financial assets (concession assets)	18	-	-
Sales of tangible and intangible assets	15-16	34	4
Other long- and short-term deferred incomes	29.4	-238	-24
Changes in long-term receivables	19	2	3
Liquid assets from investment operations		**-1,475**	**-1,639**

	Note no.	2021	2020
Financial operations			
Increase/decrease of long-term loans	14, 29	-559	2,122
Increase/decrease of short-term loans	30	233	-967
Difference from consolidation and changes in other reserves	27	-6	7
Purchase of treasury shares	26	-394	-679
Distribution of dividends	27	-253	-
Increase/decrease in securities	24	205	-761
Liquid assets used for financial operations		**-774**	**-278**
Net increase/decrease of cash and cash equivalents		**610**	**-679**
Cash and cash equivalents as of 1 January		**666**	**1,345**
Cash and cash equivalents as of 31 December		**1,276**	**666**

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1. GENERAL BACKGROUND AND DESCRIPTION OF ACTIVITIES

PannErgy Plc. (hereinafter: "PannErgy Plc.", "PannErgy" or the "Company"), as the legal successor of Pannonplast Plc., has a history of almost one hundred years. On 31 May 1991, the Company was transformed into a public company limited by shares, in line with Act XII of 1989 on the transformation of economic organizations. In 2007, PannErgy set the goal to generate substantial volumes of thermal or even electric power by exploiting the long-known geothermal resources of Hungary, thereby creating value for the population and institutions of the country as well as for PannErgy's shareholders. In line with this shift in its strategy, since 2007 its core activities have been redirected from plastic manufacturing to the utilization of renewable, and in particular geothermal energy resources. As of 31 December 2021, PannErgy Plc.'s subsidiaries operated projects for the utilization of geothermal resources in Miskolc, Győr, Szentlőrinc and Berekfürdő.

The subsidiaries are listed in Note 42.

The registered address of the Company is: Hungary, H–1117 Budapest, Budafoki út 56.

2. BASIS OF THE COMPILATION OF THE FINANCIAL STATEMENTS

The consolidated financial statements of the PannErgy Group, comprising PannErgy Plc. and its consolidated subsidiaries (hereinafter referred to as the "PannErgy Group" or "the Group") were prepared in conformity with the International Financial Reporting Standards endorsed by the European Union (hereinafter: "IFRS" or "EU IFRS"). The consolidated financial statements have been prepared in compliance with the requirements of *Act C of 2000 on Accounting*, pertaining to the consolidated financial statements prepared in conformity with the EU IFRS.

The consolidated financial statements were compiled on a cost basis except for financial instruments, certain financial assets, liabilities and marketable assets, which are presented in the statement of financial position at fair value. PannErgy Plc. rounded up the figures in the consolidated financial statements to million Hungarian forints; with exceptions specifically indicated in the statements.

The accounting and other records of the members of the PannErgy Group are maintained in line with the effective Hungarian laws and accounting regulations. The members of the PannErgy Group modify the annual reports compiled on the basis of the Hungarian reporting requirements (*Act C of 2000 on Accounting*) in order to comply with the IFRS.

Since 1 January 2017 PannErgy Plc. as a company listed in a regulated market of the European Economic Area has had the statutory obligation to apply the EU IFRS for the purposes of its individual reporting. Pursuant to this regulation, PannErgy Plc. as a parent company compiled both its IFRS consolidated financial statements and its individual financial statements in accordance with the requirements of the EU IFRS as of 31 December 2021.
The consolidated financial statements of the PannErgy Group present the Group's consolidated financial position and the results of its operations and cash flows as well as changes in equity.

The European Securities and Markets Authority (ESMA) issued rules for the European Single Electronic Format (ESEF) effective as of the financial year starting on 1 January 2020. Pursuant to the new regulation, financial reporting for EU-regulated listed companies, including PannErgy Plc., has changed considerably. The new consolidated annual reports need to be produced in the XHTML format, which facilitates the use of inline XBRL (iXBRL), where data consolidated in conformity with the IFRS must be recorded. The relevant Hungarian legislation also changed as of 27 February 2021; in its resolution No 1078/2021.(II.27), the Hungarian Government decided on the conditional postponement of the publication of annul financial reports regarding securities listed on regulated markets in the single electronic format; accordingly, Hungary also has made use of the option that issuers employ the provisions regarding the preparation of the annual financial report in the single electronic format (ESEF) for financial years starting on 1 January 2021. Nonetheless, PannErgy Plc. submitted its 2020 consolidated financial statements in the XHTML format containing iXBRL's as well to the regulatory authorities. Likewise, the 2021 consolidated financial statements are also being prepared in XHTML format including iXBRLs and will be transmitted to the regulatory authority with the prescribed content in the prescribed format.

3. THE IMPACT OF THE PANDEMICS (COVID-19) ON THE COMPANY'S REPORT

PannErgy Plc. proceeds in the reporting period – as in the previous period – in accordance with the recommendations of the European Securities and Markets Authority (ESMA) regarding the presentation of the impacts of the COVID-19 pandemic on the Company and its financial statements. Accordingly, the Company places emphasis on business continuity planning and has emergency plans for all critical areas of operation. The Company is prepared for using their emergency plans as and when necessary. This should include taking and implementing business continuity measures to ensure to ensure operational continuity in line with regulatory obligations.

In accordance with the disclosure recommendations of ESMA, the Company, as a securities' issuer discloses, as promptly as possible, in accordance with its transparency obligations under the market abuse regulations, all relevant data and information on the effects and impacts of the pandemic on the Company' assets, income and financial position, operational activities, perspectives and plans.

The Company provides market participants with information on their best estimates of the actual and possible impacts of the COVID-19 pandemic according to qualitative and quantitative assessments of their own business activities, financial position and performance.

In conformity with the ESMA recommendation PannErgy Plc. publishes the following information in its consolidated year financial report on 2021:

The COVID-19 pandemic has no material impact on the figures presented in the Company's consolidated year financial report on 2021. This is also confirmed by the fact that despite the uncertainties and economic and other difficulties experienced in the entire reporting period in connection with the pandemic the Company managed to tackle the challenges. On the one hand, the Company supplied to its heat-receiving partners at a high level of operational safety; and on the other hand, it managed to keep up and even increase its EBITDA, its key operational metric, over and above the budgeted level relative to the preceding year.

In order to maintain business continuity, the Company has activated a number of emergency measures since the appearance of the COVID-19 virus in Hungary as warranted by the latest available information In addition to continuously monitoring developments relating to the pandemic the Company prepares and updates action plans in accordance with, and in response to, the pandemic. This was one of the reasons why the negative effects of the pandemics could be averted both during and outside the heating season.

The sales revenue generating capability of the Company's core operation, that is, the generation and sale of geothermal heat, is exposed to the negative impacts of the COVID-19 pandemic as detailed below:

The Company sells its output to a small number of customers. Its direct partners are district heating service providers and manufacturing companies. In the reporting period there were no incidents at the heat-receiving partners that would have resulted in a material decrease in the year 2021 sales revenue as a consequence of the COVID-19 pandemic.

Besides the above Group-level impacts it should also be noted that the COVID-19 pandemic had no material impacts on the data shown in PannErgy Nyrt's 2021 unconsolidated financial statements either.

4. SUMMARY OF THE KEY ELEMENTS OF THE ACCOUNTING POLICIES

4.1. *General description*

The key accounting policies used in the course of the compilation of the consolidated financial statements are described below. The PannErgy Group applied the accounting principles described and detailed herein consistently for all the business years presented; any modifications in and deviations from the practices of previous business years are specifically indicated.

4.2. *Basis of consolidation*

The consolidated financial statements cover all the assets, liabilities, incomes and expenditures of all the subsidiaries that are in the majority ownership of the PannErgy Group. Intercompany transactions and balances have been eliminated in the course of consolidation.
The minority (external) participations in the net assets of the consolidated subsidiaries (with the exception of goodwill) are presented separately within the equity of the PannErgy Group's. Minority participations include the value of these participations at the time of acquisition or on the date of the original business combination, as well as the changes in the rates of minority participations following acquisition. Losses in excess of the value of the minority participation in the subsidiary that can be allocated to the minority participation are charged to the participation of the Group unless the minority (external) shareholder is obliged and has the option to make additional investments to cover such losses.

4.3. *Effects of the amended rules of the IFRS standards to be implemented as of 1 January 2021 and of the introduction of new standards on the financial statements*

<u>New and amended standards and interpretations entering into force in the current reporting period as published by the IASB and endorsed by the EU:</u>

Amendments of IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 – interest rate benchmark reform – Phase 2; adopted by the EU as of 13 January 2021 (to be applied to reporting periods beginning on or after 1 January 2021),

Amendments of IFRS 4 "Insurance contracts" – **Extension of the Temporary Exemption from Applying IFRS 9** – endorsed by the EU on 15 December 2020 (to be applied for reporting periods beginning on or after 1 January 2021),

IFRS 16 "Leases" – Covid-19 related rent concessions of terms ending beyond 30 June 2021 (entering into force as of 1 April 2021, and in rent concessions starting thereafter).

The Group holds that the adoption of these standards and the amendment of existing ones will have no material effect on the financial statements of the Group.

<u>New and amended standards and interpretations issued by the IASB, endorsed by the EU but not yet effective:</u>

Amendments of IFRS 3 Business combinations; IAS 16 Property, plant and equipment; IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" – Annual improvements (to be applied for reporting periods beginning on or after 1 January 2022).

IFRS 17 "Insurance contracts", including the amendments of IFRS 17 (to be applied for reporting periods beginning on or after 1 January 2023).

<u>Standards and interpretations issued by the IASB, but not endorsed by the EU:</u>

Currently the IFRS endorsed by the EU are not substantively different from the regulations adopted by the International Accounting Standards Board (IASB), except for the following new standards, the amendments of existing standards and new interpretations, which had not been endorsed by the EU as of the date of publication of the financial statements.

Amendments of IAS 1 "Presentation of financial statements" – Classification of Liabilities as Current or Non-current (to be applied to reporting periods beginning on or after 1 January 2023);

Amendments of IAS 1 "Presentation of financial statements" and IFRS Practice Statement 2 – Disclosure of Accounting Policies (to be applied to reporting periods beginning on or after 1 January 2023);

IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" – Definition of Accounting Estimates (applicable to reporting periods beginning on or after 1 January 2023),

Amendments of IAS 12 "Income Taxes" – Deferred Tax related to Assets and Liabilities arising from a Single Transaction (to be applied for reporting periods beginning on or after 1 January 2023).

Amendments of IFRS 17 "Insurance Contracts" – Initial application of IFRS 17 and IFRS 9 – Comparative information (to be applied to reporting periods beginning on or after 1 January 2023);

Amendments to IFRS 10 "Consolidated Financial Statements and IAS 28 Investments in associates and joint ventures" – sale or transfer of assets between the investor and its associates and joint ventures (the effective date has been postponed for an indefinite time while the research project arrives at a conclusion regarding the equity method),

IFRS 14 "Regulatory Deferral Accounts" (to be applied for reporting periods beginning on or after 1 January 2016) – The European Commission adopted a decisions that it will not apply the endorsement process to the present interim standard and to wait for the final version of the standard instead.

The implementation of these amendments, new standards and interpretations would have no material impact on the Group's consolidated/unconsolidated financial statements.

4.4. *Functional currency*

The functional currency is the currency defined in IAS 21 "*The Effects of Changes in Foreign Exchange Rates*", i.e. the currency of the primary operational environment where the entity operates, and which may be different from the currency of presentation.
The functional currency of the Company is the Hungarian Forint, which is the currency of the primary operational environment. The Company does not engage in business operations in any other environment that would justify the use of a functional currency other than the Hungarian Forint. Accordingly, the effects of changes in exchange rates are not discussed in the consolidated financial statements.

4.5. *Conversion of foreign currencies, foreign exchange transactions and balances*

Foreign exchange transactions are converted into HUF at the exchange rate effective on the day of the transaction or – in the case of revaluation – valuation. The exchange gains and losses originating from the year-end revaluation of the financial assets and liabilities that arise from such transactions or recorded in foreign currencies are recognized in the statement of profit or loss. Exchange gains and losses are shown in the "Financial incomes" or "Financial expenditures" line of the statement of profit or loss.

The Company converts its FX revenues at the MNB exchange rate and uses such rate to measure them at the end of the period.

4.6. *Fair value measurement*

The Company uses fair value measurement in the case of "Held to collect" type financial assets. For the establishment of fair value, the following hierarchy is applied:

- level 1: price listed on a regulated market,
- level 2: calculated price based on input data available on essentially regulated markets,
- level 3: calculated price based on input data not available on major regulated markets

The Company's financial statements include only "level 1" type securities.

The Company recognizes changes in the fair value under other comprehensive income, i.e. among financial expenditures/incomes for financial assets and other expenditures/incomes for fixed assets held for sale.

4.7. *Intangible assets*

Based on the definition of assets within the conceptual framework principles of financial reporting and IAS 38 "Intangible assets", the Company recognizes as intangible assets those resources coming under the Company's control as a result of past events that are expected to generate economic profits for the Company in the future, and whose costs can be reliably measured and that originate from identifiable sources (based on contracts or other rights, or that can be separated), and are not monetary assets with respect to their physical appearance.

In the consolidated financial statements, intangible assets are recognized at cost by the PannErgy Group because, due to the special nature of these assets, the notion of an active market is not applicable.

These costs are reduced by accumulated amortization and, where applicable, impairment, stated in line with the useful life of the asset.

The intangible assets of the Company consist in software used for operations, valuable rights and know-how associated with geothermal activities.

Software comprises software developed by third parties; the Company is not involved in any software development activities.
Purchased software is capitalized at cost calculated based on the costs incurred in the course of acquisition and installation. These costs are written off over an estimated useful life of 3–5 years, as appropriate for the type of the software in question.

Trademarks, licenses and purchased and own-produced know-how have definite useful lives and are recognized at cost less accumulated depreciation. The cost of trademarks and licenses is amortized with the straight-line method over an estimated useful life of 15–25 years.

Certain intangible assets may be stated in the Company's books at zero value at the end of their useful lives and should be written off, yet they are continued to be used by the Company owing to changes in the fundamental assumptions regarding their useful life. To avoid such situations, the Company re-estimates useful life and depreciations annually, at the end of the reporting period. If the asset's useful life is modified after the re-estimation, the difference between the amortization charged until the end of the reporting period and the amortization appropriate for the recalculated useful life is charged to the profit or loss or the equity depending on whether the re-estimation affects depreciation in the reporting period or in the preceding period.

This re-estimation of useful life is not relevant to the purchasing of intangible assets with purchasing values under HUF 100 thousand as purchases below that ceiling are not considered to be material by the Company; therefore, purchases below that amount are not capitalized. The values of such purchases are recognized in the statement of profit or loss for the reporting year in the form of depreciation, and the Company maintains separate records of them, taking into consideration the consideration of asset management.

4.8. *Impairment of non-financial assets*

The Company does not charge any amortization to intangible assets with an indefinite useful life or not yet suitable for use, but reviews them annually to identify potential impairment.

Assets in respect of which the Company recognizes amortization are also subjected to review for impairment in each case when events or altered circumstances imply that the book value may not be fully recovered.

If the Company sees indication that the realizable value of tangible assets or intangible assets may fall below the book value, impairment losses is reconsidered. If the realizable value falls below the book value, impairment must be recognized against the profit or loss with respect to assets carried at cost. The realizable value is the higher of the value in use and market value of the asset. The market value is the amount that can be received for an asset in a transaction between unrelated parties, while the value in use is the net present value of the cash flows derived from the continuous use of the asset and its sale at the end of its useful life.

The assets used by the PannErgy Group in its geothermal projects, which have relevance only on the geothermal system as a whole but not on their own, have no active markets as defined in *IAS 36*, and therefore – in the absence of a market value – their realizable value is the net present value of the future cash flows originating from their continuous use and realized at the cash-generating unit.

As the realizable value cannot be determined individually for each asset, it is defined separately for each cash-generating unit. At the end of each reporting period the PannErgy Group examines whether the reasons for the recognized impairment still exist. Any previously recognized impairment can be reversed only if there was a change in the circumstances that were taken into consideration at the time of the last latest calculation of impairment. Impairment can be reversed to the level where the book value of the asset does not exceed its recoverable value or its book value less depreciation which would have occurred if no impairment had been charged.

4.9. *Recognition of Research and Development*

When looking at the recognition of self-produced intangible assets, the Company divides the process of production into research and development phases. In the course of a project for the production of any own intangible asset the Company is unable to distinguish the research phase from the development phase, the expenditures of the project are treated as if they were incurred solely in the research phase. Intangible assets originating from research (or the research phase of any internal project) cannot be recognized; therefore the Company recognizes the expenditures associated with the research as expenditures when they are incurred.

Intangible assets originating from development or from the development phase of an internal project are recognized by the Company among fixed assets provided that the Company can demonstrate the following:

- the technical feasibility of the production of the intangible asset so that it is suitable for use or sale;
- the intent of the unit to complete, use or sell the intangible asset;
- the ability of the unit to use or sell the intangible asset;
- the way the intangible asset will generate future benefits;
- among other things, the unit is required to prove the existence of the product originating from the intangible asset or the market for the intangible asset, or in case it is used internally, the usefulness of the intangible asset;
- availability of sufficient technical, financial and other resources for the completion of the development or the use or sale of the intangible asset;
- the ability of the unit to reliably measure the expenditures that can be attributed to the asset in the course of the development of the intangible asset.

4.10. *Property, plant and equipment*

In the category of properties, the consolidated financial statements of the PannErgy Group includes building-type tangible assets connected with geothermal heat generation and heat sale (thermal centres, buildings functioning as connection points to heat consumers) as well as geothermal heat transmission systems, production and re-injection thermal wells classified as civil engineering works. Furthermore, the Company also has industrial real estates recorded as investment assets and not related to its core activities.

In respect of the rating of tangible assets, the Company clearly distinguishes fixed assets intended/held for sale, investment properties, and other properties, machinery and equipment not falling into these special categories but covered by *IAS 16*.

4.10.1 Investment property

Based on *IAS 40 "Investment property"*, land, buildings (or parts thereof) and structures qualify as properties. The Company treats and carries all properties held for rental to others or speculating on a value increase, which are not held for use in the production or supply of goods or services or for administrative purposes, or for sale in the ordinary course of business, as investment properties.

The Company recognized as investment property its own properties geographically located at its plants in Csepel and Debrecen (land, buildings, structures) and had been acquired in the period when plastics manufacturing was its core activity before the strategic shift in the operating profile of the PannErgy Group because these properties, which are not related to its core operation – geothermy – by letting them to tenants and in view of the existing contractual background the future economic benefits relating to these investment properties are expected to be received by the Company and the cost of the investment properties can be reliably measured.

Each one of the investment properties owned by the Company is a purchased investment property, whose cost value comprises the purchase price together with expenses associated with and attributable to the purchase of the property.

The Company evaluates the investment properties on the basis of the IAS 16 cost model. Accordingly, depreciation based on the asset's useful life – and when there is evidence of impairment, it – is recognised in accordance with IAS 16. The fair value has to be stated anyway, regardless of the Company's decision to use the cost model.
Investment properties are stated in a separate line of the consolidated statement of financial position in an IFRS financial statement. Upon its sale, or final termination of its use, the investment property concerned is derecognised from the IFRS financial statement, in accordance with the fact that no future gains are expected from it. Upon derecognition the difference between the carrying value and the net sales revenue of the property is shown, based on netting, either as a revenue item in the sales revenue line or as an expenditure item in the cost of sales line of the profit and loss statement.

4.10.2 Non-current assets held for sale

The Company classifies any fixed assets as held for sale if its book value is expected to be recovered by way of sale rather than in the course of its continuous use. In line with the requirements of IFRS 5, the asset has to be in a condition based on which it can be declared that it is ready for being sold, and the probability of selling needs to be high. The Company deems the probability of selling to be high and therefore it considers the following as fundamental conditions for recognizing the asset as marketable:

- if the Company's supreme body or management has confirmed its commitment to the planned sale, as evidenced by the relevant documents, and based on this commitment it is confirmed that there exists a plan for the identification of a specific buyer;
- if, after its documented commitment, the Company carries out active marketing activities for selling at a realistic price that is in line with the value of the asset over the shortest period of time and under the most favourable terms possible;
- if it is unlikely that the there will be substantial changes to the selling plan and it is unlikely to be withdrawn;
- if based on the plans, the sale is expected to occur within one year of the date of classification. In certain cases the period of sale may be extended to a period exceeding one year. That is the case when events or circumstances beyond the control of the Company delay the conclusion of sale, and there is sufficient evidence that the entity continues to be committed to the plan to sell the asset.

If, based on the foregoing, the Company classifies an asset to be an asset held for sale, at the moment of such reclassification the depreciation of the asset is stopped, and revaluation is performed on the basis of the valuation at the time of the classification, at fair value less the cost of selling; this principle is also applicable to any subsequent valuations.

In its IFRS financial statements, the Company presents its fixed assets classified as held for sale separately from other assets. The Company separately presents the amounts of accumulated revenues or expenses charged against other comprehensive income which are related to reclassification or subsequent valuation.

4.10.3 Tangible assets under IAS 16 Property, plant and equipment

The Company treats all long-term assets that do not fall into the category of investment properties or fixed assets held for the purpose of selling in accordance with the requirements of IAS 16 "Property, plant and equipment". These are long-term tangible assets (used over more than one business period) which came under the Company's control as a result of past events and are expected to generate future economic benefits for the Company, the costs of which can be measured reliably and which are used by the Company for production or the supply of services or administration.

Property, plant and equipment are recognized at historical cost less depreciation. The cost of tangible assets depends on the mode of their production or acquisition. In the case of individual acquisitions, the cost of purchase is the cost itself; in the case of an acquisition through a business combination, it is the fair value, while in the case of self-manufactured assets, it is the expense that arose in the development phase.

Historical cost includes the costs directly incurred in connection with the acquisition of the items. After initial capitalization, subsequent costs are recognized as items increasing the book value of the asset or as separate assets only if the Company is likely to have a share of the future economic benefits originating from the item, and if the cost of the item can be measured reliably. The book value of the replaced components of the items are de-recognized. The costs incurred after the installation of the tangible asset, such as costs of repair and maintenance, are charged to the profit or loss in the period when they are incurred.

In the case of tangible assets measured with the cost method, depreciation and residual value are determined on the basis of cost and useful life; based on this, the cost less the residual value is depreciated over the useful life, which is recognized in the IFRS statement of profit or loss for the reporting year. The Company takes into account the amount realized at the end of the asset's useful life, after the deduction of the expected costs of disposal, as the residual value.

The annual review and, where necessary, re-estimation of the residual value and useful life (and thus, of the depreciation rate) is required for all tangible assets

A tangible asset may be included in the Company's financial statements at zero value at the end of its useful life and therefore it should be-recognized; however, the Company may continue using it due to changes in the fundamental assumptions of the estimation of the asset's useful life. To avoid such situations, the Company re-estimates useful life and depreciations annually, at the end of the reporting period. If the asset's useful life is modified after re-estimation, the difference between the depreciation charged until the end of the reporting period and the depreciation corresponding to the recalculated useful life is charged to profit or loss or equity, depending on whether the re-estimation affects the reporting period or a preceding depreciation charge.

This re-estimation of useful life is not relevant to the purchasing of intangible assets with purchasing values under HUF 100 thousand as purchases below that ceiling are not considered to be material by the Company; therefore, purchases below that amount are not capitalized. The values of such purchases are recognized in the statement of profit or loss for the reporting year in the form of depreciation, and the Company maintains separate records of them, taking into account the considerations of asset management.

The PannErgy Group does not recognize depreciation for land. The Company calculates the depreciation of properties, machinery and equipment using the straight-line method, whereby the cost or revalued amount of assets is reduced to the residual value over the following estimated useful lives:

Properties	20 – 50 years
Plant and machinery	3 – 25 years
Other equipment	2 – 8 years
Vehicles	5 years

The book value of an asset is immediately depreciated to the recoverable amount if the book value is greater than the estimated recoverable amount.

The Company depreciates tangible assets acquired in the framework of a finance lease in the same manner as applied to its own tangible assets over their expected useful life, provided that there is reasonable certainty that ownership will be transferred at the end of the term.

The profit or loss generated or incurred at the time of selling the assets is determined based on the book value and sale price and recognized among other expenditures and incomes.

The Company does not charge any amortization to tangible assets with an indefinite useful life or not yet suitable for use but tests them annually for impairment. Tangible assets for which the Company recognizes depreciation are also subjected to review for impairment in all cases when events or changed circumstances indicate that the book value may not be fully recovered.
If the recoverable value is less than the respective book value, impairment has to be charged to the profit or loss in respect of assets treated at cost. The recoverable value is the higher of the asset's value in use and its fair value less costs to sell. The fair value less costs to sell is the amount that can be obtained for an asset in a transaction between unrelated parties, less the costs of disposal, while the value in use is the net present value of the cash flows derived from the continuous use of the asset and its sale at the end of its useful life. The recoverable value is determined individually for each asset, or if this is not possible, for each cash-generating unit.

At the end of each reporting period, the Company examines whether the reasons for the impairment losses recognized earlier still prevail. Any impairment loss can be reversed only if there has been a change in the circumstances that were taken into consideration at the time of the establishment of the last impairment. Impairment can be reversed only to the level where the book value of the asset does not exceed the recoverable value or – if it is lower – its book value less depreciation that would have applied had the impairment not been recognized.

4.10.4 Investments, geothermal projects

In the financial statement, the value of tangible assets includes the value of investments, which encompass the current costs of the geothermal energy and other types of tangible asset development projects in progress, where depreciation is recognized after the commissioning of the project.

During the implementation of geothermal projects, typically after a preparatory, design and permission phase, a production well is established followed by an injection well that transfers the produced geothermal fluid back into the soil layer, a thermal center containing a heat exchanger and the control panel of the whole system, the consumer connection and heat transfer points and a transmission system connecting the above elements of the complete geothermal system.

The PannErgy Group takes the requirements of *IAS 11 "Investment contracts"* into account for projects affecting more than one reporting period, and contractual schedules are determined so that they should be in line with the occurrence of the costs of implementation and the schedule of invoicing.

4.10.5 Application of component accounting

The Company does not apply the elements of IAS 16 relating to component accounting. According to the relevant requirements of the standard, if the main components of assets of significant value feature considerably different economic characteristics, then the main components should be recorded separately, with separate depreciation periods.
Due to the special characteristics of geothermal operations, the Company regards its tangible assets to form a unit, and in technical terms it deems the economic characteristics and useful lives of the components of its tangible assets to be identical. The costs of major overhauls are not regarded as separate components and are not commissioned separately in accounting terms because these costs cannot be unambiguously estimated at the time of commissioning due to the technical factors influencing useful life (for instance, long-term effects of geodetic conditions and water quality). The

Company keeps separate records of these significant, unforeseeable future costs of inspections and capacity increases as giving rise to additional capitalization.

4.11. *Investments*

From among the methods set out in *IAS 27 "Separate financial statements"* for the valuation of investments, the Company uses the cost method for all its participations.

Impairment testing at specified intervals is an important element of the valuation of participations; the Company performs impairment tests on its participations according to the requirements of *IAS 36* when compiling its IFRS financial statements. If there is any indication that a participation has suffered impairment, its recoverable amount has to be determined. The recoverable amount is the higher of value in use (typically the value determined with the discounted cash flow method based on the Company's detailed future financial plans) and fair value less costs of disposal (if it can be determined accurately based on benchmark market information). If the recoverable amount is lower than the asset's cost, impairment has to be recognized and presented in the other expenses line of the statement of profit or loss for the reporting year.

Impairment has to be recognized for participations in line with the foregoing if, on the end of the reporting period for IFRS financial statements, the book value exceeds the expected recoverable amount. The Company considers it an indication of impairment if it has any information pointing to the financial difficulties of a subsidiary, the termination of customer contracts serving as the basis of its income-generating ability, the restructuring of the subsidiary that is disadvantageous for the Company, the transformation of the external financing structure that is disadvantageous for the subsidiary or any threat of bankruptcy.

4.12. *Goodwill*

The Company carries as goodwill the intangible assets that are associated with the purchasing of asset by paying for goodwill in the light of its expectations in relation to the future economic benefits from the purchased asset, and that cannot be individually identified, i.e. they cannot be unambiguously or directly connected to any of the existing tangible or intangible assets affected by the asset purchase.

The cost of the goodwill corresponds to the positive difference between the sum paid for the business combination and the part of the fair value of the identifiable assets, liabilities and pending liabilities that is attributable to the Company as the acquiring party.

Annually, the value of the goodwill has to be subjected to an impairment test, whereby the Company examines the recovery of the value of the goodwill, comparing the part of the future discounted cash flows at the Group's cash-generating units affected by the given goodwill and having a share from synergies that arise from the combinations ensured by the goodwill in excess of the assets that are linked to the cash-generating units in questions, and the value of the goodwill.

4.13. *Financial assets related to concession agreements (IFRIC 12)*

On 30 November 2006, the International Financial Reporting Interpretations Committee (IFRIC) published its interpretation for *IFRIC 12 "Service concession agreements"*; the interpretation covers service concession agreements in order to clarify how the operator of a concession is required to present the infrastructure covered by the service concession agreement, its construction and operating phases and to record the associated incomes and expenditures. *IFRIC 12* offers two methods for the accounting of the latter items based on the uncertainty of the future revenues of the concession operator: the financial asset model and the intangible asset model.

PannErgy Plc.'s subsidiaries within the scope of consolidation and engaging in the operation of geothermal projects have contracts with municipality-owned district heating companies that provide district heating services to households, public institutions connected to the district heat supply network and industrial consumers; however, due to the nature of such contractual relationships and the legal and economic content of the transaction these relationships do not constitute concession agreements; consequently, the Company does not apply the *IFRIC 12* interpretation. These transactions are not covered by the interpretation for the following reasons:

- Even though the heat energy supply service provided by the Company as a "supplier" affects the public utility infrastructure, the Company is not in possession of any infrastructure necessary for the supply of public services, and it has no control over the public utility infrastructure. The Company has not constructed or acquired any infrastructure that is necessary for the supply of public services; it offers services only to district heating service providers;
- The Company's contracts with the district heating service providers cover exclusively the takeover of heat energy and the relevant terms; they contain no rights and obligations regarding the provision of public services; moreover, in addition to the absence of legal prerequisites, it would be physically impossible for the Company to provide such services;
- The Company has no responsibility, even partial, for the operation of the infrastructure and services of the district heating suppliers concerned; they are completely unrelated entities;
- The Company has no control whatsoever over the rates of the public services;
- The Company has sole control over its assets;
- Under agreements covered by the *IFRIC 12* interpretation, operators are typically required, at the end of the term of the agreement, to return the infrastructure to the grantor in a specific condition and for minimal consideration; the agreements between the Company and the relevant district heat suppliers contain no such requirement.

Accordingly, the provisions of *IAS 16* are applicable to the treatment, under IFRS, of the fixed assets owned by the Company and used for the sale of heat to public sector district heat suppliers. Such assets do not constitute infrastructure for the provision of public services and have no direct effect on the direct provision of public services. The revenues realized using such assets are recognized by the Company in compliance with the requirements of *IFRS 15 "Revenue from contracts with customers";* there is no construction or development service-type agreement or activity between the partners that would require the presentation of part of revenues from heat supply under the heading of financial assets or intangible assets.

There is a single exception to the above: the concession project of the Company related to the Győr Geothermal Project. PannErgy Geothermal Power Plants Ltd., a subsidiary of the Company, concluded a concession contract with the Hungarian State for the exploration, extraction and exploitation of geothermal energy in the region of Győr, for a definite period of 35 years (which may be extended once, by 17.5 years). In terms of its legal and accounting qualification, the project, implemented under, and in accordance with the terms and conditions of, the concession contract, is in line with the *IFRIC 12* interpretation; therefore, the investment implemented so far in the context of the project is recognized in the category of fixed assets, as a financial asset, in the consolidated statement of financial position, where the presented investment amount is adequate, i.e. it is covered by the value of the discounted cash flows expected for the 35-year term of the concession contract, in proportion to the degree of completion of the investment project.

4.14. *Inventories*

The overwhelming majority of the inventories recognized in the consolidated financial statements are goods as well as work-in-progress and semi-finished goods used in connection with the implementation of geothermal projects, or materials proposed to be used for maintenance in the operational phase of geothermal projects. Inventories are stated at cost or at net realizable value, whichever is lower.

The cost of inventories consists of the cost of acquisition, the cost of conversion as well as costs incurred in moving the inventories to their present location and bringing them to their present condition. Cost may not include expenses relating to warehousing, promotion and marketing or sale. The cost of acquisition consists in the costs incurred by the acquirer to purchase the inventories. The Company includes in this category the consideration paid for the inventories, charges related to imports, non-refundable taxes, the expenses of transportation and handling, and any other payments directly related to the item concerned. Discounts and rebates received are to be deducted from the cost of acquisition. The Company defines net realizable value as the expected selling price under normal business terms, minus the expenses relating to completion and sale expected to be incurred before the sale. Net realizable value must be re-estimated at the end of each reporting period and the amount of the write-off needs to be recalculated annually. If changes occurred in the net realizable value of an inventory item that necessitate the write-back of a previously recognized impairment, the Company may do so up to the amount of the previously recognized impairment. Both write-offs and write-backs need to be stated among other expenditures. The write-off (write-back) must be recognized in the period when it was determined.

From among the options listed in *IAS 2 Inventories,* the Company uses the weighted average cost method for the valuation of inventories.

4.15. *Financial instruments*

By way of its Regulation 2016/2067, on 22 November 2016 the European Union endorsed the *IFRS 9 "Financial instruments"* standard, to be applied for business years starting on 1 January 2018 or thereafter. The PannErgy Group has not made use of the option of early adoption; thus the standard has been applied since 1 January 2018.

IFRS 9 "Financial instruments" describes the classification, valuation and presentation of financial assets and financial liabilities, and replaces the sections of the former IAS 39 standard applicable to the classification and valuation of financial instruments. *IFRS 9* requires the classification of financial assets into categories measured at their fair values and depreciated cost, respectively. Financial assets need to be classified into these categories at the time of their initial recognition.

The introduction of *IFRS 9* has not caused any material change in the principles of classification applied by the Company, including reporting period. The financial instruments that have been recognized in the Company's financial statements at fair value continue to be presented in the same manner, and the same applies to the financial instruments that are recorded at amortized cost. The Company has set up a "amortized cost" category for the assets classified into the "Held to collect" class, essentially because its business model does not entail any receivables held for sale. The "Available for sale" category essentially pertains only to securities, and the "Held for trading" category to derivative transactions.
All the receivables of the Company belong to the "Held to collect" category.

Financial instruments include loans provided, loans received, debt securities purchased, debt securities issued, participations in other entities, trade receivables, trade payables, forward and swap transactions as presented in the Company's consolidated IFRS financial statements.

Financial instruments (including compound financial instruments) become an asset, a liability or an equity element based on the real content of the underlying contractual obligations; initially they are recognized by the Company at fair value. The fair value of a financial instrument is the price that the Company could realize on the sale of the asset, or would pay upon the transfer of the related obligation, assuming arm's length conditions and a transaction in the normal course of business, at the time of the valuation.

Fair value can be determined on the basis of exact market prices or, in the absence of such, using valuation models. In the course of the selection and design of models, models appropriate for the characteristics of the instrument need to be applied and the general principles of fair value determination must be used.

4.15.1. Initial recognition at fair value

Pursuant to *IFRS 9*, the Company recognizes all financial instruments at fair value initially, at the time of the transaction, that is, on the day when the Company commits itself to the purchasing or selling of the instrument. The company includes in this value the transaction costs that are directly related to the acquisition or issuance of the financial instrument. Financial assets evaluated at fair value against the profit or loss are initially presented at fair value, while transaction costs are stated in the statement of profit or loss.
The classification of financial instruments is based on the purpose of the acquisition of the financial assets, the characteristics of the financial instruments and the definitions of the categories of financial instruments under IFRS 9. The Company decides on the classification of financial assets at the time of their initial recognition. For subsequent presentation, financial instruments can be classified in the following categories:

4.15.2. Receivables

For the recognition of impairment, the PannErgy Group introduced an *IFRS 9* compatible model based on expected lending loss, to replace the incurred loss model of *IAS 39*. This change in IFRS 9 had no effect on the financial statements of the Company in the reporting period in the field of the impairment of receivables due to the portfolio of receivables and the nature of the Company's operations and contractual relations.

Trade receivables comprise the amounts due from customers for goods sold or services rendered during the ordinary course of business. If these amounts are expected to be collected within one year, they are classified into current assets, otherwise they are recognized among non-current assets, in conformity with their maturities.

The Company's trade receivables consist almost exclusively in receivables from domestic undertakings based on long-term contractual relations. It was found during the classifications regarding the 2021 business year that there is no need to establish a standard collection process for the trade receivables of the Company as its trade debtors has always paid in time, observing the due dates of payment. Nevertheless, in the reporting period the Company has determined impairment losses expected to occur based on the "expected credit loss" model, meaning that an impairment loss matrix that is designed relying on past events and also considers forward-looking information is used, broken down by type of debtor based on the nature of the relationship with the partner (term of the contract, strategic nature of the contract). For the calculation of impairment losses the Company opted for the Staging method, whereby stage ratings (1–3) are clearly defined relying on portfolio impairment loss considerations and with clear reasons to justify the classification. Furthermore, the Company's size and small number of customers facilitates the use of individual rating rules.

The Company has no retail operations that would call for the use of segment-based SPPI tests. On the other hand, the Company uses the portfolio impairment loss module, where it allocates into separate categories the ratings of receivables from district heating suppliers that are in long-term business relations with the companies operating the geothermal projects (MIHŐ Miskolc Hőszolgáltató Ltd., GYŐR-SZOL CPlc., Szentlőrinc Közüzemi Nonprofit Ltd.) and priority strategic business partners (Audi Hungaria CPlc.), and the rating of receivables from entities outside this portfolio.

In practice, the Company does not engage in factoring; should such a situation arise, these receivables would be presented at fair value.

4.15.3. Loans provided

The Company grants loans to other enterprises only on a case-by-case basis, almost without exception to entities belonging to the scope of consolidation. Due to the affiliation and as the repayment of these loans depends on the group-level cash flow planning, the Company recognizes no impairment for these loans. These financial assets to be held to maturity are valued in the consolidated financial statements at amortized cost. The Company has performed and documented the so-called SPPI classification tests/benchmark tests with regard to loans provided to non-affiliated parties that do not belong to the scope of consolidation, taking into consideration whether or not these loans carry variable interest rates. The test revealed that the amortized cost of the loans was adequate.

Based on the expected lending loss model, the Company classifies loans provided and recorded at amortized cost into categories 1 to 3, and impairment is calculated accordingly. When testing impairment, the Company does not take into account particular exposures individually; they are treated in aggregate because the effect of the separate treatment of exposures on valuation is irrelevant in the case of loans to affiliates. Because of the obligation of full-scope documentation, SPPI tests were also run for affiliated undertakings in the scope of consolidation; however, due to the affiliation, they were placed in Category 1 without any further examination or impact assessment and no impairment was recognized.

The commitment fees of the credit line are recognized as a transaction cost (and thus they are to be taken into account in the calculation of the amortized cost and effective interest rates of credit) if it is likely that the given portion of the available credit will be drawn down. In this case, any fee that has already paid is accrued until draw-down. In contrast, if it is unlikely that the given portion of the available credit will be drawn down, the fee is charged to the profit or loss for the year during the commitment period of the credit line.

The general and specific costs of the use of credits that are directly connected with the acquisition, construction or production of classified assets are capitalized where considerable time is required before the asset is suitable for its intended use or sale. Such borrowing costs are added to the cost of the asset until it becomes suitable for is intended use or sale. Any income originating from the temporary investment of individual credits as yet unused in relation to the classified asset is deducted from the borrowing costs to be capitalized. Any other borrowing cost is recognized in the profit or loss of the period when it is incurred.

4.15.4. Hedging and derivative transactions

The Company applies the rules set out in *IFRS 9* regarding hedging and derivative transactions, recognizing them at fair value, with separate documentation and administration.

In the course of the preparation of its consolidated IFRS financial statements, the PannErgy Group relies on hedge accounting. On a one-off basis certain members of the Group conclude foreign exchange forward transactions that are of hedging character as there is a direct connection between the forward transaction and the future FX purchase of the company. The Company resorts to such one-off transactions in case of high-value foreign currency purchases, applying the specific payment deadline set out in the relevant asset purchase agreement. The Group engages in no non-hedging forward transactions. For such transactions the Group applies hedge accounting as defined in *IFRS 9*, that is, on 31 December, the end of the reporting period, the fair value of the expected gain/loss on outstanding forward transactions is determined and charged against the financial instruments (assets) as other financial income/expenditure. When the transaction is closed in the following year, the difference between the actual gain/loss realized and the amount recognized on 31 December is posted taking into account the amount established at the end of the reporting period.

In addition to forward foreign exchange transactions, the Company also has interest rate swaps fixed for the long term relating to its investment loans; in this case, the amount of expected loss recorded at the end of the interest period concerned is also recognized for transactions outstanding at the end of the reporting period, based on the statement received from the relevant financial institution. In such cases there is a clear economic link between the hedge and the hedged transaction, and the hedging ratio applied is the ratio used in the past for risk management purposes; these transactions will continue to be presented at fair value.

In addition, the Company targets a natural hedge strategy to cover its foreign exchange risks: its foreign currency (typically euro) denominated revenues almost fully cover its obligations to suppliers incurred in foreign currencies and the servicing of its foreign currency borrowings in the same period.

The foreign currency loans, which represent the largest item within the Company's liabilities, have been refinanced with HUF-denominated loans; consequently, the volume of the related interest rate swaps has also decreased considerably.

4.15.5. Liquid assets

As liquid assets comply with the criteria of recognition at amortized cost, therefore, based on the "expected credit loss" model, the Company does not recognize any impairment because, as a general rule, it keeps its liquid assets exclusively in risk-free financial institutions with high credit ratings.

4.15.6. „Held to collect" financial assets

The Company recognizes its participations and securities in companies listed or nor listed at stock exchanges as "Held to collect" financial assets, and they are stated in the financial statements at fair value. For the evaluation of participations in companies not listed at any stock exchange, the Company relies on independent experts to determine fair value.
The Company presents differences arising from changes of fair value in the statement of profit or loss.

4.15.7. Credits

The Company has only investment loans and working capital loans extended by financial institutions. The credits are classified as short-term liabilities if they are due for repayment within a year. Otherwise, they are presented among long-term liabilities. Credits are initially recognized at fair value, while subsequently they are measured at amortized cost determined using the effective interest rate method.

4.15.8. Deferred income

State aid relating to the purchasing of assets are presented by the Company as deferred income, and recognized in equal installments against the profit or loss over the useful life of the asset.

Any state aid that has become repayable needs to be recognized as an adjustment to the accounting estimate. Accordingly, the long-term deferred income disclosed in a separate line in the consolidated statement of financial position of the Company encompass the over-one-year part of grants awarded in application schemes for the geothermal projects. The short-term, under-one-year part of deferred income is stated among short-term liabilities, also in a separate line.

The end of the maintenance period applicable to the projects funded from application schemes and related grants does not affect the rate of write-back of grants recorded as deferred income because they are linked to the useful life of the subsidized assets; the write-back of the deferred income in the subject period among other income in the consolidated statement of profit or loss occurs during the asset's useful life based on the depreciation of the subsidized assets in the reporting period and on aid intensity.

4.15.9. Trade payables

Trade payables include the amounts payable for goods and services received from suppliers in the ordinary course of business. Trade payables are classified as short-term liabilities if their settlement is due within one year. Otherwise, they are presented among long-term liabilities. Initially, trade payables are recognized at fair value, while subsequently they are measured at amortized cost that are defined with the effective interest method.

4.15.10. Other financial liabilities

All other financial liabilities not carried at fair value through profit or loss are recorded under other financial liabilities. In its IFRS financial statements, the Company presents the value of other financial liabilities at amortized cost. The change in fair value has to be presented only in the notes to the consolidated financial statements. In the case of financial instruments of 'other financial liabilities' nature, the Company applies the effective interest rate method.
Interest, dividends, gains and losses related to financial instruments classified under liabilities are recognized as expenses on financial transactions in the statement of profit or loss as they are incurred. In the case of compound financial instruments, the liability component is measured first, and the equity component is defined as the residual value.

4.15.11. Determination of effective interest rates

The Company regards as the effective interest rate, to be used for discounting future expected cash flows, the contractual HUF- and EUR-denominated fixed interest rates for which its affiliates swapped their variable interest rates using interest rate swap transactions. Any material change in the effective interest rate results in the change of cost; no such changes have occurred.

The Company regards as the effective interest rate, to be used for discounting future expected cash flows, the contractual HUF- and EUR-denominated fixed interest rates for which its affiliates swapped their variable interest rates using interest rate swap transactions. Any material change in the effective interest rate results in the change of cost; no such changes have occurred. The effective interest rate used by the PannErgy Group in the reporting period was 2.4%, which corresponds to the effective interest rate of the Company's long-term, HUF investment loans and the interest rate of EUR loans achieved through interest rate swaps. The Company uses such effective interest rate as the discount rate where it performs discounted cash flow calculations, e.g. for the measurement of intangible asset, tangible assets or goodwill. The Company has no assets that would warrant discounting. In the case of long-term loans, the effective interest rate corresponds to the interest rate specified in the contract, thus no discounting is required. The long-term deferred income relating to grants need not be discounted because they had all been financially settled, and they are presented as liabilities only because of the requirement to spread the assets affected by the grant throughout the useful life of the assets.

4.15.12. Netting of financial instruments

Financial assets and liabilities are netted mandatorily and recognized in the consolidated financial statements as a net amount if the net settlement of the recognized amounts is legally permitted and the Company intends to settle the amounts on a net basis, or intends to simultaneously realize the asset and settle the liability.

4.16. *Cash and cash equivalents*

In the Company's consolidated IFRS financial statements and statement of cash flows, cash and cash equivalents comprise the amount of financial assets held at the end of the reporting period as the Company's HUF and FX petty cash assets, freely disposable bank account balances that are available in the Company's electronic accounts held with financial institutions, bank account balances for limited use that are available in the Company's earmarked accounts held with financial institutions, balances in the deposit accounts with agreed maturity held with financial institutions, as well as sight bank deposits. In the consolidated IFRS financial statements and statement of cash flows, negative balances of current accounts held with financial institutions, i.e. overdraft facilities, are presented among short-term liabilities, in the line of short-term credit.

4.17. *Equity, subscribed capital*

The equity in the Company's consolidated IFRS financial statements is the difference between total assets and total liabilities.

The IFRS subscribed capital equals the subscribed capital specified in the deed of foundation as long as it qualifies to be a capital instrument. The legal form of the Company is a public company limited by shares; PannErgy's ordinary shares listed at the Budapest Stock Exchange are recognized as subscribed capital within the meaning of the IFRS. Incremental costs directly attributable to the issuance of new ordinary shares are reported as an item decreasing the equity.

Capital reserve is the sum of all elements of equity which do not meet the definition of subscribed capital, subscribed capital not yet paid, profit reserve, revaluation reserve, after-tax profit or tied-up reserve under the IFRS.

Profit reserve is the accumulated after-tax profit of former years recognized in the IFRS financial statements and not yet distributed to the shareholders, including amounts charged to accumulated profit under IFRS, which may not contain other comprehensive income defined in *IAS 1 "Presentation of financial statements"*, except for reclassification modifications. The amount of paid-up supplementary payments recognized as assets under the IFRS and the amount of unused development reserve less the related deferred tax calculated based on *IAS 12 Income taxes* must be deducted from the resulting amount.

Revaluation reserve comprises the accumulated other comprehensive income and other comprehensive income for the reporting year indicated in the statement of comprehensive income, as defined in *IAS 1 "Presentation of financial statements"*.

After-tax profit is the aggregate amount of the net after-tax profit presented for continuing and discontinued operations and included in the profit or loss section of the statement of other comprehensive income, as defined in *IAS 1,* or in the separate statement of profit or loss.

Tied-up reserve is the amount of received supplementary payments recognized as liabilities under the IFRS plus the amount of unused development reserve less the pertaining deferred tax calculated based on *IAS 12 "Income taxes"*.

4.18. *Treasury shares*

The Company may repurchase its own shares at the stock exchange pursuant to the authorization of the General Meeting; these shares are presented in the IFRS financial statements and annual reports separately as items decreasing the equity.
The gain/loss on the sale of treasury shares and the effect of their fair valuation at the end of the reporting period is charged directly to equity, in the "reserves due to treasury shares" line.
The above procedure ensures that no gain or loss is recognized with regard to treasury shares in the profit or loss of the Company when any change occurs to own shares (purchase, sale, issue, cancellation or revaluation at the end of the reporting period).

4.19. *Earnings per share*

To determine earnings per share, the Company used the ratio of the profit or loss for the period and the average number of shares for the period less treasury shares owned by the company.

For the determination of diluted earnings per share, all diluting factors are taken into consideration. The Company reports the number of shares issued by the Company as the diluted number of shares, plus warrants (options issued by the Company), management options and convertible bonds, with the number of shares inherent in them.

Furthermore, when determining the diluted earnings per share the Company also takes into account the number of shares involved in the share option program running in the reporting period as an item decreasing the volume of own shares provided that the conditions set out in the share option program for the call-down of options are satisfied at the time of the preparation of the report and that the own shares concerned had not yet been called down.

Through that adjustment, the diluted earnings per share figure takes into account the anticipated dilution of the number of shares as evidenced by documentation, thereby decreasing the assets per share to be allocated to individual shareholders.

4.20. *Current and deferred income tax*

Pursuant to *IAS 12 "Income Taxes*", income taxes consist of current and deferred taxes. The income tax expenditure disclosed in the consolidated financial statements is the sum of the current tax liability and the deferred tax expenditure. Accordingly, in the Company's consolidated IFRS financial statements, the amount of the corporate income tax payable annually is based on the tax payment obligations stipulated in the relevant Hungarian legal regulations, which is adjusted for the amount of deferred tax expenditures.

Current tax is the income tax payable (recoverable) with regard to the taxable profit (negative tax base) for the period. Income taxes include all domestic and foreign taxes that are levied on taxable profits. The Company measures current tax liabilities (tax assets) for the current period and previous periods at the level expected to be payable to the tax authority (or expected to be reimbursed by the tax authority) using the tax rates and tax regulations that had been incorporated in legal regulations by the end of the reporting period.

Current tax (asset/liability) equals the tax payable/deductible. The actual amounts of the taxes payable/deductible may be different from the amounts stated among current taxes. These modifications reflect the changes in estimated payable/deductible taxes. Unless there is an indication that the modification arises from an error, these current tax changes are to be treated as changes in accounting estimates. These modifications are recognized under tax expenses/revenues in the period when the modification occurs.

Current tax is recognized in profit or loss or other comprehensive income (equity) depending on where the underlying transaction/event is recognized.

Pursuant to the relevant tax regulations, the Company is also required to pay local business tax and innovation contribution, which has a material impact on the Company's profit or loss. Based on the interpretation of the definition of taxable profit as per *IAS 12*, the Company does not treat local business tax and innovation contribution as income taxes but rather as operating expenses, recognizing them under other expenses.

In line with the requirements of *IAS 12*, the Company recognizes income taxes payable/recoverable in respect of future periods, the recovery of which is certain and which arose in connection with past transactions and events. The tax base of an asset is the amount attributed to that asset for tax purposes, which is deductible upon the recovery of the asset. If the economic benefits are not taxable, the tax base of the asset is equal to its carrying amount.

The tax base of a liability is the amount attributed to that liability for tax purposes i.e. the liability's carrying amount less any amount deducted subsequently for the purposes of taxes. The tax base for any deferred income equals the carrying value less non-taxable future incomes. Pursuant to *IAS 12*, a temporary difference is the difference between the carrying amount and the tax base which is either taxable or deductible after recovery/settlement. If the temporary difference is taxable, it is a deferred tax liability, while if it is deductible, it is a deferred tax asset.

Sources for deferred tax receivables can potentially include deductible temporary differences, unused negative tax bases and unused tax credits. Future taxable profit and taxable temporary differences may be the sources of recovery of deferred tax.

Deferred tax is required to be fully recognized in the case of deferred tax liabilities. In contrast, in the case of deferred tax assets, recognition is only possible if a future taxable profit against which the deductible temporary differences can be offset is available. Deferred tax is recognized at the same place as the underlying transaction or event (i.e. item).

Offsetting deferred tax assets and deferred tax liabilities against each other is mandatory if the Company has an enforceable right to offset the current tax assets and liabilities and if the income taxes relate to the same tax authority.

Based on the above, deferred taxes arise if there is a timing difference between the booking of an item for accounting and tax purposes. Deferred tax assets and liabilities are determined using the tax rates for the taxable income of the years when the differences derived from the timing differences are expected to be reversed. Deferred tax liabilities and assets reflect the tax implications of assets and liabilities as of the end of the reporting period, as determined by the Company. Deferred tax assets can only be included in the consolidated statement of financial position if it is probable that during its future activities, the Company will generate a profit that will form part of the tax base, against which the deferred tax asset will be offset.

As of the end of the reporting period, the Company takes into consideration its non-recovered deferred tax assets and liabilities and checks the recovery of these with a discounted cash flow calculation relevant for its future profits.

In line with the *IAS 12* requirements the Company does not rely on discounting in the calculation of deferred taxes.

4.21. *Provisioning*

The Company recognizes liabilities of uncertain timing or amount as provisions if:
- the related obligation arose from past events;
- they exist on the last day of the reporting period;
- they constitute legal or constructive obligations;
- their settlement is expected to result in an outflow of resources giving rise to economic benefits;
- the amount of the obligation can be estimated reliably.

The Company recognizes a contingent liability if:
- there is an obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company;
- there is an obligation that arises from past events but is not recognized because it is improbable that an outflow of resources embodying economic benefits will be required to settle the obligation; or the amount of the obligation cannot be measured with sufficient reliability.

Existence as of the end of the reporting period and connection to past events are important aspects; no provision can be allocated for costs that arise in the interest of future operations.

A past event gives rise to a constructive obligation for the Company if there is no other realistic alternative but to settle it. In the case of a legal obligation this entails the assumption that the obligation is derived from a contract, a legal regulation or other legal transactions. A constructive obligation is an obligation that derives from the Company’s actions where, by an established pattern of past practice, published policies or a sufficiently specific current statement, the Company has indicated to other parties that it will accept certain responsibilities and as a result, it has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

In order to decide whether the settlement of the event or obligation forming the potential basis of a provision may induce the outflow of resources embodying economic benefits, the Company examines the probability of occurrence. The Company considers the event where the probability of occurrence is higher than that of non-occurrence (i.e. it exceeds 50 %) as probable. If it is unlikely that the event occurs, the Company carries the given obligation as a contingent liability and discloses it as such in its financial statements but does not recognize it in the statement of financial position.

Provisions are recognized by the Company in the amount necessary to settle all the related obligations. This amount is the best estimate of all of the necessary expenses made based on the information available as of the end of the reporting period taking into account all risks and uncertainties which may arise in connection with the obligation.

If the time value of money significantly influences the amount that is required for the settlement of the related obligation, the provisions are recognized to the extent of the present value of the expenses necessary to settle the obligation. Through the discounting method that indicates the passing of time, the balance sheet value of the provision increases each year with the impact of the discounting and the increase is charged to the current profit or loss as an interest expense under other expenses.

The expense necessary for the settlement of the provision, or a portion of it, may be recovered. In this light, the recovery may only be recognized if it is virtually certain that amount of recovery will be received if the Company settles the obligation affected by the provision. The recovered amount may not exceed the amount of the provision. The recovered amount must be treated as a separate asset; in the statement of profit or loss, the expense related to the provision may be presented net of the amount recognized for the recovery.

With regard to its existing, operational geothermal projects, the Company has no revegetation or environmental obligations; no provisions have been set up in this context.

4.22. *Share option program, share-based payments*

The Company may operate a share option program pursuant to the authorization of the General Meeting. Under the multi-annual program, the beneficiary of the program is entitled to purchase a specific number of shares at a specific option price if the stock exchange price of PannErgy shares reaches a specified level.

The Company discloses the value of the share option program as a short-term liability against capital reserves, based on the market price of PannErgy shares at the end of the reporting period, its volatility and the probability of reaching the share price specified in the share option program, depending on the outcome of measurement using the Black-Scholes method.

The Company applies the provisions of *IFRS 2 "Share-based payments"* to the recognition of actual share-based payments in the course of the valuation of the share option program. If share-based payments are made in equity instruments, any costs arising in connection with such payments are charged to equity while in the case of settlement in liquid assets, they are charged to financial liabilities as personnel expenditures.

The Company also applies *IFRS 2 "Share-based payments"* to share-based payments outside the scope of the share option program, even though they are not common practice in the Company; no such share-based payment occurred in the period covered by these consolidated financial statements. Accordingly, if the Company is free to choose the mode of settlement, then when an obligation arises for settlement in liquid assets at the time of conclusion of the contract, it should be treated as a transaction to be settled in liquid assets. If, however, at the time of the conclusion of the contract no obligations to settle in liquid assets arises, the agreement is to be treated as a transaction to be settled in equity instruments.

If the choice is given for the other party (typically, an employee of the Company), then the Company issues a compound financial instrument, which should be separated into a part to be settled in equity instruments and another part to be settled in liquid assets, and it should be recognized in the consolidated statement of profit or loss and the statement of financial position accordingly.

Share-based benefits offered to employees do not give rise to an obligation for the Company immediately; instead, the right to claim the benefits becomes effective if the vesting and potential non-vesting conditions are fulfilled during a specified period (the so-called vesting period). The vesting period is usually a period of several years; accordingly, the expected costs have to be charged over the vesting period on a time-proportionate basis.

The value of share-based payments can be defined using a direct or an indirect method. If the direct method is used, the amount of the share-based payment is defined based on the fair value of the product acquired or service used by the Company. When the indirect method is applied, the fair value of the equity instrument may serve as a basis for the definition of the amount of the payment. In the case of share-based payments settled in equity instruments, the fair value of the equity instrument as of the date when the share-based benefit is provided is used for the entire vesting period, while changes in fair value are charged to the equity. In the case of share-based payments settled in liquid assets, the fair value of the equity instrument as of the date when the share-based benefit is provided is re-measured at the end of each reporting period, while changes in fair value are charged to profit or loss.

The costs of share-based payments are always charged to the profit or loss of the company that is the employer of the employees entitled to such benefits. The Company may conclude contracts for share-based benefits with partners who are not employees of the Company. In this case, the principles of recognition and measurement are identical with those applied in the case of share-based employee benefits.

In the reporting period, the Company has no share option program; the previous one ended in the base period.

4.23. *Accounting for revenue from sales*

Pursuant to the framework principles governing the preparation and presentation of the financial statements, revenue is the growth of economic benefits during the reporting period resulting from either the inflow or increase of assets or the decrease of liabilities, which will result in a rise in the equity for reasons other than contributions from shareholders, is generated in the ordinary course of business (sale of goods or services, other use of assets) of the entity, the inflow of future economic benefits is probable, revenues can be measured reliably, and costs (incurred or expected) can be reliably identified and measured.

By way of its Regulation 2016/1905, on 22 September 2016 the European Union endorsed *IFRS 15 "Revenue from Contracts with Customers"*, to be applied for business years beginning on or after 1 January 2018, with the option of earlier application. The Group has not made use of the option of earlier application and will apply the standard to its consolidated financial statements as of 1 January 2018.
Under the standard, revenue from sales is recognized as control over the goods or services is passed to the customer, i.e., the customer is able to direct their use or obtain the benefits from the goods or services.

Pursuant to the standard, the Company has devised a five-step model for the recognition of revenues:

- Identification of the sales contract
- Identification of the performance obligations
- Determination of the transaction price
- Allocation of the transaction price
- Recognition of revenues

IFRS 15 gives more detailed guidance on the distinction of goods or services: a good or service is distinct if it generates benefits on its own and if it is separately identifiable from other items. Instead of fair value measurement, consideration is defined as the amount to which an entity expects to be entitled. The Company takes the effects of variable consideration into account when determining the transaction price. If the revenue has a significant financing component, the time value of money is also taken into consideration.

Instead of a risk/reward based revenue recognition model, revenues are recognized when control over the service/good is passed to the customer. Control is passed over time if the relevant criteria are met or at a point in time if they are not.

The Company does not recognize as revenue income from the sales of tangible assets and other incomes that are not realized in the course of its ordinary activities.

In the period covered by the present consolidated financial statements, the PannErgy Group has no customer contracts to which *IFRS 15* should be applied, for the following reasons:

1) there are no customer contracts the conclusion of which would give rise to significant costs that would justify the capitalization and subsequent depreciation of such assets;
2) each customer contract meets the requirement set out in the standard that the seller may recognize the revenue only when the good or service is transferred to the customer, at an amount it considers legitimate for such good or service. The invoicing of customers is based on long-term contracts, which clearly define the price, nature, place of delivery of the goods/services. In the past five years no major delay was encountered with regard to these contracts; with the exception of a single business relationship that generated negligible sales revenues, no impairment loss needed to be recognized.
3) the recognition of sales revenues complies with the 5-step model, that is, all contracts with customers are in writing, have commercial content (provide for economic benefits for the PannErgy Group), clearly set out enforceable rights and obligations, the parties have accepted the contract and committed themselves to its performance, and there is a high probability that the Company would collect the consideration for the good/service transferred;

4) the PannErgy Group treats obligations relating to the performance of contracts separately, treating any discounts (determined ex ante or ex post) as separate obligations. The performance obligation is always clearly set out in the contract, and revenues thus invoiced can be recognized;
5) in the customer contracts of the PannErgy Group the price of the transaction is clearly set out and allocated to specific performance periods/dates, consequently the recognition of revenues is evenly spread out. In certain heat supply contracts the Company uses performance incentives regarding the commitment of the customer to increase its heat purchases; in this case, the discount related to the period is in each case deducted from the sales revenue of the period affected by the discount. The sales revenue of all transactions is identical with the invoiced amount; no discrepancies have been found. In the case of the above discount, based on the calculation formula set out in the contract between the parties, the amount of the discount to be deducted from the revenue of the period concerned and therefore recognized in that period (or subsequently, when a correcting invoice is issued) is clearly defined, consequently no estimates or probability calculations are necessary;
6) the customer contracts of the PannErgy Group clearly match the price of a transaction and the transaction; there is no partial performance within transactions that would necessitate the allocation of prices. If the Company were to provide general discounts ex post, it would allocate it to the deliveries and transactions of the period covered by the discount, in accordance with the requirements of IFRS 15;
7) the members of the PannErgy Group recognize revenues from sales when control over the asset or service sold is passed to the customer, and the customer is able to govern the use of and collect the benefits from such asset;
8) the PannErgy Group sells no products with the right of repurchase, offers no related warranties, uses no buyer options or agency commissions.

4.24. *Interest income and dividend income*

The Company may realize interest income on the loans granted in connection with the operation and management of the holding, or dividend income on its shareholder investments; these, however, are eliminated in the course of consolidation. The Company regards such interest and dividend income as income not derived in the ordinary course of business, not treating them as sales revenues but recognizing them among revenues from financial transactions.

Interest income is recognized using the effective interest rate method. In the event of the impairment of loans and receivables, the Company reduces the book value to the recoverable amount which is the present value of the estimated future cash flows discounted with the instrument’s original effective interest rate. Thereafter, the difference arising from the reversal of the discount is shown as interest income.

Interest income from impaired loans and receivables is recognized with the application of the effective interest rate used for the calculation of impairment, computed for the net value of the financial asset.

Dividend income is recognized when the Company becomes entitled to the dividend.

4.25. *Leases*

In the course of the preparation of the consolidated financial statements the Company did not make use of the option of early application of the *IFRS 16 "Leases"* standard; it started applying the provisions of the new standard as of 1 January 2019. In line with the requirements of *IFRS 1,* the comparable period for the preceding year must also be presented as if the Company had always used I*FRS 16*, taking into account the exemptions allowed under *IFRS 1*.
The Company does not act as lessor; consequently, it needs to apply IFRS 16 exclusively as lessee. The use of IFRS 16 has removed the difference between the treatment of operating lease transactions and that of finance leases for the Company as lessee; lessees have to show in the balance sheet an asset embodying the right of use under the transaction and a leasing liability, that is, the obligation to make the lease payments. The *IFRS 16* provides that a contract is a lease contract or it includes leasing if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The costs relating to the use of the asset – which used to be shown in the form of operating lease fees under the Hungarian accounting standards and the former *IAS 17 "Leases"* – are shown under the new *IFRS 16* lease standard as depreciation of the right-of-use asset and as interest-type expenditure of the lease liability. Moreover, upon the occurrence of certain events (e.g. the lease term is modified, the amounts payable in the way of lease fees are modified as a result of changes in indices or interest rates affecting lease fee payments) the lessee must revaluate the lease liability. The amount by which the lease liability is modified must be presented by the lessee as a change in the right-of-use asset. The standard stipulates exceptions for presentation regarding short term leases and ones with low-value underlying assets.
The Company has no sublease or re-lease transactions. Nor does it have right-of-use assets regarded investment property.

The Company has made use of the following exemptions offered by *IFRS 1*:

- The lease liability is valued at the present value of the remaining lease fees, discounting them with the lessee's incremental borrowing rate of interest prevailing on the day of IFRS transition, that is, 1 January 2018;
- The right-of-use asset presented upon first application is shown at a value equalling that of the lease liability adjusted with the pre-paid or deferred lease fees shown in relation to the given lease arrangement right before the date of first application in the statement pertaining to the Company's financial position;
- The Company uses a single discount rate to the portfolio of lease transactions of essentially similar parameters (e.g. similar remaining lease terms, underlying assets of similar categories, similar economic environment);
- The Company makes use of the simplification allowed by the standard in the case of leases with shorter than 12-month remaining terms on 1 January 2018, the day of transition. Such leases are recognised by the Company as short term leases;
- The Company applies the simplification allowed by the standard to leases with low-value underlying assets;
- When first applying the standard the Company does not factor in the initial direct costs in right-of use asset valuation;

- The Company applies retrospection, for example in determining the lease term, if the contract offers lease term extension or termination options.

The Company would have presented the cumulative impact of the transition to *IFRS 16* as an adjustment to the opening balance of accumulated profit at the time of first adoption, if such effect had occurred.

4.26. *Distribution of dividends*

Dividends distributable to the shareholders of the Company are recognized in the consolidated financial statements as liabilities in the period when the owners approved the dividend. Distributable dividends are accounted for as a direct decrease in equity.

4.27. *State aid, recognition of related deferred income*

State aid is recognized at fair value if the Company is reasonably certain to receive such aid because it will satisfy the relevant criteria.

Based on the income approach accounting, the Company recognizes aid as income in the periods, based on the principle of matching, in which the related expenses were incurred.

The only exception is when the aid is based on subsequent settlement, that is, the purpose of the aid is to compensate for expenditures or losses incurred as well as immediate future financial grants given without any related costs. The Company recognizes such aid as income when it opens for draw-down.

State aid relating to the purchasing of assets are presented by the Company as deferred income, and recognized in equal installments against the profit or loss over the useful life of the asset.

Any state aid that has become repayable needs to be recognized as an adjustment to the accounting estimate.

Accordingly, the long-term deferred income disclosed in a separate line in the consolidated statement of financial position of the Company encompasses the over-one-year part of grants awarded in application schemes for geothermal projects on the level of the PannErgy Group. The short-term, under-one-year part of deferred income is stated among short-term liabilities, also in a separate line. The end of the maintenance period applicable to the projects funded from application schemes and related grants does not affect the rate of write-back of grants recorded as deferred income because they are linked to the useful life of the subsidized assets; the write-back of the deferred income in the subject period among other income in the consolidated statement of profit or loss occurs during the asset’s useful life based on the depreciation of the subsidized assets in the reporting period and on aid intensity.

4.28. *Comparative information across periods*

Data for the base year and reporting year were subjected to measurement in the consolidated financial statements in the same manner, expect for reclassifications in the base data, which are explained in

Note 44. In order for the Company's IFRS consolidated financial statements to comply with *IAS 1*, all the statements include a comparative period.

In the context of the financial statements of a business year, by comparative period the Company means the reporting period of the financial statements prepared for the business year preceding the business year concerned.

These comparisons have to be disclosed in sufficient detail so that the users of the financial statements are able to interpret significant modifications affecting the consolidated statement of financial position and the consolidated statement of profit or loss.

4.29. *Segment reporting*

Definition of segments

In line with IFRS requirements, the Company needs to present its operating segments. The Company identified a single operating segment during the reporting period, just like in the base period: Energy.

The Energy industry is the Company's main operating segment, its core operations including the generation and sale of geothermal heat as well as the implementation of related investment projects and other activities.

The PannErgy Group, as the legal successor of Pannonplast Plc., does not identify the utilization – in the way of property management – of industrial facilities and related office premises formerly used by Pannonplast Plc. in its plastics manufacturing operations as a separate operating segment for the purposes of the following *IFRS 8* principles:

Presentation of operating segments, substantiation of the review of segments

It is a standard principle of *IFRS 8 "Operating segments"* that an entity must disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates [IFRS 8.1]. The standard is to be applied to the consolidated financial statements of the group for those parent companies, and the separate and individual financial statements of those entities whose debt or equity instruments are traded in an open market [IFRS 8.2]. Consequently, PannErgy Plc. is required to present operating segments.

In practice, operating segments may be presented through the following five steps:

- Identification of chief operating decision makers;
- Identification of operating segments;
- Consolidation of operating segments;
- Definition of reportable segments;
- Disclosure of segment information.

In the course of the review of segment definition, the PannErgy Group looked at potential operating segments relying on the five step listed above. An operating segment is a component of an entity that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity), whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance based on various criteria.

The consolidated financial statements of the Company show that Energy can be clearly identified as an operating segment of the PannErgy Group. As regards the operation of the PannErgy Group, the management of the Company has adopted the approach to focus all its resources, in line with the expectations of investors, on maximizing the efficiency of the Energy segment; the utilization of property owned by the Company is in all respects an insignificant element in its operation and, based on the management's approach, cannot be considered to constitute an operating segment.

Examination of limits regarding the review of segments

The segment formerly presented as the Asset management operating segment was not a central element in the strategy of the PannErgy Group; the assessment of the performance of the utilization of the aforesaid properties is a negligible part of the work of the operative management and supreme bodies of the Company; information regarding the utilization of properties is not specifically highlighted in the relevant internal control and reporting system; as these transactions entail constant income (re-invoiced utility charges and rent) and costs (utility charges), the overwhelming majority of the activity consists in pass-through items.

Based on the approach of PannErgy Group's management and the criteria pertaining to the presentation of operating segments, the single operating segment of Energy can be identified at the Company; consequently, the examination of the criteria applicable to reportable segments is irrelevant; nevertheless, the Company has looked at the satisfaction of such limits (Note 43 *Segments*).
The Company needs to meet the disclosure criteria applicable to the entire entity. This means that the figures of the Energy segment in the reporting year and in the previous year reconcile with the financial information pertaining to the entire entity, which was appropriately presented in these consolidated financial statements.

Presentation of geographical segments

The Company pursues its activities solely in the territory of Hungary, in a similar legal, technical, economic and demographic environment; consequently, territorial segmentation is not relevant.
Within Energy, the single operating segment defined within the Company, geographical/project location segments were identified in the reporting period based on their order of magnitude. In addition to assessing financing and other aspects the Company examines the profitability of these separately, working out specific plans concerning their operation. The geographical segments corresponding to projects are described in *Note 43.2*.

4.30. *Gross cash flow and EBITDA definition*

Similarly to the previous periods, the Company uses the following main quantitative and qualitative indicators, as well as alternative performance measures in measuring its operating performance:

Consolidated quantity of heat sold (GJ), Gross cash-flow, EBITDA

Of these indicators the Company identifies the consolidated quantity of heat sold as both a quantitative and a key quantitative indicator, since the quality of geothermal heat generation and the subsequent operational processes preparing the sale of heat are effectively represented by the consolidated quantity of heat sold. No other performance quality indicator is presented by the Company.

The gross cash-flow and the EBITDA categories presented in the consolidated financial statements are defined by the Company as follows:

The gross cash-flow is the sum of the gross margin – equalling the difference between the sales revenue and direct costs of sales – and the amount of depreciation that entails no cash flows, stated among the direct costs of sale. The Company uses this alternative performance indicator because it adequately represents the cash flow generated directly in relation to the sales revenue generating activity and, as such, it is representative of the Company's operation, a useful piece of information for investors.

EBITDA (earnings before interests, taxes, depreciation and amortisation) is the sum of the operating, indirect depreciation (among Indirect costs of sales), the sum of direct depreciation (among Direct costs of sales), and the extraordinary write-off and impairment of tangible asset and intangible assets (among Other expenditures).

The Company uses this alternative performance indicator because by eliminating the differences stemming from different taxation, financing background (interest payment) and investments it provides an adequate view of the Company's cash generating capacity and goodwill, and it enables its operation to be comparable with other entities in the energy sector. Accordingly, the EBITDA is a highly representative metric for the public concerning the Company's operation.

No hypotheses or assumptions were used in the calculation of the gross cash-flow or the EBITDA as alternative performance measures; no element of the measures is related to actual or expected performance in any past or future period, or contain any estimate or extrapolation pertaining to the future.

In applying the above alternative performance measures (APM) the Company fully complies with the relevant recommendation (5/2017. (V. 24.)) of the Magyar Nemzeti Bank providing for conformity to the guideline of the ESMA (European Securities Market Authority) on APMs (ESMA/2015/1415).

5. MATERIAL/CRITICAL ACCOUNTING ASSUMPTIONS AND ESTIMATES IN THE APPLICATION OF THE ACCOUNTING POLICY

In line with the requirements of the IFRS, the preparation of the Company's IFRS consolidated financial statements requires the application of estimates and assumptions, which will affect the amounts disclosed in the financial statements. The Company continually evaluates estimates and judgments based on past experience and other factors, such as expectations related to future events considered as reasonable under the circumstances.

The Company applies the requirements of *IAS 8 "Accounting policies, changes in accounting estimates and errors"* and *IAS 10 "Events after the balance sheet date"* as appropriate to any material errors of prior periods, the modification of accounting estimates and the treatment of events after the end of the reporting period.

5.1. *Events after the end of the reporting period*

In respect of the events between the end of the reporting period and the date of the financial statements' approval, the Company reviews whether the event in question confirms the circumstances that prevailed at the end of the reporting period and if yes, the modification of the financial statements is required. If the event implies circumstances that arose after the end of the reporting period, the only requirement is a disclosure, and only in material cases.

5.2. *Material error*

During the preparation of the consolidated financial statements, an error may arise from mathematical errors made when applying the accounting policy, from the ignoring of facts or from incorrect interpretation. The Company has adopted the principle that as long as it is possible and not technically impracticable, material errors from former periods need to be corrected retrospectively in the first financial statements or annual report compiled and approved for disclosure after the detection of the error. For the Company, impracticable means that it is impossible to apply even if the Company does everything that can reasonably be expected to ensure application.
The Company defines a material error as follows: the omissions or misstatements of items are material if separately or aggregately they are able to affect the users' decisions made based on the financial statements. Materiality depends on the assessment of the extent and nature of omissions or misstatements under the given circumstances. The size and nature of an item, or a combination of the two, are the decisive factors in that assessment; as a general principle, the Company defines errors exceeding 1 percent of the total of the IFRS statement of financial position as material.

5.3. *Critical accounting estimates and assumptions*

In the course of implementation of the IFRS accounting policy, the Company relied on certain estimates and assumptions. Although the resulting accounting estimates are based on the Company's best knowledge of the current events, by definition they are rarely identical with the final results and the actual figures may be different. Estimates and assumptions that may cause the value of assets and liabilities in the statement of financial position to be significantly modified will be presented in the subsequent financial year, as shown below. These assumptions are explained in detail in the relevant notes; however, the most important ones relate to the following:

- Tax allowances in the future or the realization of a future profit that constitutes adequate taxable income against which the deferred tax assets can be set off;
- The outcome of certain pending liabilities;
- Determination of the fair value of financial instruments;
- Determination of the useful life of tangible assets;
- Determination of the impairment of tangible assets and goodwill;
- Determination of the value of provisions.

The methodology of making accounting estimates may change; in the Company's interpretation a change of accounting estimates occurs when the carrying amount of an asset or liability or the amount of the asset's use in the period needs to be modified. Accounting estimates may be changed based on the evaluation of the current position of the assets and liabilities and the assessment of the expected future benefits and obligations related to them. Changes in accounting estimates result from new information or new developments; accordingly, they do not qualify as the correction of an error.

6. REVENUE FROM SALES

6.1. *Breakdown of sales revenues by core activity*

	2021 HUF Mn	2020 HUF Mn
Energy	5,583	5,070
Property management [1]	856	853
Total	**6,439**	**5,923**

[1] Not defined as a separate segment, see Chapter 43 “Segments Report”.

6.2. *Breakdown of sales revenues by geographical location*

	2021 HUF Mn	2020 HUF Mn
Revenue from domestic sales	6,280	5,921
Revenue from sales to the EU	159	2
Revenue from sales outside the EU	-	-
Total	**6,439**	**5,923**

6.3. *Breakdown of sales revenues by activity or service*

	2021 HUF Mn	2020 HUF Mn
Heat sales	5,323	4,906
Electricity sales	841	818
Mediated and re-invoiced services	91	90
Sale of products	159	84
Rent for buildings and tangible assets	25	25
Total	**6,439**	**5,923**

In the reporting period the consolidated sales revenue of the Company increased by HUF 516 million 9% up year-on-year. The breakdown of sales revenue by activities and services reveals that income from the sale of heat increased 8% year-on-year, by HUF 417 million. The increase was driven primarily by weather conditions, which were more favourable for heat generation than in the preceding period and by efficiency improving and capacity increasing projects implemented during the reporting period.

The sale of electricity increased by 3% during the reporting period, of which HUF 804 million was not related to Energy, i.e. the Group's core operation. This sales revenue was generated by reinvoicing electricity charges relating to the operation of PannErgy Nyrt's properties in Debrecen to co-owners of the property concerned, which is in undivided joint ownership. The significant increase was attributable, in one part, to the change in the EUR/HUF exchange rate as the majority of the re-invoiced electricity is EUR denominated. The other reason is the significant energy price increase in the reporting period; this had an effect in increasing the re-invoiced amount as well. The additional HUF 37 million electricity sales consist in the sale of electricity relating to the project of the Company in Berekfürdő.

Moreover, the Company recognised HUF 158 million as revenue from the sale of intangible assets stated in its books as assets held for sale.

The rent from buildings and tangible assets during the reporting period came from the utilisation of the Company's properties in Debrecen; the amount of sales revenue from equalled the previous year's amount.

6.4. *Breakdown of fixed assets related to sales revenues by geographical segment*

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Assets used in domestic production	22,933	23,634
Assets used in production within the EU	-	-
Assets used in production outside the EU	-	-
Total	**22,933**	**23,634**

6.5. *Concentration of sales revenue, information regarding key customers*

The PannErgy Group has three key customers, each generating at least 10% of the Company's total sales revenues:

	2021	as a % of total sales in 2021	2020	as a % of total sales in 2020
Total sales revenue from key customers	**5,194**	**81%**	**4,785**	**81%**
Revenue from sales	**6,439**	**100%**	**5,923**	**100%**

7. Indirect costs of sales

	2021 HUF Mn	2020 HUF Mn
Indirect personnel-type costs	145	122
Expert fees, bookkeeping, audit fees	117	115
Office and operating costs	110	108
Costs related to public and stock exchange presence and social responsibility	97	87
Banking costs	23	52
Insurance fees	14	12
Other fees and duties payable to authorities	5	4
Indirect depreciation (property, plant and equipment)	1	1
Total	**512**	**501**

The PannErgy Group's indirect operating costs increased by 2% during the reporting period year-on-year.

Indirect personnel-type costs increased by 19% year-on-year, in line with labour market processes and the increased fluctuation during the period concerned. During the reference period, 6 people joined the Company, and 3 people left. When compared to the previous year, with 1 person joining and 3 leaving, it can be said that employee turnover has increased.
The period-end headcount of the PannErgy Group was below the corresponding figure of the previous year; on 31 December 2021 the number of employees was 18 persons, one fewer than the 19 on 31 December 2020. The average statistical number of staff for the whole year dropped from the 27 persons in the base period to 23 in the reporting period. Salary-type payments are summarized in Note 9. *Headcount and wage costs*.

Costs of experts incurred in the reporting period include legal and consulting costs relating to the financing of geothermal projects and to accounting projects, expert costs relating to application schemes as well as general consulting fees to support operations and legal fees. Consultancy costs increased by 2% during the period concerned. In the category of consultancy costs the PannErgy Group's auditing costs amounted to HUF 17 million, on connection with the auditing of the annual reports and the transformation-related statements of assets and liabilities, Of which HUF 7 million was incurred by PannErgy Plc., the Group's parent company, in relation to the auditing of the individual report and the consolidated financial report and their quality assurance audit.

The 3% increase in office and operating costs was related to the COVID-19 pandemic *inter alia*, and is caused by the acquisition costs pertaining to safe working conditions and prevention.

The costs of public and stock exchange presence, stated as indirect costs, increased by 12% during the reporting period. This increase resulted from the verification, dividend payment and payroll accounting services used in relation to dividend payment in 2021.
As to the costs of public and stock exchange presence it should be noted that, for social responsibility considerations, PannErgy Group continues to attach high importance to supporting the cities and regions where existing projects are located, in the areas of sports activities and other social initiatives, thereby offering support to the end users of geothermal energy.

The substantial – 57% – decrease during the reporting period in the banking costs resulted from a higher base figure which in turn had been caused one-off impacts of the previous year's comprehensive refinancing transaction, booked among banking costs.

8. DIRECT COSTS OF SALES

	2021 HUF Mn	2020 HUF Mn
Direct depreciation (geothermal assets)	1,594	1,615
Maintenance and operating costs	1,014	896
Costs of goods sold, mediated services	849	840
Electricity charges	844	689
Facility maintenance costs, rental	387	374
Research and development costs	109	-
Insurance costs (directly related to production)	44	34
Maintenance materials	-	1
Other direct costs	18	30
Total	**4,859**	**4,479**

The direct costs of sales increased in the reporting period by 8% year-on-year. The amount of direct depreciation remained almost unchanged: in 2020 a total of HUF 1,615 million, while in 2021 HUF 1,594 million was booked by the Company as direct cost of depreciation on assets used directly in geothermal heat generation.

The growth of maintenance, operational and facility management costs is attributable to additional tasks relating to the operation and maintenance of the ever expanding assets of geothermal projects, along with efficiency improving and capacity increasing projects, higher operational/efficiency expectations and, *inter alia*, increased operational safety levels required in response to the pandemic.

In the "Costs of goods sold, mediated services" category, HUF 849 million was stated as expenses of sales not related to geothermal operations; they mostly consisted in re-invoiced ("pass-through") services, primarily that of the cost of electricity, in the context of the utilization of real properties owned by the Company in Debrecen. These are related expenses related to the HUF 841 million value of electricity sales and the HUF 91 million value of intermediated and re-billed services, mainly related to electricity re-billing.

The substantial – 22% – increase in the costs of electricity required for heat generation and sale was a result of the hefty price increase in the electricity market during the period concerned. The direct costs of power increased from HUF 689 million in 2020 to HUF 844 million in 2021. The Company dampens the impacts of the unfavourable market processes by continuously monitoring the spot and futures electricity market and by effective contracting activity.

HUF 109 million – stated among direct costs – was spent on research and development relating to geothermal production during the period under review.

9. HEADCOUNT AND WAGE COSTS

	2021	2020
Average statistical headcount (persons)	23	27
Wage cost (HUF Mn)	117	98
Other personnel-type payments (HUF Mn)	8	6
Taxes and contributions on wages (HUF Mn)	20	18
Total	**145**	**122**

The PannErgy Group's 2021 average statistical headcount was 23, substantially reduced from the 27 recorded in 2020. On 31 December 2021 the number of staff working for the PannErgy Group was 18, to be compared to the 19 recorded on 31 December 2020. The difference between the average statistical headcount and the number of employees is attributable to part-time employment across group members and the increased headcount during the year.

As in the preceding year, the PannErgy Group made no contributions to any voluntary pension fund for its employees in 2021 either.

10. Other expenditures

	2021 HUF Mn	2020 HUF Mn
Local taxes, duties, fines	124	123
Mining fee	74	70
Fines, penalties, default interest, compensations paid	3	2
Subsidies granted to offset costs	3	1
Cost relating to insurance events	2	2
Extraordinary write-off of tangible or intangible assets	-	43
Impairment losses of receivables	1	-
Other	12	6
Total	**219**	**247**

The most substantial (HUF 124 million) item that can be highlighted within the HUF 219 million portfolio of other expenses is made up of local taxes, most notably the local business tax paid to the local governments at the sites of geothermal projects. Another major item is the mining fee payable relating to geothermal heat production; under this heading the Company incurred expenditures of HUF 74 million in the reporting period.
No specific provisions were made during the reporting period.

11. Other incomes

	2021 HUF Mn	2020 HUF Mn
Aid received for development purposes	283	274
Ex post discounts received	59	-
Fines, compensation received	41	31
Profit on the sales of tangible assets	26	-
Income relating to insurance events	5	62
Other	20	12
Total	**434**	**379**

Within the HUF 434 million other income in the reporting year, the most significant item is development aid received, in an amount of HUF 283 million, comprising consists of the write-back of deferred income in proportion with the depreciation charge for the reporting year relating to non-repayable investment and development grants.

Compensations and penalties relating to insured events that occurred and projects that were implemented in earlier periods, as well as discounts received subsequently, made up a larger amount – HUF 105 million – in the category of other incomes during the reporting period than in the base period. The items in this category included penalties, compensations or other damage-related income-

type items received or acknowledged in relation to machine failures and service interruptions as well as ex-post discounts based on agreements.
In the reporting period the Company realised a profit of HUF 26 million on the sale of tangible assets, specifically from the sale and purchase transaction relating to the real properties owned by Pannergy Plc. in the town of Debrecen.

12. Financial incomes

	2021 HUF Mn	2020 HUF Mn
FX gains related to receivables	67	54
FX gains related to liabilities	14	14
Gains arising from dealing securities	13	1
FX gains on FX loans	10	-
FX gains related to FX accounts	3	23
Gains on derivative transactions	3	3
Interest and interest-type income	2	1
Gain arising from the fair valuation of securities	-	9
Total	**112**	**105**

Financial incomes included an amount of HUF 94 million in realized and unrealized exchange rate gains relating to various receivables and liabilities. The HUF 3 million FX gain on derivative transactions in the reporting year was earned on forward FX transactions, concluded in conformity with the trade payables of the PannErgy Group incurred in foreign currencies.

13. Financial expenditures

	2021 HUF Mn	2020 HUF Mn
Interest and interest-type expenses	295	285
FX loss related to liabilities	47	44
FX loss on FX loans	43	453
FX loss related to receivables	31	8
FX loss related to FX accounts	8	-
Loss arising from the fair valuation of securities	5	-
Loss on derivative transactions	-	128
Other financial expenditures	2	-
Total	**431**	**918**

Financial expenditures amounted in the reporting period to HUF 431 million down by a substantial HUF 487 million from the corresponding amount posted in the preceding period.

The most important item among financial expenditures is interests paid on credit and loan liabilities. HUF 295 million was booked for the reporting period under this heading. An amount of HUF 129 million was recognised as exchange loss on various foreign exchange items.

Of the financial profit/loss of the PannErgy Group during the reporting period the unrealised FX revaluation at the end of the period resulted in an overall loss of HUF 20 million regarding all types of assets and liabilities, having aggregated exchange rate gains and losses. In accordance with IFRS requirements, monetary items of the PannErgy Group carried in currencies other than the HUF – the functional currency – are converted into HUF at the exchange rate prevailing at the end of the period, and the (financially unrealised) exchange rate differences resulting from such conversions are recognised in the profit and loss account under financial transactions. The loss on the period-end revaluations is the result of a decrease of the HUF/EUR exchange rate relative to the previous periods.

Notwithstanding the momentary, unrealised or financial transaction effect of the aforementioned revaluation, the Company is not subject to any material long-term exchange rate risk in the course of its operation because it has a natural hedge position in view of the fact that on an annual level its income realised in foreign currencies adequately covers its costs (typically electricity charges) incurred in other currencies as well as its contractual debt servicing obligations, denominated in foreign currency, towards financial institutions having extended investment loans. The currency of FX items referred to above is always EUR.

As a consequence of the above, the PannErgy Group recognises a loss of HUF 319 million for the reporting period as profit/loss on financial transactions.

14. OTHER INFORMATION RELATING TO FINANCIAL TRANSACTIONS

	2021	2020
Opening EUR/HUF exchange rate	365.13	330.52
EUR/HUF exchange rate on 31 December	369.00	365.13
Annual change in the EUR/HUF exchange rate	3.87	34.61

15. Intangible assets

Gross value

data in HUF million

	Goodwill	Know-how	Valuable rights	Purchased software	Total
1 January 2020	518	2,261	105	42	2,926
Purchase	160	37	3	7	207
Sale	-	-25	-	-	-25
Impairment, write-off	-	-	-	-	-
Reclassification	-	-	-	-	-
31 December 2020	678	2,273	108	49	3,108
Purchase	-	151	-	-	151
Sale	-	-	-	-	-
Impairment, write-off	-	-	-	-	-
Reclassification	-	-	-	-	-
31 December 2021	678	2,424	108	49	3,259

Accumulated depreciation

	Goodwill	Know-how	Valuable rights	Purchased software	Total
1 January 2020	-	374	83	33	490
Increase	-	154	6	15	175
Sale	-	-25	-	-	-25
Impairment, write-off	-	-	-	-	-
Reclassification	-	-	-	-	-
31 December 2020	-	503	89	48	640
Increase	-	211	1	1	213
Sale	-	-	-	-	-
Impairment, write-off	-	-	-	-	-
Reclassification	-	-52	-	-	-52
31 December 2021	-	662	90	49	801

Net value

	Goodwill	Know-how	Valuable rights	Purchased software	Total
1 January 2021	678	1,771	19	1	2,468
31 December 2021	678	1,761	18	-	2,457

HUF 517 million of the HUF 678 million goodwill relates to the 7% minority participation in PannErgy Geothermal Power Plants Ltd. purchased in prior periods.
The HUF 160 million increase in goodwill during year 2021 was related to the Company's two project companies in the town of Miskolc, resulting from transaction whereby the Company purchased a 10% minority share in each of Miskolci Geotermia CPlc. and Kuala Ltd., both owned by MIHŐ Miskolci Hőszolgáltató Ltd. Another HUF 1 million goodwill resulted from the purchase of a minority interest in Szentlőrinci Geotermia CPlc. in earlier years.

On 31 December 2021 the Company performed the impairment test of the value of the goodwill relying on the future discounted cash flow forecasts of related cash-generating units; finding that the HUF 678 million value of the goodwill is its actual fair value, therefore no impairment needs to be recognized.

In addition to goodwill, the Group discloses a number of geothermal know-how elements among intangible assets, relating to deep geothermal exploration and drilling projects as well as the special expertise relating to the construction and operation of efficient systems geothermal systems. The inclusion of these high-value intangible assets in the financial statements is justified as specific future benefits attributable to the asset concerned can be linked to it. Based on the year-end calculations prepared relying on the management of the Group, it is possible to quantify the future cash flows arising from the exploitation of developments disclosed in the consolidated statement of financial position. These cash flows, broken down by cash-generating units, were compared, after discounting, with the tangible assets and goodwill of the cash-generating units as well as the book value of geothermal know-how owned by the Group. On this basis, no impairment needs to be recognized in the reporting period regarding assets stated among intangible assets.

16. TANGIBLE ASSETS

data in HUF million

Gross value	Marketable properties	Investment properties	Properties	Machinery and vehicles	Investment	Total
1 January 2020	3	115	16,933	8,617	36	25,704
Purchase	-	51	140	1,101	142	1,434
Capitalization	-	-	-	-	-6	-6
Sale	-3	-	-	-221	-	-224
Effect of fair value measurement	-	-	-	-	-	-
Reclassification to intangible assets or financial assets	-	-	-	-	-	-
Reclassification to/from marketable property	-	-	-	-	-	-
Other changes, write-off	-	-	-	-40	-28	-68
31 December 2020	-	166	17,073	9,457	144	26,840
Purchase	-	-	-	-	1,103	1,103
Capitalization	-	-	125	961	-1,086	-
Sale	-	-33	-	-20	-	-53
Effect of fair value measurement	-	-	-	-	-	-
Reclassification to intangible assets or financial assets	-	-	-	-	-	-
Reclassification to/from marketable property	-	-	-	-	-	-
Other changes, write-off	-	-	-	242	-	242
31 December 2021	-	133	17,198	10,640	161	28,132

Accumulated depreciation	Marketable properties	Investment properties	Properties	Machinery and vehicles	Investment	Total
1 January 2020	-	1	2,266	4,199	-	6,466
Increase	-	6	506	901	-	1,413
Sale	-	-	-	-227	-	-227
Reclassification, write-off, impairment	-	-	-	-25	-	-25
31 December 2020	-	7	2,772	4,848	-	7,627
Increase	-	12	705	664	-	1,381
Sale	-	-	-	-19	-	-19
Reclassification, write-off, impairment	-	-	-45	83	-	38
31 December 2021	-	19	3,432	5,576	-	9,027

Net value	Marketable properties	Investment properties	Properties	Machinery and vehicles	Investment	Total
1 January 2021	-	159	14,301	4,609	144	19,213
31 December 2021	-	113	13,766	5,065	161	19,105

In addition to its core operations comprising the production and sale of geothermal heat (Energy) the Company has industrial real properties and offices originating from before the time of the "Pannonplast - PannErgy" strategy shift in the town of Debrecen. These properties are categorised by the Company as investment property and utilised by letting. In the consolidated financial statements, investment property is carried at cost in accordance with the Accounting Policies in accordance with IAS 40. Investment properties are stated in the consolidated statement of financial position at HUF 113 million at the end of the reporting period.
Their fair value was HUF 121 million at the end of the reporting period.

The PannErgy Group posted HUF 1,595 million in the way of depreciation for the reporting period, of which HUF 213 million was for intangible assets, HUF 1,370 for tangible assets and HUF 12 million for investment properties. At the cost of property, plant and equipment, HUF 242 million related to other movements and scrapping is related to the increase in leases in accordance with IFRS 16 during the period. HUF 38 million was recognized in the line "reclassification, scrapping" under depreciation, which is also the effect of eliminating the current depreciation of the above-mentioned property, plant and equipment identified as leases in accordance with IFRS 16 and the interim result of the transformation transactions during the period.

Certain properties and machinery serve as collateral for outstanding investment loans. In this context, the following material restrictions of title or mortgages are registered as of 31 December 2021:

PannErgy	Financing entity	Amount of collateral charged to tangible assets	Collateral
Miskolci Geotermia Ltd. and Kuala Ltd.	UniCredit Bank Hungary CPlc. and CIB Bank CPlc.	HUF 11,368 million	Joint general mortgage on assets on all movable assets and on items of immovable property individually worth at least HUF 50 million (Refinanced investment loans for the Miskolc Geothermal Project)
Arrabona Koncessziós Ltd. and DD Energy Ltd.	Unicredit Bank Hungary CPlc. and CIB Bank CPlc.	HUF 12,368 million	Joint general mortgage on assets on all movable assets and on items of immovable property individually worth at least HUF 50 million (Refinanced investment loans for the Győr Geothermal Project)
Arrabona Koncessziós Ltd., DD Energy Ltd., Kuala Ltd., Miskolci Geotermia Ltd.	Unicredit Bank Hungary CPlc. and CIB Bank CPlc.	HUF 2,892 million	Joint general mortgage on assets regarding the assets of all development and extension projects covered by the investment credit facility agreement (movable and immovable)
DoverDrill Mélyfúró Ltd.	Budapest Bank CPlc.	HUF 250 million	Mortgage on assets, on the PannErgy Group's industrial property to be found in Debrecen and on movable assets acquired under the EDIOP application scheme.
Szentlőrinci Geotermia Ltd.	Széchenyi Bank CPlc.	HUF 540 million	General mortgage on assets (all movable assets and immovable properties)
PannErgy Plc.	Budapest Bank CPlc.	HUF 300 million	Securities deposited as collateral

The values of the collaterals cover nearly the entire portfolio of tangible assets, therefore they correspond to the tangible asset data contained in the consolidated financial statements. The total amount of the associated long and short term credit obligations is smaller than that of the collateral securities in the consolidated statement of financial position.
No tangible assets were revalued in the reporting period.

16.1. *Year-end valuation of high-value tangible assets*

Due to the special nature of geothermal projects, the PannErgy Group has high-value assets in several of its subsidiaries (production and injection wells, properties, heat centres, transmission systems, other assets). Because of the nature of the project, their cash-generating capacity is relevant only with regard to all the tangible assets related to the project considered as a cash-generating unit. For this reason,

each project is organized into a separate economic entity, and each group of assets is used in a single market.
As of 31 December 2021, an impairment test was performed in all PannErgy group members where the overwhelming majority of assets consists in tangible assets used in or directly related to production, irrespective of whether the Company has noted any indication of their impairment.

In the interpretation of the PannErgy Group, it is an indication of impairment if losses were suffered in the previous years or the reporting year, which may signal that the economic performance of the assets is weaker than the level envisaged upon installation.

Due to the special nature of the geothermal market, the year-end valuation and impairment test was performed relying on evaluation based on income generating capacity rather than on market comparison, cost-based evaluation or the residual goodwill method. Using this approach, the future benefits expected to be derived by the PannErgy Group from the ownership of the high-value assets were quantified, and the present value of these quantified benefits as future cash flows was estimated. Income-generating capacity was selected as the core benefit, i.e., the discounted present value of cash flows forecast by the detailed model was calculated for forthcoming years. In the impairment test the calculated value, as recoverable value, was compared with the aggregated book value of tangible assets and intangible assets as of 31 December 2021.
The model used for the calculation of the recoverable amount contains the following:

- an estimate of the envisaged level of future cash flows from the assets to be derived by the Companies defined as individual cash-generating units;
- the amounts and timing of these future cash flows;
- the time value of money and other factors based on the characteristics of the industry.

The impairment tests indicated that, in line with the requirements of *IAS 36*, the assets of the Group are recorded at a value not exceeding their recoverable amount, i.e. their book value does not exceed the amount recoverable through the use or sale of the asset; consequently, no impairment was recognized.

17. OTHER INVESTED FINANCIAL ASSETS

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Government securities	103	575
Total	**103**	**575**

During the period under review – like in the previous period – the Company invested a HUF 103 million part of its separated liquid assets, the use of which is subject to authorization by the funding financial institution, in government securities, blocked by the funding financial institution in the way of security deposit. To replace the government bonds which had been purchased in relation to the refinancing of the long term investment loans and which matured during the period under review, the Company purchased short term government securities – Discount Treasury Bills – at the time of renewal and this reallocation resulted in the decrease during the reporting period.

18. Financial assets (concession assets)

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Arrabona Koncessziós Ltd.'s investment in Győr	1,085	1,136

the PannErgy Group reported financial assets relating to concession agreements in an amount of HUF 1,085 million in its consolidated financial statements as at 31 December 2021, in conformity with the *IFRIC 12* interpretation. This financial asset comprises the costs of implementation (including the concession tender costs) of the production well established under the concession development project implemented in the context of the Company's Geothermal Project in Győr. The amount stated for the reporting period is based on the calculations of the returns on the assets.

The Company sealed a concession contract with the Hungarian State on the exploration, production and utilisation of geothermal energy in the Győr region, over a period of 35 years, with the option of an extension by 17.5 years. It was in the context of this concession project that the Company established its production well (BON-PE-03) at the village of Bőny.

19. Long-term receivables

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Other receivables	-	2

The PannErgy Group states no long term receivables in its consolidated financial statements as at 31 December 2021. Such receivables, stated in terms of amortised cost, were shown in this asset category last year which were linked to sale and purchase transactions where the Company agreed with the buyer on a long-term – over-year – payment schedule for part of the purchase price.

20. Lease receivables

The PannErgy Group had no lease receivable during the reporting period or the reporting period.

21. Inventories

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Materials	7	29
Total	**7**	**29**

The inventories shown in the 2021 consolidated financial statements include reserve maintenance materials purchased to provide for the efficient, safe and secure operation of the geothermal projects.

22. TRADE RECEIVABLES

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Trade receivables	1,415	1,719
Impairment loss provisioning for doubtful receivables, and provisions reversed	-1	-2
Total	**1,414**	**1,717**

Accounts receivable decreased by 18% year-on-year. The members of the PannErgy Group sell their products and services to a small number of buyers, mostly on the basis of long-term contractual arrangements. The trade receivables are non-interest earning items, with a 30-day term for the most part. In view of the stability of the relations between the Company and its buyers no significant impairment loss provision was set aside for any partner during the period concerned. Impairment loss provisions of HUF 2 million were reversed during the period concerned and HUF 1 million impairment provision was made for another buyer partner.

23. OTHER RECEIVABLES

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Other receivables from suppliers	339	-
Other tax receivables	210	237
Deferred items	62	97
Approved state grant not settled by the cut-off date	50	-
Other receivables associated with assignments	25	59
Advance payments made	12	16
Receivables from derivative transactions	4	-
Receivables associated with insured events	-	5
Other loans provided	2	3
Total	**704**	**417**

At the end of the period, the Company recorded HUF 339 million as other receivables from suppliers, the claims of which are damages, post-discounts and other settlements. The largest items in the category of other tax receivables in the company's books include VAT receivables and corporate income tax receivables in a total of HUF 201 million and HUF 23 million, respectively, each being receivable from the tax authority. A substantial amount of value added tax receivable is associated with the increased intensity of capital projects in the fourth quarter of the reporting period.

HUF 3 million and HUF 59 million of the deferred items of the next period are associated with the sales revenue, and the costs, respectively.

24. SECURITIES

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Securities held until maturity	526	260

The Company increased its short-term securities portfolio considerably during the reporting period. However, this meant primarily a restructuring of long-term securities, as detailed in Chapter 17 Other invested financial assets. It invested part of its separated liquid assets the use of which is subject to authorization by the funding financial institution in short term government securities, i.e. Discount Treasury Bills, which were blocked by the funding financial institution in the way of security deposit.

25. SUBSCRIBED CAPITAL

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Subscribed capital	421	421

On 31 December 2021 the subscribed capital amounted to HUF 421 million, unchanged year-on-year. The subscribed capital is stated in the financial reports in its total amount as issued, while the number of shares is presented net of the amount of treasury shares.

The subscribed capital comprises a total of 21,054,655 voting shares, of a nominal value of HUF 20 each. The ISIN identifier of the shares listed on the Budapest Stock Exchange: HU0000089867.

Before 21 November 2007 the Company (then called PannonPlast Műanyagipari Plc.) owned common shares (HU0000073440 ISIN) of a nominal value of HUF 100 each; the nominal value splitting procedure took place thereafter.

26. TREASURY SHARES

	31 December 2021	31 December 2020
Treasury shares (number)	4,658,644	4,189,970
Nominal value (HUF Mn)	93	84
Cost (HUF Mn)	4,845	3,184

On 31 December 2021 the Company held a total of 4,658,644 PannErgy Plc. treasury shares, 468,674 more than the stock of treasury shares held on 31 December 2020. The change was exclusively a result of an increase in the portfolio of treasury shares; no decrease occurred in the Company's portfolio of treasury shares.

The increase in the Company's portfolio of treasury shares in the reporting period is linked to the Company's treasury share repurchasing program that took place during the reporting period, in the framework of which 188,313 treasury shares were repurchased in 2021 H1, followed by the repurchase of 280,361 shares in 2021 H2.

With respect to the treasury share transactions, more detailed information is made available in the Company's public disclosures; moreover, details of the treasury share buyback programs started and completed during the reporting period are discussed in *Chapter 11 Treasury share buyback* of the Business and Management Report worked out on these basis of this consolidated financial statements.

27. Reserves

Reserves are detailed in the PannErgy Group's consolidated financial statements as follows:

	31 December 2021 HUF Mn	**31 December 2020 HUF Mn**
Capital reserve	10,516	10,516
Retained earnings	3,947	2,714
Other reserves	-956	-956
Total	**13,507**	**12,274**

The capital reserve is regarded to be associated with two historical events: the subscribed capital decrease upon the company's transformation into a one limited by shares, and the exchange rate gain resulting from share issue. The amount stated as capital reserve remained unchanged between the business years of 2021 and 2020.

The amount of the profit reserve equals the total amount of the profits accumulated by the PannErgy Group in the previous years, net of the dividends paid to shareholders.

In 2021 the Company resolved to actually pay a gross amount of HUF 15.15 per share to the shareholders entitled to dividends for the year 2020, i.e. a total of HUF 253 million was paid to shareholders, beginning from 14 July 2021. But for an amount of HUF 53,912 million the total of the prescribed HUF 253 million had been paid to shareholders by 31 December 2021. Due to the dividend payment made in the current year, the Company's retained earnings decreased by HUF 253 million.

More detailed information is provided regarding the dividend in the public disclosures. Details of dividend payments made during the period under review are presented in Chapter *10. Dividend payment* of the Business and Management Report prepared on the basis of these consolidated financial statements.

The Company shows an amount of HUF 100 million as difference resulting from modification of previous years as at 31 December 2021 among reserves in the Retained earnings line.

In connection with the current period company transformations affecting the subsidiary, a difference of HUF -16 million arising from the consolidation is recognized in the reserves under the Profit and Loss Account.
The other reserves line shows the exchange rate differences resulting from the consolidation of foreign subsidiaries sold in earlier years, together with the exchange rate losses on the sale of treasury shares.

The PannErgy Group's consolidated statement of financial position shows the aggregated amount of the reserve created for treasury shares and the general reserves in separate lines. The form of accounting and presentation complies with the requirements described in the *IAS 32 Financial instruments: Presentation and IAS 33 Earnings per share standard*s. The '*Treasury shares*' column of the consolidated statement on the changes in the Company's equity shows the book value – cost – of the current treasury share portfolios and movements, while the amount in the '*Reserve*' column of the '*Sales of treasury shares*' line presents the price difference recognized relative to the relevant book values as a result of the sale transactions concerned. No profit or loss is incurred upon the purchase of treasury shares, therefore no amount recognized among reserves within the equity capital.

28. MINORITY INTERESTS

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Balance as of 1 January	-	32
Reporting year profit or loss of subsidiaries attributable to minority shareholders (subsidiary, external)	-	-
Decrease/increase in minority interest due to the sales/purchase of subsidiary shares	-	-32
Balance as of 31 December	**-**	**-**

28.1. *Other changes involving minority interests during the reporting year*

No transactions involving minority shareholdings took place during the period concerned. The Company states no minority shareholdings as at 31 December 2021.

29. LONG-TERM LIABILITIES

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
HUF based loan secured with collateral	8,609	8,879
EUR based loan secured with collateral	2,541	2,703
Financial lease liabilities	83	4
Short-term part reclassified to short-term credits	-1,233	-1,133
Long-term loans, leases, total	**10,000**	**10,453**

The decrease in long term loans – in particular, EUR and HUF loans – resulted from repayments made during the period under review.

29.1. *Weighted average interest rate on long-term loans*

The interest rates applied to the outstanding EUR loans related to all of the project companies concerned, are based on the 6M EURIBOR, regardless of which financial institution provided the required funding. In view of this fact and the contractual interest margins the weighted average interest rate on the collateral covered EUR-based loans was 2.56% in view of the loan amounts as at 31 December 2021, equalling the ratio recorded as at 31 December 2020, taking into account the interest fixing effect of the interest swap transactions as well. Without the interest swap transactions the weighted average interest rate on the EUR-based loans would have been 2.13% on the cut-off date, however, the fixing of the interest rates on the investment loans by way of the interest swap transactions affords considerable predictability and significantly mitigates the interest rate risk faced by the Company. Most of the HUF-based loans secured with collaterals carry a fixed interest rate of 2.40% and 2.50%, some carry fixed rates of 2.00% or 1 month BUBOR plus 1.85 – 2.00%. In the reporting period, their weighted average interest rate was 2.48% based on the credit amounts on 31 December 2021, higher than the rate 2.39% observed on 31 December of the previous financial year, in line with the interest changes in the subject period.

29.2. *Maturity dates of the long-term loans*

HUF 5,236 million of the total of HUF 10,000 million amount of long-term loans and leases is made up of items maturing in 1-5 years, while HUF 4.,764 million is made up of items maturing in over 5 years. Within this item, HUF 5,153 million and HUF 4,764 million of the total of HUF 11,150 million HUF- and EUR-based credits that are secured by collaterals mature within 1-5 years, and beyond 5 years, respectively, while HUF 83 million of financial lease liabilities mature within 1-5 years.

29.3. *Lease liabilities recorded among long-term liabilities*

The significant increase in lease liabilities stems from the long term lease contracts relating to special geothermal installations and equipment used for the Company's geothermal projects. The Company leases such assets in a long term, and the long term lease liability is calculated against the cost of the leased assets on the basis of the present value of the lease fees expected to be paid by the Company during the lease term as specified in IFRS 16 Leases. In relation to such leased assets – used in geothermal heat generation – the Company showed HUF 73 million in the way of long term lease liabilities among Long-term loans, leases, as at 31 December 2021. Furthermore, of HUF 10 million was stated as long term lease liabilities for the lease of motor vehicles at the end of the reporting period.

29.4. *Other long-term deferred incomes*

	2021 HUF Mn	2020 HUF Mn
Other long-term deferred incomes	3,989	4,227
Short-term part of the long-term incomes	-285	-240

Other long-term deferred incomes, total	**3,704**	**3,987**

It is among the other long-term incomes that the Company states – in connection with its energy industry projects – the over-year part of the non-repayable grants won for its projects through application schemes, while the short-term part is stated among short-term liabilities; the latter is recognized in the consolidated profit & loss account among other incomes, as a result of the reversal (in proportion with depreciation) of assets associated with application schemes.

PannErgy Group level long-term deferred incomes comprise the over-year part of the non-repayable grants won in the context of application schemes for the geothermal projects, while in the individual unconsolidated balance sheet they are stated among deferred liabilities. The short-term part is stated among short-term liabilities.

29.5. *Details of aids relating to deferred revenues*

HUF Mn

Group entity	Project ID	Eligible investment cost	Aid granted	Aid drawn down	Aid deferred income (liability)
Szentlőrinci Geotermia Ltd.	KEOP-4.2.0/B-09-2009-0026	883	442	427	320
Berekfürdő Energia Ltd.	KEOP 4.4.0/A/09-2009-0009	250	125	125	36
DoverDrill Mélyfúró Ltd.	GINOP-2.1.2-8-1-4-16-2017-00166	1,250	500	450	395
Miskolci Geotermia Ltd.	KEOP 4.7.0-2010-0001	632	316	314	221
Miskolci Geotermia Ltd.	KEOP 4.2.0/B-11-2011-0007	2,856	1,000	1,000	687
Miskolci Geotermia Ltd.	GOP-1.2.1/B-12-2012-0005	323	162	148	24
Kuala Ltd.	KEOP 4.7.0/11-2011-0003	619	309	309	254
Kuala Ltd.	KEOP-4.10.0/B-12-2013-0012	2,836	1,000	1,000	689
DD Energy Ltd.	KEOP-4.10/B-12-2013-0010	3,997	1,000	1,000	674
Arrabona Koncessziós Ltd.	KEOP-4.10/B-12-2013-0011	3,509	1,000	992	689

Government aids as of 31 December 2021 were stated in the consolidated statement of financial position in the form of long term and short-term (shorter than one year) deferred incomes (HUF Mn):	**3,989**

Each of the above projects fall into the category of project implementation. The project objective is geothermal energy utilisation in the case of the KEOP (Environment and Energy Operational Programme, EEOP) application schemes, the procurement of assets in the case of GOP (Economic Development Operational Programme, EDOP) tenders, and research & development in the case of GINOP (Economic Development and Innovation Operational Programme, EDIOP).

The expiry of the maintenance periods relating to the various projects implemented under application schemes do not influence the aid reversals because they are linked to the useful life period associated with each asset acquired from aid money.

The records of PannErgy Group show no grant advance in relation to the application schemes. At the end of the reporting period the Company stated other receivables in an amount of HUF 50 million in relation to DoverDrill Mélyfúró Kft's GINOP application, in relation to an amount of grant, awarded under a grant contract but not disbursed yet; this item had been financially settled by the reporting date.

30. SHORT-TERM CREDITS

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Short-term part of long-term credits	1,233	1,133
Other short-term credits	230	100
Short-term part of long term lease liabilities	133	7
Total	**1,596**	**1,240**

30.1. *Short-term part of other long-term deferred incomes*

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Short-term part of other long-term deferred incomes	285	240
Total	**285**	**240**

The part of the grants won under application schemes relating to geothermal projects which can be used within a year, which is recognized in the profit & loss account among other incomes in proportion with the depreciation of the intangible assets and tangible assets directly involved in the application scheme.

31. PROVISIONS

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Opening balance as of 1 January.	-	-
Provisioning	-	-
Reclassification of provisions	-	-
Release of provisions	-	-
Closing balance as of 31 December	**-**	**-**

The Company did not form or release specific provisions in relation to contractual liabilities stemming from binding contracts, or to financial obligations expected to stem from lawsuits during the reporting period.

In its consolidated statement of financial position for reporting year and previous years, the PannErgy Group discloses no provisions for environmental or revegetation liabilities, costs of redundancy programs or employee pensions. It has no such obligations other than the contributions paid to the public pension system.

32. OTHER SHORT-TERM LIABILITIES

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Deferred items	392	23
Tax and contribution liabilities	206	213
Wages and social security	11	9
Other liabilities	5	6
Other short-term liabilities, total	**614**	**251**

Of the HUF 392 million of items deferred to the next period HUF 260 million is associated with revenues, while HUF 132 million is the sum of the costs relating to the next period, of which HUF 131 million is the amount of interests payable for the next period.

At the end of the reporting period the Company's records show tax and contribution liabilities in a total amount of HUF 206 million, of which the largest items are made up of VAT liabilities relating to transactions settled during the reporting period in a total amount of HUF 173 million, and the mining annuity liabilities of the project companies engaged in geothermal heat generation, in a total amount of HUF 24 million.

The most significant item is made up of other liabilities in an amount of HUF 4 million, stemming from the earlier dematerialisation of shares.

33. Taxation, income tax

33.1. *Income tax payable for the reporting year*

	2021 HUF Mn	2020 HUF Mn
Tax liabilities for the reporting year	10	22
Effect of deferred taxes	57	3
Total	**67**	**25**

The group's tax corporate tax liability for the reporting year is calculated on the basis of the taxable income of each member according to the relevant domestic rules. As in the previous period a 9% corporate income tax rate is applied to each member of the PannErgy Group.

The local business tax payable to the municipal governments concerned is stated by the Company – in accordance with its accounting policy – not among the income tax items but as part of its other expenditures.

33.2. *Receivables from deferred taxes*

In the assessment of the deferred tax assets and liabilities the following amounts of receivables from deferred taxes were stated among the assets:

	2021 HUF Mn	2020 HUF Mn
Amounts recovered from deferred losses	75	40
The difference stemming from depreciation according to the Accounting Act and the depreciation according to the Tax Act	-6	22
Tangible assets depreciation difference from consolidation	185	201
Receivables from deferred taxes (gross)	*254*	*263*
Deferred tax liabilities (gross)	*-71*	*-23*
Deferred tax to be recognized (net)	**183**	**240**
Deferred tax recognized in previous year	240	243
Deferred tax recognized/reversed	-57	-3
Receivables from deferred taxes as of 31 December	**183**	**240**

The deferred tax receivable of HUF 183 million stated among fixed assets comprises the 9% corporate income tax payable for the unused negative tax bases of the subsidiaries belonging to the PannErgy Group on the one hand, and on the other hand, for other deferred tax modifying items under the IFRS rules.

The deferred tax receivables stemming from accrued and deferred losses is based on the controlled deferred tax recovery of the subsidiaries concerned. The Company decided to apply a five-year period regarding accrued and deferred losses instead of the previously applied the-year period, in accordance with the *IAS 12* standard recommendations.

The total gross amount of the deferred tax receivable is HUF 254 million. This is reduced by another HUF 71 million by the amount of the reporting year's deferred tax liability relating to the development reserves.

Since these deferred tax receivables and liabilities are to be settled with the same tax authority, their amounts are netted as prescribed by the IFRS, leaving HUF 183 million in the way of deferred tax receivable in the consolidated financial statements.

33.3. *Calculation of the effective income tax*

The difference between the expected income tax figures calculated by multiplying the individual pre-tax profit figures stated in the profit & loss accounts of the members of the PannErgy Group with the income tax rates applying to them, and the corporate income tax figures actually stated in the profit & loss accounts, is calculated as follows:

	2021 HUF Mn	2020 HUF Mn
Profits before taxes (individual companies)	**1,005**	**253**
The tax payable on the basis of the member company's profit/loss at the applicable tax rate (9%)	90	23
Effects of different tax rates (minimum profit tax)	1	4
Tax implications of non-deductible expenditures, effects of differences in depreciation and other tax-decreasing items	-67	26
Tax allowances	-11	-22
Use during the reporting year of the negative tax base carried over from previous years	-3	-9
Tax liabilities for the reporting year	**10**	**22**
Write-off of tax receivables assessed earlier for negative tax bases	**57**	**3**
Income tax (as per the profit & loss account)	**67**	**25**

34. Earnings per share

	2021	2020
Profit/loss, attributable to shareholders of the Company (HUF Mn)	897	236
Number of shares issued less the number of treasury shares	16,396,011	16,864,685
Profit/loss per share (HUF)	**54.71**	**14.01**
Diluted profit/loss per share (HUF)	**54.71**	**14.01**

There is no difference between the profit/loss per share the diluted profit/loss per share at the end of the reporting period since the Company calculates the diluted profit/loss per share without taking into account any adjustment factor, unlike the way it did in the base period.

35. LIQUID ASSETS AND CASH EQUIVALENTS

The PannErgy Group had the following portfolio of liquid assets and cash equivalents as of 31 December 2021:

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Bank account and cash at hand	1,061	496
Separated, blocked cash	215	170
Cash and cash equivalents	**1,276**	**666**

Certain amounts in regard to which use for purposes other than the account holder's own business operations is subject to the financing institution's consent are stated in the bank account and cash at hand.

Those stated among the separated blocked cash items are amounts on accounts managed by financial institutions, blocked as collaterals for loan repayment, and not accessible by the borrowers.

The Company's government securities of HUF 103 million are stated among fixed assets, while the portfolio of Discount Treasury Bill securities worth 526 million are shown among current assets.

36. TRADE PAYABLES

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Trade payables	704	815
Total	**704**	**815**

At the end of the reporting period the Company's trade payables amounted to 10% less year-on-year.

37. Financial instruments

The members of the PannErgy Group hold financial instruments of the following categories:

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Financial assets	**2,772**	**2,984**
Financial assets available for sale (AFS)	***629***	***835***
Other invested financial assets (government securities)	103	575
Securities	526	260
Loans and Receivables (LAR)	***2,141***	***2,147***
Loans provided	2	3
Trade receivables	1,414	1,717
Other short term receivables, prepaid income taxes	721	427
Financial instruments held to maturity (Held to Collect, HTC)	***4***	***2***
Long term financial receivables	-	2
Financial instruments, Fair Value to Profit and Loss (FVTPL)	**4**	**-**
Derivative transactions	4	-
Financial liabilities	**12,914**	**12,759**
Other financial liabilities	***12,914***	***12,759***
Trade payables	704	815
Long-term loans, lease liabilities	10,000	10,453
Short-term loans, lease liabilities	1,596	1,240
Other financial liabilities	614	251
Financial liabilities, Fair Value to Profit and Loss, (FVTPL)	**-**	**-**
Derivative transactions – liabilities	-	-

The Company shows primarily the purchased debt securities regardless of maturity, and its participations in other companies, among its marketable financial assets. The portfolio of marketable financial assets comprises participations of or below 50%, along with other participations that are not consolidated for other reasons, but the company shows no such asset in its statements at the end of the reporting period. Among its other financial investments, the Company shows government securities in an amount of HUF 103 million and short-term securities held for trading, in an amount of HUF 526 million. It invested part of its separated liquid assets the use of which is subject to authorization by the funding financial institution in long- and short-term government securities for investment: HUF 103 million in government bonds and HUF 526 million in discount Treasury bills.

The Company shows purchased debt securities among the loans and receivables, and on account of their very nature, it is also here that it can show the trade receivables and the loans it has provided.

Loans are recognized by the Company among the current assets. The value of loans and receivables are initially shown at fair value, and thereafter at amortized cost, in its IFRS consolidated financial statements, using the effective interest rate method.
The Company states its non-derivative financial assets with fixed or determinable payments, which it positively intends to keep, and is capable of keeping, until maturity, among its financial instruments held-to maturity. The Company shows its outstanding purchase price receivables associated with the sale of assets, entailing long term scheduled payments to be made by the Company, among its financial instruments to be held to maturity; the receivables are of the held to maturity status.

Receivables associated with futures transactions, swap transactions are recognized by the Company as financial assets evaluated at fair value against the profit or loss, while liabilities connected with similar transactions are shown as financial liabilities evaluated at fair value against the profit or loss.

All other financial liabilities not carried at fair value through profit or loss – primarily trade payables, loan and credit liabilities, other short-term liabilities. – are recorded under other financial liabilities. Initially, trade payables are recognized at fair value, while subsequently they are measured at amortized cost that are defined with the effective interest method.

38. Share-based benefits

The Company had no share option program in place during the base period or the reporting period; accordingly, no such evaluation is carried out at the end of the reporting period. No share-based allocation occurred at the Company during the reporting period.

39. Impairments

IAS 36 impairments booked by the PannErgy Group during the reporting period:

2021				HUF Mn
	Impairments, opening balance	**Impairment provisioning**	**Impairment reversal**	**Impairments, closing balance**
Trade receivables	2	1	2	1
Total impairment	**2**	**1**	**2**	**1**

2020				HUF Mn
	Impairments, opening balance	**Impairment provisioning**	**Impairment reversal**	**Impairments, closing balance**
Trade receivables	2	-	-	2
Total impairment	**2**	**-**	**-**	**2**

No impairment provisioning and reversal were recognized during the reporting period regarding tangible assets and inventories. HUF 2 million impairment loss provision made earlier was reversed in connection with the derecognition of trade receivables during the reporting period. HUF 1 million impairment loss provision was made at one of the project companies on the basis of the rating of an overdue trade receivable item at the at the end of the period.

40. OFF-BALANCE SHEET LIABILITIES AND COMMITMENTS

40.1. *Contractual and investment obligations*

The PannErgy Group has no material contractual investment commitment as at the end of the reporting period.

Commitments relating to asset management transactions

In concluding asset management type transactions (sale and purchase of shares and other assets) the Company provides reasonable guarantees to secure the economic contents of the transactions. To the best of its knowledge the Company's management expect no obligation to perform significant tasks under the guarantees provided.

40.2. *Other contingent liabilities*

40.2.1 Assets relating to funding by financial institutions, restriction of titles

Collaterals of various types were provided at the end of the reporting period for the funding financial institutions under external financing agreements concluded by members of the PannErgy Group in amounts of HUF 8,839 million and EUR 6,888 million. The collaterals concerned include pledges on receivables, movables, other assets, and bank accounts, as well as collaterals and provided guarantees for funding financial institutions. These are detailed in note *16. Tangible assets*.

40.2.2 Contingent commitments relating to application schemes

Pursuant to Government Decree 358/2014 (XII. 29) and other related legislation since 1 January 2015 beneficiaries with at least one full closed business year, listed in the NTCA's register of taxpayers free of tax debt obligations are no longer obliged to provide guarantees in relation to funds received from the European Regional Development Fund or the European Social Fund. Accordingly, the PannErgy Group is relieved from the obligation to provide such guarantees in relation to applications regarding all of its applications now in the project maintenance phase.

40.2.3 Other contingent commitments to external parties

PannErgy Geothermal Power Plants Ltd. has a joint and several guarantee in place in connection with the Miskolc Geothermal Project towards one of the heat receiving customers for commitments stemming from potential future loss events, in the amount up to HUF 100 million in the case of Miskolci Geotermia Ltd. and without a value limit for Kuala Ltd. No future cash outflow is expected in relation to this contingent commitment, therefore no specific provision needs to be formed.

40.2.4 Lease transactions

The minimum aggregated amounts payable in the future under non-cancellable operating lease agreements are shown in the following table in a breakdown by maturity:

	31 December 2021 HUF Mn	31 December 2020 HUF Mn
Within 1 year	133	25
Over 1 year but within 5 years	83	28
Over 5 years	-	-
Total	**216**	**53**

The significant increase in operating lease liabilities stems from the long-term lease contracts relating to special geothermal installations and equipment used for the Company's geothermal projects. The Company leases such assets in a long term, and the long-term lease liability is calculated against the cost of the leased assets on the basis of the present value of the lease fees expected to be paid by the Company during the lease term as specified in IFRS 16 Leases. In relation to such leased assets – used in geothermal heat generation – the Company showed HUF 73 million in the way of long-term lease liabilities among Long-term loans, leases, as at 31 December 2021. HUF 124 million is the amount of the short-term liabilities – due within one year – relating to rental arrangements categorised as lease under IFRS 16. Moreover, the Company has HUF 9 million and HUF 10 million short term and long-term lease liabilities, respectively, under motor vehicle lease contracts.

In accordance with *IFRS 16 Leases* THE Company carried out another assessment of the details of the lease contracts in place during the reporting period, finding that the above lease fees cover no acquired valuable rights, i.e. they are lease liabilities relating solely to lease fee payments.

No assets are rented or leased from the Company under lease type arrangements on account of which the IFRS 16 provisions would be applicable.

41. FINANCIAL RISK MANAGEMENT

41.1. *Financial risk factors*

The PannErgy Group is exposed to the following types of financial risks through its operations: market risk including exchange rate risk, price risk, fair value interest risk, cash flow interest risk, lending risk and liquidity risk.

41.2. *Market risk*

41.2.1. Exchange rate risk

Some of the Company's operations involve foreign currencies and it issues its invoices in EUR as stipulated in the relevant agreements. Part of the Company's liabilities are denominated in EUR, most of them stemming from EUR-based long term investment loans taken out for the implementation of geothermal projects, and many of its foreign and domestic suppliers also issue invoices in EUR. Such assets and liabilities involving settlements in foreign currencies entail risks resulting from fluctuations in currency rates – particularly, the EUR rates – which the PannErgy Group uses its best efforts to mitigate, primarily by maximizing the coverage of its EUR loan debt liabilities by the abovementioned EUR-based revenues.

The Company occasionally concluded FX forward transactions in 2021, mitigating the risk of exchange rate losses on the settlement of its future payables to be incurred in foreign currencies. These transactions were not cash-flow hedge transactions; the gains and losses on such transactions during the reporting year appear in the financial incomes and financial expenditures categories in its consolidated financial statements.

In view of the PannErgy Group's foreign exchange receivables and liabilities, and assuming a 10% increase/decrease relative to the 31 December 2021 EUR/HUF rate, with the forint being the functional currency, the positive/negative effects on the profit are presented in the table below:

Description	EUR		USD	
	2021.	**2020.**	**2021.**	**2020.**
Resulting change in profit/loss in HUF Mn	-238	-255	-	-

Details of EUR-based items (change in HUF Mn):

	EUR amount, 2021	**Change in profit as a result of 10% change in exchange rate**	**EUR amount, 2020**	**Change in profit as a result of 10% change in exchange rate**
Trade receivables	1,265	47	1,561	57
Trade payables	870	-32	1,149	-42
FX credits	6,888	-253	7,403	-270
Total		**-238**		**-255**

41.2.2 Price risk

The Company runs no risks relating to exchange traded commodities or financial instruments. Mention should be made here, however, despite it being essentially a regulatory risk, of the fact that the selling price of the bulk of the geothermal heat sold by the PannErgy Group's members engaged in generating and selling geothermal heat is a regulated price, which is reviewed and in some cases modified annually by the competent authority, that is, the Hungarian Energy and Public Utility Regulation Authority (HEA). This may influence the PannErgy Group's profitability through the future selling prices. The Company mitigates this risk by continuously monitoring the factors having an impact on regulatory pricing.

41.2.3 Cash flow and fair value interest risk

The interest rate risk facing the PannErgy Group results primarily from its long-term investment loans. Owing to the variable interest rates applying to its loans the Company is exposed to a cash-flow interest rate risk which is only partly offset by variable-rate financial assets; therefore the Company faces a fair value interest rate risk stemming from its fixed-rate loans.

The Company's long-term FX loan portfolio was worth HUF 2,542 million (EUR 6,888 million) at the end of 2021, while its forint loan portfolio amounted to HUF 8,839 million, to be compared to the HUF 2,703 million (EUR 7,403 million) worth of FX loan portfolio and the HUF 8,879 million forint loan portfolio stated at end-2020. The interest rates applying to the FX loans are typically based on the 6M EURIBOR, while those on the HUF loans are typically fixed 2.50% and 2.40% rates.

The PannErgy Group applies a dynamic analysis to its exchange rate risk exposure, through simulating a series of different financial models, factoring in refinancing, the renewal of existing positions and the involvement of alternative funding sources. It is these scenarios on the basis of which the Company calculates the effect of the interest rate fluctuations on the profit and loss figures. The Company uses the same fluctuations in the interest rates applying to each of the relevant currencies in its various models. Models are only developed for the liabilities involving the main interest bearing positions.

To mitigate the interest rate risk entailed by its investment loans the Company has replaced the interest bases applying to its 6M EURIBOR-based variable-rate loans with fixed interest rates for the entire remaining term of each loan via interest rate swap (IRS) transactions, taking advantage of the previous favourable interest rate environment. The interest rates fixed under the above transactions will remain unchanged even if market rates should increase in the future, therefore no such risk will be borne by the Company. The results of the interest rate swap transactions during the reporting period are shown in the financial incomes or the financial expenditures, as the case may be.

The Company's interest sensitivity is characterized by the fact that a 1% increase in interest rates would have resulted in a HUF 112million increase in the Group's profit at the end of 2021, in contrast to the additional cost of HUF 117 million that would have been recorded at end-2020, assuming an unchanged portfolio of principal debt relative to the cut-off date of the reporting period and that of the base period. A 1% decrease in the interest rates would entail the opposite effect. The Company increased the proportion of the loans denominated in HUF by refinancing transactions before the reporting period, as a consequence of which the proportion of the HUF loans had increased to 78% by 31 December 2021, substantially reducing the interest rate risk on the loans denominated in EUR. Through its above-mentioned interest swap transactions however, whereby it replaced the variable interests on the investment loans with fixed rates, the Company eliminated even this modest interest rate risk.

41.3. *Lending risk*

The lending risk is a financial risk of loss from potential non-performance of any contractual obligation by any of the Company's buyers, primarily in the form of failure to settle invoices. It should be noted in particular that the Company sells its products and services to a handful of customers, resulting in a limited degree of diversification.
Lending risk management is a group function. It is a responsibility for the members of the PannErgy Group to analyse and manage lending risks relating to their new customers before working out and offering terms and conditions of payment and delivery as befits their normal of business operations.
The lending risks faced by the PannErgy Group stem from liquid assets and cash equivalents, the bank deposits and security deposits placed with financial institutions as well as the exposure to buyers through the sale of energy, including receivables and transactions under which the Company assumes commitments. The Company manages its lending risks by detailed continuous buyer rating and

effective receivable monitoring. Customers are rated on the basis of their creditworthiness and their credit limits are determined on the basis of their financial positions, financial data, historical performance and other factors, by the PannErgy Group's Finance and Treasury group. The Company monitors draw-downs from the credit limits. Its customers always pay for their purchases by bank transfers. No credit line was exceeded during the reporting period, and management does not expect losses from default on the part of the relevant partners. Buyers' debts (trade receivables) are assessed and actions are taken, as necessary, regarding each buyer individually, at the end of the year.
The trade receivables are shown, in a breakdown by time past due, in the following table:

HUF Mn

	Total	Before due date	1-90 days past due	91-180 days past due	181-360 days past due	over 360 days past due
Trade receivables	1,414	1,414	-	-	-	-

Items before due date are trade receivables whose due date – specified in the invoice or in the payment agreement –is beyond the cut-off date of the statement of financial position. Among past due items the 1-90 days past due category includes items whose due date for payment has passed by not more than 90 days, and the same principle applies to the other past due categories as well. The due date is always the date specified for payment in the invoice concerned. These are checked in the light of the statement's cut-off date and the buyer concerned, together with the liability, is assigned to the past due category depending on the number of days by which the due date had passed by the cut-off date.

PannErgy Group's liquid assets and securities as at 31. December 2021 are presented in relation to the lending risk in a breakdown by time to maturity:

31/12/2021 HUF Mn

Conditions	**<1 month**	**1-3 months**	**3-12 months**	**1-5 years**	**>5 years**	**Total**
Non-interest bearing, or sight	1,276	-	-	-	-	1,276
Variable rate	-	-	-	103	-	103
Fixed rate	-	506	20	-	-	526
Total	**1,276**	**506**	**20**	**103**	**-**	**1,905**

31.12.2020 data in HUF million

Conditions	**<1 month**	**1-3 months**	**3-12 months**	**1-5 years**	**>5 years**	**Total**
Non-interest bearing, or sight	666	-	-	-	-	666
Variable rate	-	-	-	-	218	218
Fixed rate	-	-	547	69	-	616
Total	**666**	**-**	**547**	**69**	**218**	**1,500**

The company's liquid assets are stated in the category of non-interest bearing or sight assets, while the Company's securities shown among its fixed assets and current assets are stated in the category of variable and fixed rate assets. The securities in the longer than five-year category are either investment units without maturity or corporate bonds with maturity periods exceeding five years.

41.4. *Liquidity risk*

Liquidity risk is the risk of the company's incapacity to settle its financial liabilities upon their respective due dates. The purpose of liquidity management is to ensure that sufficient funds are available to settle liabilities when they fall due. The Company's approach to liquidity management is aimed at providing sufficient liquidity, to the extent possible, for the settlement of liabilities on their respective due dates under both regular and tight conditions without incurring unacceptable losses or putting its reputation at risk. Adequate liquidity is maintained by adjusting the terms of the funding sources to the lifecycles of its projects. Cash-flow forecasts are worked out by the PannErgy Group's Finance and Treasury group, besides the monitoring of rolling forecasts regarding the satisfaction of the Group's liquidity requirements, in order to maintain a portfolio of liquid assets as required for the Group's operations, while keeping up sufficient manoeuvring room concerning the available credit limits to ensure that the Company does not exceed any of its limits and can deliver the debt required servicing ratios to the financial institutions concerned. The cash-flow forecasts that are based on the financial settlement of trade payables, loan repayments as well as contractual and other incomes are worked out in view of the PannErgy Group's financial plans, the need to maintain the ratios stipulated in contracts as well as all relevant regulatory and statutory regulations.
The financial liabilities in a breakdown by time to due date:

31/12/2021

	Érték	0-6 hó között	6-12 hó között	1-2 év között	3-5 év között	5 éven túl
Non-derivative financial liabilities						
Loans	11,596	679	918	1,356	3,879	4,764
Trade payables	704	704	-	-	-	-
Other financial liabilities	614	614	-	-	-	-
Derivative financial liabilities	-	-	-	-	-	-

The above table is a collection of the amortized costs of the Company's financial liabilities in terms of their nearest possible maturity dates.
Besides trade payables other short-term liabilities appear in the cash-flow forecasts with due dates corresponding to their respective types: taxes and contributions and other liabilities relating to salaries and wages are settled within 30 days, while other liabilities are settled on the dates specified in the underlying contracts or other documents, but not beyond one year.

41.5. *Capital management*

The Company's purpose in the management of its capital structure is to maintain continuous operability in order to generate profits for its shareholders as well as to minimize the costs of capital through optimized capital structure. To ensure that adequate capital structure is maintained, and/or adjusted as appropriate, the Company's management makes decisions or proposals concerning the amount of dividends to be paid, or capital repayments to be made, to the shareholders. In certain cases – and with the support of the General Meeting – the management may, also in the context of capital management, make decisions on issuing new shares or selling assets. The management affirms that the Company meets the applicable statutory capital requirements, based on its assessment as stipulated by the provisions laid down in Act V of 2013 on the Civil Code. Data on the equity and its ratio to the subscribed capital are presented in the following table: The positive amount of the equity was significantly larger than the subscribed capital in both the reporting period and the preceding period.

	31 December 2021 HUF Mn	**31 December 2020 HUF Mn**
Subscribed capital	421	421
Total equity capital	9,980	9,747
Equity / Subscribed capital	**23.71**	**23.15**

41.6. *Offsetting of financial assets and financial liabilities*

In the case of financial assets and liabilities that are subject to a mandatory offsetting arrangement or a similar agreement the agreement between the Company and the other party permit offsetting of the given financial assets and liabilities only if both parties opt for this type of clearing. No such agreement or decision is in place in the PannErgy Group, therefore financial assets and liabilities are cleared and settled in terms of gross amounts.

41.7. *Regulatory risk*

In discussing the general regulatory risks it needs to be noted in particular that the selling price of the bulk of the heat sold by certain project companies engaged in heat generation and sale is subject to regulatory pricing, which is regularly reviewed and even adjusted by the pricing authority, thereby limiting the Company's profitability, resulting in considerable uncertainty concerning future sales prices, which the Company is managing by efficient and effective operative and strategic controlling over its operational activities.

41.8. *Technological risk*

Geothermal energy production entails unforeseeable risks, stemming from the unpredictable availability of the geothermal energy resources as well as the tolerance of the equipment used, to the unconventional operational environment. To mitigate this risk the Company prepares every one of its geothermal projects in a prudent way, the collection and detailed assessment and evaluation of all accessible data and information that may affect its implementation.

41.9. *Pandemic risk*

The expected human and economic impacts of the various mutants of the pandemic caused by the COVID-19 virus that broke out in 2019 and that was declared a pandemic in 2020 will affect a wide variety of segments and areas at both society and economy, as well as economic participants; their effects can only be roughly estimated and, as such, carry substantial risks. Given its very nature, the operation of the Company are not expected to be severely restricted by the pandemic's potential future adverse consequences; this is explained in more detail in chapter *3. The impacts of the Covid-19 pandemic on the Company's report* herein.

41.10. *Risk associated with the Russian – Ukrainian war*

On February 24, 2022, a war broke out between Russia and Ukraine. In response, the European Union and other international actors have imposed wide-ranging, comprehensive economic and other legal sanctions on Russia in various areas. Both the war and the sanctions imposed and imposed in the future could have significant direct and indirect economic consequences for PannErgy's operating environment. Their determination cannot be estimated at the time of preparation of these consolidated financial statements. Based on the available information, the Company's operations are expected to be affected only to a limited extent by the possible negative consequences of the war. The Company has no exposure to Russian or Ukrainian customers, suppliers or financiers.
In addition to the above, it is important to emphasize that the Company's geothermal heat generation activities directly contribute to reducing Hungary's energy dependence on external market participants and conditions.

42. PARTICIPATIONS

42.1. *Consolidated subsidiaries*

	Share capital (HUF Mn)	Shareholding (%)	Voting rights (%)	Consolidation ratio
PannErgy Geothermal Power Plants Ltd.	2,072.70	100.00	100.00	100.00
DoverDrill Mélyfúró Ltd.	86.00	100.00	100.00	100.00
Arrabona Koncessziós Ltd.	6.10	100.00	100.00	100.00
TT Geotermia CPlc.	6.00	100.00	100.00	100.00
Szentlőrinci Geotermia Ltd.	5.00	100.00	100.00	100.00
Miskolci Geotermia Ltd.	5.00	100.00	100.00	100.00
DD Energy Ltd.	3.10	100.00	100.00	100.00
Kuala Ltd.	3.00	100.00	100.00	100.00
Berekfürdő Energia Ltd.	3.00	100.00	100.00	100.00

The ratios presented above show the respective shares of ownership and voting rights of PannErgy Plc. and PannErgy Geothermal Power Plants Ltd. in the various subsidiaries. The consolidated ratios are the same as the respective shares of ownership. PannErgy Plc., the parent company, has a 100% share of ownership in PannErgy Geotermikus Erőművek CPlc. the Group's technical/professional leader company, which in turn is 100% direct owner of all PannErgy project companies and group member companies.

42.2. *Changes affecting investments and participations during the reporting year*

The following transactions involving/affecting investments and participations took place during the reporting period:
Of the consolidated members of the PannErgy Group, Well Research Ltd. merged into Miskolci Geotermia CPlc. as of 30 June 2021, whereby it was terminated, and Miskolci Geotermia CPlc. (currently Ltd.) became its general legal successor.

The subscribed capital of Berekfürdő Energia Ltd. was decreased during the reporting period, from HUF 24 million to HUF 3 million, as of 31 September 2021.

Based on a decision adopted by the owner PannErgy Geotermikus Erőművek CPlc., the legal form of Miskolci Geotermia Ltd. and Szentlőrinci Geotermia Ltd. – both covered by the PannErgy Group's scope of consolidation – was changed as of 31 December 2021 from private limited company into limited liability company. Szentlőrinci Geotermia Ltd's and Miskolci Geotermia Ltd's restructuring was registered with the Court of Registration on 25 January 2022 and on 31 December 2021, respectively.

43. SEGMENTS REPORT

43.1. *Definition and identification of the segments of operation*

In line with IFRS requirements, the Company needs to present its operating segments. The Company identified a single operating segment during the reporting period, just like in the base period: Energy. The Energy industry is the Company's main operating segment, its core operations including the generation and sale of geothermal heat as well as the implementation of related investment projects and other activities. The PannErgy Group does not identify the utilization – in the way of property management – of industrial facilities and related office premises formerly used by Pannonplast Plc. in its plastics manufacturing operations, as a separate operating segment for the following reasons:

- based on the requirements of *IFRS 8 Operating Segments*, particularly, the management approaches to segments and the criteria for the presentation of operating segments the asset management and property utilization activity performed in addition to the Energy segment does not form truly separate components in themselves. This may be regarded as a integrated supplementary function, including the re-invoicing of electricity and other utility fees and, to a lesser extent, the collection of office rents. Moreover, the Company is planning to sell the properties concerned; indeed, the most valuable property was actually sold during the reporting period;
- the assessment of the performance of the utilization of the aforesaid properties is a negligible part of the work of the operative management and supreme bodies of the Company; information regarding the utilization of properties is not specifically highlighted in the relevant internal control and reporting system; because these are 'pass-through' type transactions with constant revenue and cost elements;
- the Company pursues its activities solely in the territory of Hungary, in a similar legal, technical, economic and demographic environment, consequently, territorial segmentation is not relevant;
- In view of the principles detailed in section *4.29 Segment reports* hereof the Company affirms that Energy as an operating segment can be clearly identified in the case of the PannErgy Group.

As regards the operation of the PannErgy Group, the management of the Company has adopted the approach to focus all its resources, in line with the expectations of investors, on maximizing the efficiency of the Energy segment; the utilization of property owned by the Company is in all respects an insignificant element in its operation and, based on the management's approach, cannot be considered to constitute an operating segment.

Regardless of the above the Company reviewed the limit values of the asset management and property utilization activity linked to the identification of the operating segments and it is concluded from the assessment that the sales revenue from the utilization of the properties in the town of Debrecen, amounted to HUF 855 million during the reporting period, equalling 13% of the PannErgy Group's HUF 6,439 million sales revenue during the same period. Since a significant – 96% – part of this amount is made up of pass-through items, without coverage, i.e. public utility fees re-invoiced to the tenants, the profit element of the public utility fees relating to the utilization of the properties, that are re-invoiced to tenants provides a more accurate picture of the proportion of the real property utilization business within the sales revenue of the PannErgy Group: it amounted to HUF 10 million, less than 1% of the total sales revenue. Accordingly, the asset management and property utilization activity is below the *IFRS 8* quantitative limit pertaining to standards and it will remain so because of the continuous growth of the Energy segment and the diminishing of the property portfolio.

Ultimately, the Company has one operating segment, that is, the Energy segment. Consequently, the Company has to fulfil disclosure obligations covering the whole of the business entity. In the case of the Company this means that the reporting year's and the basis year's data of the Energy segment are the same as the financial information pertaining to the entirety of the business entity, which are adequately presented herein.

43.2. *Geographical segments*

Within Energy, the single operating segment defined within the Company, geographical/project location segments were identified in the reporting period based on the order of magnitude of both sales revenue and fixed assets. In addition to assessing financing and other aspects the Company examines the profitability of these separately, working out specific plans concerning their operation.

Profit and loss 2021 (HUF million)	**Győr**	**Miskolc**	**Holding management, other activities**	**Total**
Revenue from sales	**3,263**	**1,990**	**1,186**	**6,439**
Revenues among segments	-	-	-	-
Direct cost of sales	**-2,205**	**-1,414**	**-1,240**	**-4,859**
Gross margin	**1,058**	**576**	**-54**	**1,580**
Gross margin ratio %	***32%***	***28%***	***5%***	***25%***
Indirect costs of sales	-91	-137	-284	-512
Other revenues	138	131	165	434
Other expenditures	-116	-98	-5	-219
Operating profit	**989**	**472**	**-178**	**1,283**
Operating profit rate %	**30%**	**24%**	**-15%**	**20%**
Direct depreciation	820	533	241	1,594
Indirect depreciation	1	-	-	1
Total depreciation	**821**	**533**	**241**	**1,595**
Extraordinary depreciation	-	-	-	-
EBITDA	**1,810**	**1,005**	**63**	**2,878**
EBITDA rate %	**55%**	**51%**	**5%**	**45%**
Financial profit	-206	-109	-4	-319
Profit before taxes	**783**	**363**	**-182**	**964**
Income tax	3	4	60	67
Net profit for the year	**780**	**359**	**-242**	**897**

Statement of financial position 2021 (HUF million)	**Győr**	**Miskolc**	**Holding management, other activities**	**Total**
Goodwill	264	379	35	678
Other intangible assets	47	65	1,667	1,779
Tangible assets	8,851	8,854	1,287	18,992
Investment properties	-	-	113	113
Marketable properties	-	-	-	-
Other invested financial assets	103	-	-	103
Financial assets (concession assets)	1,085	-	-	1,085
Receivables from deferred taxes	28	85	70	183
Long-term receivables	-	-	-	-
Total fixed assets	**10,378**	**9,383**	**3,172**	**22,933**

Statement of financial position 2021 (HUF million)	Győr	Miskolc	Holding management, other activities	Total
Inventories	2	-	5	7
Trade receivables	574	600	240	1,414
Other receivables	340	251	113	704
Prepaid income taxes	8	3	12	23
Securities	335	191	-	526
Liquid assets	613	240	423	1,276
Total current assets	**1,872**	**1,285**	**793**	**3,950**
TOTAL ASSSETS	**12,250**	**10,668**	**3,965**	**26,883**

Statement of financial position 2021 (HUF million)	Győr	Miskolc	Holding management, other activities	Total
Subscribed capital	-	-	421	421
Reserves without comprehensive income for the year	2,461	4,286	6,760	13,507
Comprehensive income for the year	780	359	-242	897
Reserve for repurchased treasury shares	-	-	-4,845	-4,845
Minority shareholdings	-	-	-	-
Total equity	**3,241**	**4,645**	**2,094**	**9,980**
Long-term loans, leases	6,394	3,359	247	10,000
Other long-term deferred incomes	1,256	1,770	678	3,704
Provisions	-	-	-	-
Total long-term liabilities	**7,650**	**5,129**	**925**	**13,704**
Trade payables	258	216	230	704
Short-term credits	71	53	239	363
Short-term part of long-term credits	763	396	74	1,233
Short-term part of other long-term deferred revenues	107	104	74	285
Other short-term liabilities	160	125	329	614
Total short-term liabilities	**1,359**	**894**	**946**	**3,199**
TOTAL LIABILITIES AND EQUITY	**12,250**	**10,668**	**3,965**	**26,883**

44. EXPLANATION FOR RECLASSIFICATIONS RELATIVE TO BASE PERIOD REPORT AND DURING THE REPORTING PERIOD

The PannErgy Group did not modify the data contained in its 2020 consolidated financial statements; the basis data presented herein are the same as those to be found in the 2020 consolidated financial statements.

45. TRANSACTIONS WITH AFFILIATED PARTIES

The effects of settlements and transactions between all consolidated subsidiaries belonging to PannErgy Plc. were eliminated by consolidation.

45.1. *Transactions with members of the Company's management*

The members of the Group's management are shareholders of enterprises that provide regular business management consultancy or long-term lease of vehicle type services for PannErgy Plc. – in 2021 such services amounted to HUF 66 million, of which business management consultancy services were provided in the amount of HUF 51 million, and long-term leases in the amount of HUF 15 million.

45.2. *Transactions with affiliated parties*

The following transactions took place at the PannErgy Group with affiliated but not consolidated parties, during the reporting period:

Data of transactions with affiliated but not consolidated parties, in the consolidated financial statements	**2021 HUF Mn**	**2020 HUF Mn**
Revenue from sales	3	2
Costs of goods and services	66	60
Receivables at the end of the reporting period	-	-
Liabilities at the end of the reporting period	4	-

All of the transactions – during the reporting period and during the base period – with affiliated but not consolidated parties involve entities related through ownership to the Group's management.

45.3. *Loans to affiliated parties*

The PannErgy Group provided no loans to affiliated but not consolidated parties, or for any member of the management, in 2021 or 2020.

45.4. *Changes in intra-group consolidated / eliminated transactions and portfolios*

Elimination of profit & loss account items:	2021 HUF Mn	2020 HUF Mn
Revenue from sales	2,067	2,275
Direct cost of sales	2,044	1,967
Indirect cost of sales	33	96
Other revenues	2	122
Other expenditures	2	122
Financial profit/loss	438	506

Elimination of statement of financial position items:	2021 HUF Mn	2020 HUF Mn
Tangible assets	2,027	2,163
Intangible assets	36	71
Next period's items among other receivables	729	668
Other receivables, short term loans	7,052	7,748
Long-term loans granted	6,102	7,515
Long-term liabilities	6,102	7,515
Next period's items among other liabilities	729	668
Other short-term liabilities	7,052	7,748

45.5. *Management's compensation*

	2021 HUF Mn	2020 HUF Mn
Short-term employee benefits	13	13
Total	**13**	**13**

By its BoD Resolution No. 2021.04.16./5. the Company set the remuneration of the Chairman of the Board of Directors at 195,000 HUF/month, while that of the other members of the BoD at 155,000 HUF/month, from 17 April 2021, i.e. the directors' remunerations remained unchanged. The Board of Directors acted in the capacity of the General Meeting in accordance with Section 9 (2) of Government Decree 102/2020 (IV. 10.) on derogating provisions governing the operation of partnerships and joint-stock companies during the state of danger.

No long term benefits or share-based allocations were provided for the members of the BoD, other than the above remunerations, during the reporting period or the base period.

46. EVENT AFTER THE CUT-OFF DATE OF THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

References to events that occurred after the cut-off date of the consolidated financial statements are presented in the following table: Based on the references the complete information is accessible at the Company's official places of disclosure.

Date	Type of news	Subject, brief content
21 March 2022	Extraordinary information	Amendment of the Agenda of the annual ordinary General Meeting
20 March 2022	Extraordinary information	Treasury share transactions
11 March 2022	Extraordinary information	Treasury share transactions
11 March 2022	Extraordinary information	Amendment of the Agenda of the annual ordinary General Meeting
6 March 2022	Extraordinary information	Treasury share transactions
3 March 2022	Extraordinary information	Changes to the implementation of the share-buyback program
28 February 2022	Extraordinary information	Voting rights, share capital
25 February 2022	Extraordinary information	Treasury share transactions
23 February 2022	Other information	PannErgy wins prestigious ESG award
17 February 2022	Extraordinary information	Amendment to the 2022 EBITDA plan
31 January 2022	Extraordinary information	Voting rights, share capital
14 January 2022	Extraordinary information	Quarterly production report

47. DATE OF AUTHORIZATION OF DISCLOSURE

The Company's Board approved the financial statements and authorized their disclosure on 22 March 2022.

Dénes Gyimóthy
Representing the Board of Directors

www.pannergy.com

PannErgy Plc.
Business and Management Report
2021

Based on the PannErgy Group's IFRS consolidated financial statements

Budapest, 22 March 2022

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

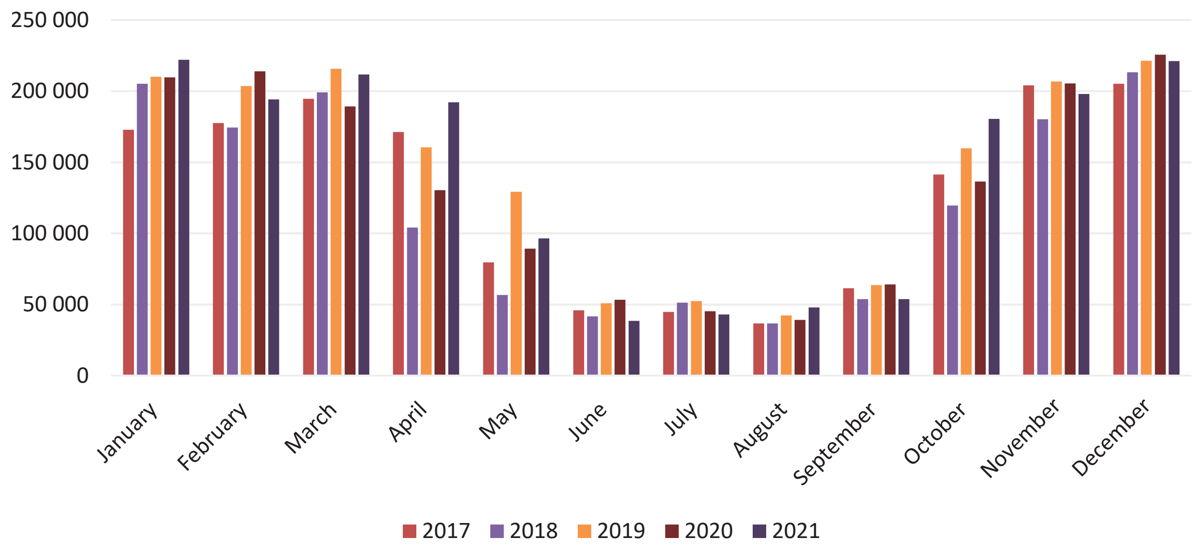
The attached pdf report is not the official report of the Company. The official version is prepared and published by the Company in XHTML-XBRL format in accordance with the legal requirements. The content of the attached pdf report is fully identical to the content of the report published in XHTML-XBRL format.

1. Executive Summary

Thermal energy generation during the reporting period, ensuring the fulfilment of the 2021 EBITDA plans and operational and investment activities enabling growth

The business year 2021 brought about a substantially changed economic and social environment for all market participants as a consequence of the pandemic which broke out earlier but still dominated the reporting period as well. The events – in price increases and volatility in the energy (primarily electricity and gas) market – which became sharper in the reporting period, posed major challenges for all economic operators, but especially companies in the energy sector. The Company managed to overcome the obstacles even in the prevailing more complicated circumstances, and accomplished its objectives laid down in its geothermal energy generation and utilisation strategy aimed at efficient utilisation of the capacities tailored to customer needs available at the various project sites in line with the prevailing weather conditions and at dynamically choosing the operating condition(s) most effectively contributing to the accomplishment of this aim. The implementation of the strategy not only supports the Company's business results, but also the significant reduction of emissions, including a sustainable and environmentally friendly energy supply.

The Company's green heat sales increased by 6% from 1,602 TJ in 2020 to 1,699 TJ in 2021. In spite of that the Company fell short of the 2021 target amount of 1,733 TJ by as little as 2%. The Company's HUF 6,439 million consolidated sales revenue was up 9% year-on-year, in which the sales revenue of the geothermal business line also increased by a similar rate. The Company's consolidated EBITDA amounted to HUF 2,878 million, 5% up year-on-year, essentially achieved to the high end of the planned EBITDA range (HUF 2,800 – HUF 2,880 million) for the financial year 2021. The steady strong EBITDA performance, in line with the plans, was enabled by operations and financial management geared for efficiency and effectiveness, and the positive impacts in 2021 of the capacity increasing and efficiency and operational safety improving projects started in earlier years and continued in the reporting period.



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	2021 TARGET	2022 TARGET
January	172,758	205,199	209,999	209,678	221,966		
February	177,533	174,300	203,484	213,855	194,173		
March	194,634	199,090	215,693	189,195	211,762		
Q1	**544,925**	**578,589**	**629,176**	**612,728**	**627,901**	**660,769**	**646,020**
April	171,294	104,033	160,548	130,407	192,053		
May	79,700	56,758	129,300	89,190	96,333		
June	45,936	41,641	50,780	53,394	38,595		
Q2	**296,930**	**202,432**	**340,628**	**272,991**	**326,981**	**290,438**	**315,549**
July	44,865	51,247	52,406	45,297	42,919		
August	36,709	36,794	42,415	39,205	48,023		
September	61502	53,650	63,731	64,096	53,870		
Q3	**143,076**	**141,691**	**158,552**	**148,598**	**144,812**	**160,683**	**163,654**
October	141270	119,652	159,888	136,460	180,427		
November	204,045	180,263	206,686	205,417	197,872		
December	205,251	213,267	221,248	225,688	221,198		
Q4	**550,566**	**513,182**	**587,822**	**567,565**	**599,497**	**620,679**	**626,790**
ANNUAL TOTAL	**1,535,497**	**1,435,894**	**1,716,178**	**1,601,882**	**1,699,190**	**1,732,569**	**1,752,012**

Consolidated actual and target amounts of heat sales, in GJ

The Company's consolidated sales revenues and the direct costs of sales increased by 9% and 8%, respectively. Both the Company's consolidated gross margin and its consolidated gross cash-flow improved as a result of the above: the consolidated gross cash-flow grew by HUF 115 million or 4%.

The combined result of the administrative and overhead costs as well as other revenues and expenditures, was a HUF 297 million indirect cost, below the value of HUF 369 million in the base period. As a result, the Company achieved an operating profit of HUF 1,283 million, which is 19% higher than in the previous year.

The PannErgy Group's year 2021 consolidated EBITDA amounted to HUF 2,878 million. The HUF 143 million increase compared to the EBITDA performance of HUF 2,735 million in the previous year was achieved during the reporting period with the proportion of the EBITDA remaining nearly unchanged at 45%.

The Company booked HUF 319 million in the way of financial loss, improved by almost half a billion forints compared to the base period, mainly due to the more favorable euro / forint cross-rate exchange rate in the period under review. The financial result mainly covers the revaluation effect of interest paid on external financing and exchange rate movements on items in the financial statements.

The Company's consolidated net profit – profit after taxes – amounted to HUF 897 million in 2021, significantly exceeding the HUF 237 million consolidated profit booked in 2020.

Main profit/loss data (HUF million)	2021	2020
Revenue from sales	6,439	5,923
Direct costs of sales	-4,859	-4,479
Gross margin	**1,580**	**1,444**
Gross cash-flow	**3,174**	**3,059**
Gross cash flow rate	**49%**	**52%**
Indirect costs of sales	-512	-501
Other revenues and expenditures	215	132
Operating profit (EBIT)	**1,283**	**1,075**
EBITDA	**2,878**	**2,735**
EBITDA rate	**45%**	**46%**
Profit/loss on financial transactions	-319	-813
Profit before taxes	**964**	**262**
Consolidated net profit for the reporting period	**897**	**237**
Return on Equity (ROE) %	*8,99*	*2.42*
Return on Sales (ROS) %	*13.93*	*3.99*
Earnings per ordinary share (diluted EPS) (HUF)	*54.71*	*14.01*

The Company's EBITDA projections for 2022 and 2023

In respect of the 2022 business year, the Company's management confirms the updated and published consolidated EBITDA target as early as February 17, 2022 in the range of HUF 3,150 – 3,250 million under the IFRS.
The abovementioned EBITDA target range for 2022 represents an increase of approximately 12-13% compared to the target range of the base period, primarily reflecting the effect of completed or in-progress capacity expansion and efficiency improving projects, and, secondarily, changes in the energy market environment and conditions in the energy market

In terms of the EBITDA forecast for 2023, in accordance with the amendment to 2022, the Company also confirms the update of the previously published preliminary consolidated EBITDA target in the range of HUF 3,150 – 3,250 million to the consolidated EBITDA plan of HUF 3,350 – 3,450 million, under the IFRS. One of the essential preconditions for achieving the revised EBITDA plan for 2023 is the deepening and commissioning of the third production well of the Miskolc Project this year. In the event of a failure to deepen the well, the plan level of HUF 3,300 - 3,400 million for the year 2023 is currently applicable.

Treasury share buyback programs

On 31 December 2021 the Company held a total of 4,658,644 PannErgy Plc. treasury shares, 468,674 more than the 4,189,970 treasury shares held on 31 December 2020. The change resulted from the purchase of treasury shares in the framework of the treasury share buyback program taking place during the reporting period.

A total of 188,313 and a total of 280,361 treasury shares were bought back in the first half and in the second half of 2021, respectively, under the above treasury share buyback programs. The portfolio of treasury shares did not decrease and there was no share option program in place during the period concerned.

The stock exchange closing price of PannErgy shares was HUF 1,040 per share at the end of the review period, to be compared to HUF 760 on 31 December 2020, up 37% year-on-year.

Financing agreement for the reporting period

On 27 September 2021 the companies belonging to the PannErgy Group concluded a HUF 2.85 billion investment credit facility agreement with the financing consortium formed by CIB Bank CPlc. and UniCredit Bank Hungary CPlc. Under the credit facility, financing will primarily be provided for priority development and expansion investment projects currently under way or planned to be implemented over the course of the next two years.

Under the credit facility, the Company and the financing parties can select the loan product best suited to the particular investment project – if currently available – from among the "NHP Hajrá" (FGS Go!) loan programme launched by the Magyar Nemzeti Bank, the loan programmes of Magyar Export-Import Bank CPlc. and various market loans. The maximum maturity of the loans to be drawn down as part of the credit facility is 2030. The loans are made available to borrowers by the financing entities after the appropriate own resources have been employed and other normal conditions are met.

The loans for the most part are denominated in HUF, and to a lesser extent in EUR. The average effective fixed annual interest rate on the loans is expected to be in the 2.00% to 2.50% range.

Transformations involving the member companies and transactions affecting the subscribed capital, during the reporting period

The following portfolio rationalisation transformations, and transactions affecting the subscribed capital, took place in the PannErgy Group during the period concerned:

Well Research Ltd. merged into Miskolci Geotermia CPlc. as of 30 June 2021, whereby it was terminated, and Miskolci Geotermia CPlc. (currently Ltd.) became its general legal successor.

The subscribed capital of Berekfürdő Energia Ltd. was decreased during the reporting period, from HUF 24 million to HUF 3 million, as of 31 September 2021.

Based on a decision adopted by the owner PannErgy Geotermikus Erőművek CPlc. during the reporting period, the legal form of Miskolci Geotermia Ltd. and Szentlőrinci Geotermia Ltd. – both covered by the PannErgy Group's scope of consolidation – was changed as of 31 December 2021 from private limited company into limited liability company. Szentlőrinci Geotermia Ltd's restructuring was registered with the Court of Registration on 25 January 2022.

Pursuant to Act XVIII of 2005 on District Heating Services the Hungarian Energy and Public Utility Regulatory Authority granted its preliminary approval for the registration by the court of registration of the above changes affecting Miskolci Geotermia CPlc. and Szentlőrinci Geotermia CPlc. as licensees generating thermal energy for district heating.

General meeting closing the previous business year, dividend payment

On 16 April 2021 the Company informed the investors of the resolutions adopted by the Management Board on the same day in exercise of its power granted for the period of the state of emergency. These included the No. 2021.04.16./1. Board resolution whereby the Management Board – proceeding in the scope of power of the General Meeting, owing to the emergency situation – acknowledged and approved the 2020 EU IFRS consolidated report of the PannErgy Nyrt group, with a balance sheet total of HUF 26,733 million and a HUF 237 million profit after taxes.

Acting under the authority of the General Meeting, the Management Board adopted the Management Board's proposal for the payment of a dividend of HUF 15 per ordinary share, but not more than a total of HUF 253 million, to shareholders entitled to dividend payment under Sections 56.3 and 58 of the Company's Articles of Association, from the reporting year's profit after taxes and the positive retained earnings from previous periods' profitable operations. The total amount of profit after tax for the year under review will be utilised for the payment of dividends. Based on the proposal the first day of dividend payment was 14 July 2021, while the cut-off date for shareholder verification for the purpose of dividend payment was 30 June 2021.

The Company disclosed details on the payment of dividends in its public communication dated 23 June 2021 on the regime of dividend payment for business year 2020. Thereafter, on 29 June 2021 it disclosed the amount of the actual dividend. Accordingly, the Company pays a gross amount of HUF 15.15 to shareholders in the way of dividend for 2020, amounting to a total of HUF 253 million.

Dividends were paid from 14 July 2021, and with the exception of an amount of HUF 53,912 million the whole of the prescribed HUF 253 million had been paid to shareholders by 31 December 2021.

2. PannErgy Group's profit or loss in 2021, key ratios of its business operations

In 2021 the PannErgy Group continued its activities aimed at accomplishing its geothermal energy production and utilization strategy laid down in the preceding year, focused on boosting its sales revenue and EBITDA through increased heat output through continued improvements in the operational condition, and the efficiency of the operation, of its geothermal projects, as well as by capacity enhancements. Having accomplished the goals and thanks to the effective and efficient geothermal operation and maintenance, as well as supportive operations, the PannErgy Group's consolidated gross margin and gross cash-flow as well as consolidated EBITDA increased during the reporting period, in line with the Company's plans.

Key profit/loss figures (in HUF million)	2021	2020
Revenue from sales	**6,439**	**5,923**
Direct costs of sales	-4,859	-4,479
Gross margin	**1,580**	**1,444**
Gross margin ratio %	*25%*	*24%*
Gross cash-flow	**3,174**	**3,059**
Gross cash flow rate %	*49%*	*52%*
Indirect costs of sales	-512	-501
Other revenues	434	379
Other expenditures	-219	-247
Operating profit (EBIT)	**1,283**	**1,075**
Operating profit rate %	*20%*	*18%*
EBITDA	**2,878**	**2,735**
EBITDA rate %	*45%*	*46%*
Financial profit	-319	-813
Profit before taxes	**964**	**262**
Consolidated net earnings in the reporting year, as profit after taxes	**897**	**237**
Return on Equity, % (ROE)	8.99	2.42
Return on Sales, % (ROS)	13.93	3.99
Earnings per share (EPS), in HUF	54.71	14.01

The diluted earnings per share also amounted to HUF 54.71. Unlike in the previous period, there is no difference in determining the diluted earnings per share.

Detailed description of the Company's business operations in 2021:

The Company's HUF 6,439 million consolidated sales revenue was up 9% year-on-year.

A breakdown of heat sale by project shows that Geothermal Project of Győr contributed HUF 3,262 million to the PannErgy Group's business performance in 2021, up 19% from the HUF 2,740 million in 2020. Of the above, Arrabona Koncessziós Kft's sales to Győr-Szol CPlc. amounted to HUF 1,734 million of the above total figure, while DD Energy Kft's sales to its automotive industry customer amounted to HUF 1,527 million (to be compared to the previous year's HUF 1,508 million and HUF 1,231 million figures, respectively). Sales realised within the framework of the Geothermal Project of Miskolc towards heat-receiving partners added up to HUF 1,980 million in the reporting period, of which HUF 1,933 million was sold to MIHŐ Miskolci Hőszolgáltató Kft of Miskolc. Owing primarily to the due to certain customer-side maintenance work and an malfunction in the system in November during the base period these sales figures fall short the 2020 revenue of HUF 2,092 million from the Miskolc project, and the HUF 2,046 million revenue from MIHŐ Miskolci Hőszolgáltató Ltd. Regarding the Miskolc project alone this represents a sales revenue decrease of 5% year-on-year.

The Company's two smaller volume projects – of Berekfürdő and Szentlőrinc – performed differently as regards their sales revenues from heat sale compared to those of the preceding years: The sales revenue of the Szentlőrinc operation increased by 10% from HUF 70 million in 2020 to HUF 78 million in 2021. By contrast, the HUF 2 million sales revenue of the Berekfürdő project from heat tariffs in 2021 was substantially below the HUF 3 million earned in 2020, however, owing to the scale of the project this had a minor impact on the consolidated sales revenue during the reporting period.

In addition to the sale of thermal energy, the sales revenue by the PannErgy Group by selling electricity amounted in 2021 to HUF 841 million, exceeding the HUF 818 million sales revenue posted in 2020. This included the electricity fee relating to the operation of PannErgy Nyrt's real estates in Debrecen, in an amount of HUF 804 million, which was re-invoiced to the tenants and other owners of the co-owned properties and not related to the core energy industry operation. Such "pass-through" energy sales do not contribute appreciable amounts (in the way of margin) to the Group's profit. The additional HUF 37 million electricity sales revenue comes from the sale of electricity in relation to the Company's project in Berekfürdő, significantly exceeding the HUF 22 million sales revenue of the preceding year.

Other re-invoiced utility services generated HUF 91 million sales revenue (HUF 10 million profit) in the utilization of the properties not related to the Company's geothermal operations during the period concerned. An amount of HUF 23 million was realised in the way of profit from the property rental fees. On the whole, the sales revenues, including profits/losses, from the utilisation of the Company's properties in Debrecen, remained unchanged in comparison to the corresponding figures of the preceding year.

Moreover, the Company recognised HUF 158 million as revenue from the sale of intangible assets stated in its books as assets held for sale.

Similarly to the previous period, three customers exceeded 10% of the total amount of the Group's consolidated revenue from sales, making up a combined 81% percent of the total sales of PannErgy Group in the reporting period, matching the base period's ratio.

The direct costs of sales increased in 2021 from HUF 4,479 million in 2020 by 8% to HUF 4,859 million, in line with the change of a similar proportion in the sales revenue during the same period.

The amount of direct depreciation showed lower level with 1%: in 2020 a total of HUF 1,615 million, while in 2021 HUF 1,594 million was booked by the Company as direct cost of depreciation on assets used directly in geothermal heat generation.

The 13% increase in of maintenance costs is attributable to additional tasks relating to the operation and maintenance of the ever expanding assets of geothermal projects, and efficiency and capacity increasing projects, higher operational/efficiency expectations and, *inter alia*, increased operational safety levels.

Within the category “Purchase value of goods sold, intermediated services”, HUF 849 million is the cost of sales related to non-geothermal energy, which are mainly related to the utilization of the properties owned by the Company in Debrecen (“flow-through”). These are the costs related to the HUF 841 million value of electricity sales and the HUF 91 million value of intermediated and re-billed services.

The substantial – 22% – increase in the costs of electricity required for heat generation and sale was a result of the hefty price increase in the electricity market during the period concerned. The direct costs of power increased from HUF 689 million in 2020 to HUF 844 in 2021. The Company dampens the impacts of the unfavourable market processes by continuously monitoring the spot and futures electricity market and by effective contracting activity.

In the period under review, the Company carried out research and development related to geothermal production in the amount of HUF 109 million, the costs of which are included in direct costs.

Accordingly, the Group stated HUF 3,174 million in the way of gross cash-flow in 2021, 4% up on the previous year’s HUF 3,059 million, exceeding the gross cash-flow ratio of the preceding period.

The PannErgy Group’s administrative and overhead, that is, indirect operating costs increased by 2% during the reporting period year-on-year.

The 3% increase in office and operating costs was related to the COVID-19 pandemic *inter alia*, and was is caused by the acquisition costs pertaining to safe working conditions and prevention.

The HUF 117 million costs of experts incurred in the reporting period include legal and consulting costs relating to the financing of geothermal projects and to accounting projects, expert costs relating to application schemes as well as general consulting fees to support operations and legal fees. Consultancy costs increased by 2% during the period concerned.

The substantial – 57% – decrease during the reporting period in the banking costs resulted from a higher base figure which in turn had been caused one-off impacts of the previous year’s refinancing transaction, booked among banking costs.

Indirect personnel-type costs increased by 19% year-on-year, in line with labour market processes and the increased fluctuation during the period concerned. During the reference period, 6 people joined the

Company, and 3 people left. When compared to the previous year, with 1 person joining and 3 leaving, it can be said that employee turnover has increased.

The period-end headcount of the PannErgy Group was below the corresponding figure of the previous year; on 31 December 2021 the number of employees was 18 persons, one fewer than the 19 on 31 December 2020. The average statistical number of staff for the whole year dropped from the 27 persons in the base period to 23 in the reporting period.

The costs of public and stock exchange presence, stated as indirect costs, increased by 12% during the reporting period. This increase resulted from the verification, dividend payment and payroll accounting services used in relation to dividend payment in 2021.

The balance of other revenues and expenditures during the reporting period is a revenue of HUF 215 million, in contrast to the HUF 132 million recorded in the base period.

The most substantial, HUF 124 million, item that can be highlighted within the HUF 219 million portfolio of other expenses, is made up of local taxes, most notably the local business tax paid to the local governments at the sites of geothermal projects. Another major item is the mining fee payable relating to geothermal heat production; under this heading the Company incurred expenditure of HUF 74 million.

The most significant item of the HUF 434 million other income in the reporting year is development aid received, in an amount of HUF 283 million, comprising consists of the write-back of deferred income in proportion with the depreciation charge for the reporting year relating to non-repayable investment and development grants.

Compensations and penalties relating to insured events that occurred and projects that were implemented in earlier periods, as well as discounts received subsequently, made up HUF 105 million exceeding the HUF 93 million of the base period in the category of other incomes during the reporting period than in the base period. The items in this category included penalties, compensations or other damage-related income-type items received or acknowledged in relation to machine failures and service interruptions, and ex-post discounts provided by partners under contracts.

In the reporting period the Company realised a profit of HUF 26 million on the sale of tangible assets, specifically from the sale and purchase transaction relating to the real properties owned by Pannergy Plc. in the town of Debrecen.

As a consequence of the above factors the operating profit/loss (EBIT) appeared as a profit of HUF 1,283 million in the 2021 business year, up 19% on the HUF 1,075 million of 2020.

The business cash-flow (EBITDA) was an influx of HUF 2,878 million with a 45% EBITDA rate, HUF 143 million higher than the HUF 2,735 million EBITDA the corresponding period of 2020.

Scheduled and extra depreciation was recognised during the reporting period in a total amount of HUF 1,595 million, lower with 1%than the preceding year’s HUF 1,616 million. In calculating the EBITDA the Company takes account of the extraordinary depreciation recognised among intangible assets and tangible assets as well; the amount of extra depreciation items was below one million forints during the reporting period.

The PannErgy Group recognises a loss of HUF 319 million for the reporting period as profit/loss on financial transactions. Of the above amount, financial expenditures amounted in the reporting period to HUF 431 million down by a substantial HUF 487 million from the corresponding larger amount posted in the preceding period.

The amount of interests paid in relation to credit and loan liabilities increased by 4% to HUF 295 million during the reporting period from the HUF 285 million recorded in the preceding year. The primary reason for this was that the members of the PannErgy Group concluded a HUF 2.85 billion credit facility agreement in 2021 Q3 with a financing consortium of two financial institutions to finance their ongoing high priority development and enhancement projects and similar projects planned to be implemented in the coming nearly two-year period.

Another large item among financial expenditures is an exchange rate loss of HUF 43 million on FX credits and loans, a very substantially smaller amount than the HUF 453 million booked under the same heading in 2020.

Of the financial profit/loss of the PannErgy Group during the reporting period the unrealised FX revaluation at the end of the period resulted in an overall loss of HUF 20 million regarding all types of assets and liabilities, having aggregated exchange rate gains and losses. In accordance with IFRS requirements, monetary items of the PannErgy Group stated in currencies other than the forint – the functional currency – are converted into forints at the exchange rate prevailing at the end of the period, and the (financially unrealised) exchange rate differences resulting from such conversions are recognised in the profit and loss account under financial transactions. The loss on the period-end revaluations is the result of a decrease of the HUF/EUR exchange rate relative to the previous periods.

Notwithstanding the momentary, unrealised or financial transaction effect of the aforementioned revaluation, the Company is not subject to any material long-term exchange rate risk in the course of its operation because it has a natural hedge position in view of the fact that on an annual level its income realised in foreign currencies almost entirely covers its costs (typically electricity charges) incurred in other currencies as well as its contractual debt servicing obligations, denominated in foreign currency, towards financial institutions having extended investment loans. The currency of FX items referred to above is always EUR.

HUF 3 million was earned as a profit on financial derivative transactions during the period under review. HUF loans borrowed from banks were converted through refinancing into fixed-rate loans during the year preceding the reporting period, eliminating the risk of increasing market rates therefore, there was no need for HUF hedging interest rate swap transactions in the reporting year, unlike in the years before.

Consequently, the PannErgy Group's 2021 profit before taxation amounted to HUF 964 million, dramatically exceeding the HUF 262 million profit posted for the previous year, thanks to the circumstances described above.

The Company recognised HUF 67 million as tax liability in the reporting period; therefore **its consolidated net profit after taxes amounted to HUF 897 million in 2021,** significantly exceeding the HUF 237 million profit of the year 2020.

Key data on the asset position (HUF million)	2021	2020
Fixed assets	**22,933**	**23,634**
Total current assets	3,950	3,099
Of which Liquid assets	*1,276*	*666*
Total assets	**26,883**	**26,733**
Total shareholders' equity	**9,980**	**9,747**

The net portfolio of fixed assets decreased slightly, by less than 3% during the reporting period, in which the greatest reduction was observed in the value of marketable financial assets. In the reporting period the Company invested part of its separated liquid assets – the use of which is subject to authorization by the funding financial institution – in government securities: such fixed assets are present in the consolidated statement of financial position in an amount of HUF 103 million. These were blocked by the funding financial institution in the way of security deposit, in accordance with the provisions of the relevant loan agreements. The reason for the decrease during the reporting period is a restructuring of these investments, from long term government securities into short term products, i.e. discount treasury bills.

The decrease in intangible assets and tangible assets during the reporting period resulted from scheduled depreciation which exceeded the value of the capacity increasing and efficiency improving projects carried out in the reporting period, and the associated tangible asset procurements. The change during the reporting period in the value of the assets put into service in the framework of the Győr concession project – recorded in the books in an amount of HUF 1,085 million as a concession financial asset pursuant to the provisions of IFRIC 12 – is based on the calculation of the return on the assets.

The Company stated HUF 678 million as goodwill, similarly to the preceding period, of which the predominant element is related to the minority interest acquired earlier in PEGE CPlc., in an amount of HUF 517 million. A HUF 160 million increase in the value of goodwill is related to the purchase in 2020 of the minority shareholdings in the Company's Miskolc project companies, while HUF 1 million goodwill is related to the acquisition of the minority shareholding in Szentlőrinci Geotermia CPlc.

Deferred tax receivables in the amount of HUF 183 million were recognised among assets, the value of which decreased by 24%, after the base period in view of PannErgy Group's calculations relating to deferred tax recovery.

The portfolio of current assets grew by 27% year-on-year. This increase occurred primarily in the portfolio of securities, in the form of the growth in fixed assets as detailed above and the increase in the level of cash and liquid assets which resulted form the efficient cash-flow generation during the reporting period.

At the end of the reporting period, the Company stated inventories – maintenance materials for use in the operation of the geothermal projects – in an amount of HUF 7 million.

Among its current assets the Company had liquid assets in an amount of HUF 1,276 million at the end of the period in contrast to the HUF 666 million stated at the end of the previous year.

The Company's equity increased by 2% year-on-year, as a result of a combined effect of the profit generated during the reporting period which increased the equity and the purchase of treasury shares during the same period, which reduced the equity and the dividend payment for the current year also reduces equity. The equity per share (calculated for the number of shares less the portfolio of treasury shares) grew from the previous year's HUF 578 to HUF 609.

The long term loan portfolio decreased by 4% year-on-year to HUF 10,000 million primarily reflecting the effects of current period repayments.

The over-year part of the non-repayable grants won in the context of application schemes for the geothermal projects is shown in the other long-term deferred incomes line. In connection with this an amount of HUF 3,704 million is shown in the Company's statement of financial position, after a decrease of 7% year-on-year, as a result of reversals recognised during the period concerned in proportion with depreciation.

Within the short term liabilities the balance of trade payables was HUF 704 million, down 14% year-on-year.

The portfolio of short-term credits together with the short term part of long-term credits amounted to HUF 1,596 million at the end of the reporting period, 29% more than the HUF 1,240 million posted in 2020, in line with the increased amount of external financing and the principal repayment schedule of the contractual loan for the one-year period following the reporting period. Other short term liabilities amounted to HUF 614 million at the end of the reporting period, of which the items due in the next period amount to HUF 392 million and the tax and contribution liabilities of HUF 206 million are the largest items.

Key indicators	2021	2020
Profitability indicators		
Return on assets, % (ROA)	3.34	0.88
Return on Equity, % (ROE)	8.99	2.43
Return on Sales, % (ROS)	13.93	3.99
Asset position indicators		
Ratio of fixed assets, %	85.31	88.41
Ratio of equity capital, %	37.12	36.46
Indebtedness rate, %	97.11	174.28
Financial indicators		
Liquidity ratio	123.47	121.75
Acid test ratio	123.26	120.61
Earnings per share (EPS), in HUF	**54.71**	**14.01**

The PannErgy Group's profit after taxes was significantly higher in the reporting year than in the preceding year. Accordingly, all of the Company's profitability and financial indicators improved year-on-year. Among the indicators of the financial position, the proportion of fixed assets decreased, which is mainly due to the depreciation of the current year. The equity ratio was able to increase despite the dividend payment for the current year and the repurchase of treasury shares, due to a significantly higher profit compared to the previous year. The gearing ratio has fallen below 100, which means that the value of long- and short-term bank debt less cash and short-term and long-term securities is lower than the value of equity.

3. Introduction to the Company

3.1. *The PannErgy Group's core operations*

PannErgy Plc. ("Company" or "PannErgy") is an entity listed at the Budapest Stock Exchange, included in the BUX basket, and is a premium share issuer; its core activities involve the extraction, utilization for energy generation and selling of one of Europe's most significant thermal water resources, in particular, renewable geothermal energy. In connection with its geothermal energy generating operations the Company performs productive operations in Miskolc, Győr, Szentlőrinc and Berekfürdő. As of 31 December 2021, the PannErgy Group has 18 employees, while the annual average statistical headcount for 2021 is 23.

PannErgy Plc. has its registered office in Hungary at H–1117 Budapest, Budafoki út 56. The Company is operating in a holding structure. For the subsidiaries' detailed data see Chapter 7.

3.2. *Regulated district heating tariffs*

Some of the project companies of PannErgy Group have district heat production licenses. Accordingly, they sell heat in a an environment regulated by the Hungarian Energy and Public Utility Regulatory Office (MEKH). In this arrangement the heat sold by PannErgy Group to district heating companies is subject to the authority-regulated tariffs announced each year by the Minister for National Development in the form of the Decree of the Ministry for National Development for a period of one year from 1 October each year until 30 September the following year (with the possibility of intermediate pricing if necessary). The thermal energy tariff in place from 1 October 2021 for the Miskolc Geothermal Project was increased from the previous year's net 2,626 HUF/GJ to 2,650 HUF/GJ in the case of Miskolci Geotermia CPlc. (Miskolci Geotermia Ltd. from 1 January 2022) and Kuala Ltd.: this is the price invoiced by these two companies for the heat sold to MIHŐ Miskolci Hőszolgáltató Ltd. In connection with the Győr Geothermal Project the regulated district heating tariff charged for the heat sold by Arrabona Koncessziós Ltd. to Győr-Szol Győri Közszolgáltató és Vagyongazdálkodó CPlc. was increased from 3,204 HUF/GJ to 3,397 HUF/GJ. In the previous period Szentlőrinci Geotermia CPlc. the charged 3,654 HUF/GJ regulated price to Közüzemi Nonprofit Ltd., which regulated district heating sale price increased to 3,791 HUF/GJ as of 1 October 2021.

3.3. *Sale of heat to industrial and non-municipal government partners*

To enhance the diversification of the sale of heat the PannErgy Group is constantly seeking for opportunities to boost its sales of geothermal heat to industrial partners as well, in the form of primary or secondary heat utilization, besides the agreements concluded with heating utility partners. The Company's major industrial consumers purchasing heat, include Audi Hungaria CPlc. in the case of the Győr Geothermal Project, while in the case of the Miskolc Geothermal Project they include Joyson Safety Systems Hungary Kft and GS Yuasa Magyarország Ltd.

3.4. *Real property utilization*

Besides its core operations comprising the production and sale of geothermal heat (Energy) at the end of the reporting period the Company only had industrial real properties, offices and land – originating from before the time of the "Pannonplast - PannErgy" strategy shift – in the town of Debrecen.

The PannErgy Group shows its industrial properties in Debrecen, which are not directly or indirectly related to the Group's core operation, that is, geothermal heat generation and sale, in its investment property portfolio, which it intends to utilise through lease arrangements. The Company's revenue from letting these properties amounted to HUF 23 million in 2021.

Such properties appeared in the Company's consolidated statement of financial position in an amount of HUF 113 million. The value of these investment properties decreased year-on-year, as a result of depreciation as well as the Company's sale of its lands in its portfolio of real properties in the town of Debrecen during the period concerned.

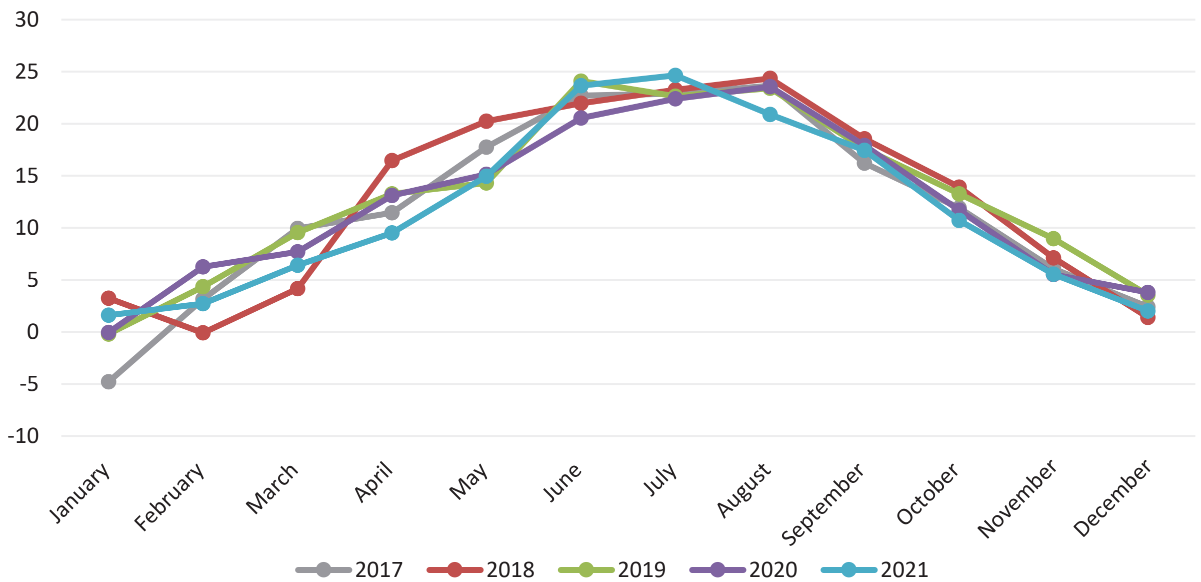
4. Achievement of PannErgy's main targets set for 2021, and the associated risks

4.1. *Győr Geothermal Project (DD Energy Ltd., Arrabona Concession Ltd.)*

Győr Geothermal Project. In 2021 Q1 it sold a total of 344,891 GJ of thermal energy, 14% more than in 2020 Q1. In respect of first-quarter heat sales in Győr, this was the highest periodical value achieved since the project was put into operation. The growth can be primarily attributed to the positive effect – already observed in the first quarter of the reporting period – of the capacity and efficiency improvement projects presented in the 2020 Q4 production report of the PannErgy Group and the reports prepared and published for its General Meeting.

During the second quarter of the reporting period the Győr Geothermal Project sold a total of 161,121 GJ thermal energy, 20% up year on year. This was enabled primarily by the weather conditions during Q2, which were favourable for the input of geothermal heat, and the capacity increasing and efficiency improving projects implemented in recent periods.

The annual average temperatures in Hungary between 2017 and 2021 were as follows:



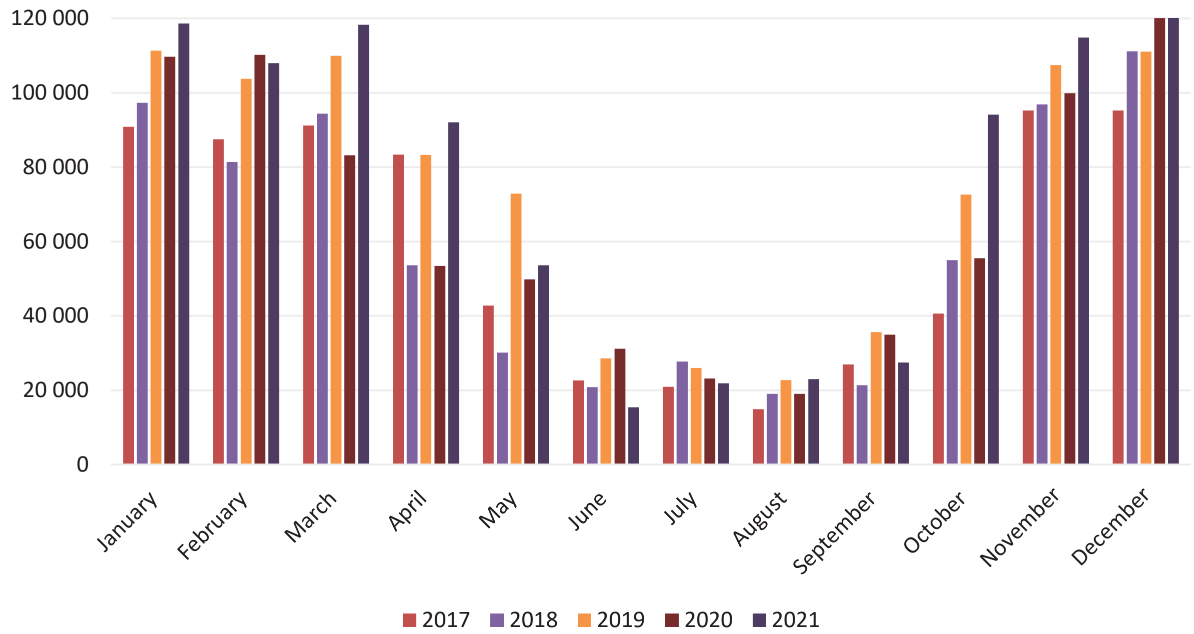
In 2020 Q2 the weather offered a more favourable heating potential at Group level compared to the same period in 2020, mainly due to cooler spring weather than in previous years.

The Győr Geothermal Project sold a total of 72,355 GJ thermal energy in 2021 Q3, down 6% year-on-year, owing primarily to the capacity limitations caused by the prolonged maintenance work on district heating systems receiving the energy, along with the Company's scheduled investment works falling outside the heating period.

The Győr Geothermal Project sold a total of 330,520 GJ thermal energy in 2021 Q4, up 20% year-on-year. The reason for the significant increase in heat supply compared to the same period of the previous year is mainly the positive effect of the implemented capacity expansion investments.

Overall, the Company realised 908,887 GJ heat sales in the commercial operations of the Geothermal System of Győr during the first half of 2021, up 15% compared to the 790,118 GJ heat sold during the previous year.

The amounts of heat sold in Győr were as follows during the reporting period (GJ):



4.2. *Miskolc Geothermal Project (Miskolci Geotermia Ltd., Kuala Ltd.)*

The Geothermal System of Miskolc sold a total of 273,892 GJ thermal energy in 2021 Q1, down 9% year-on-year.

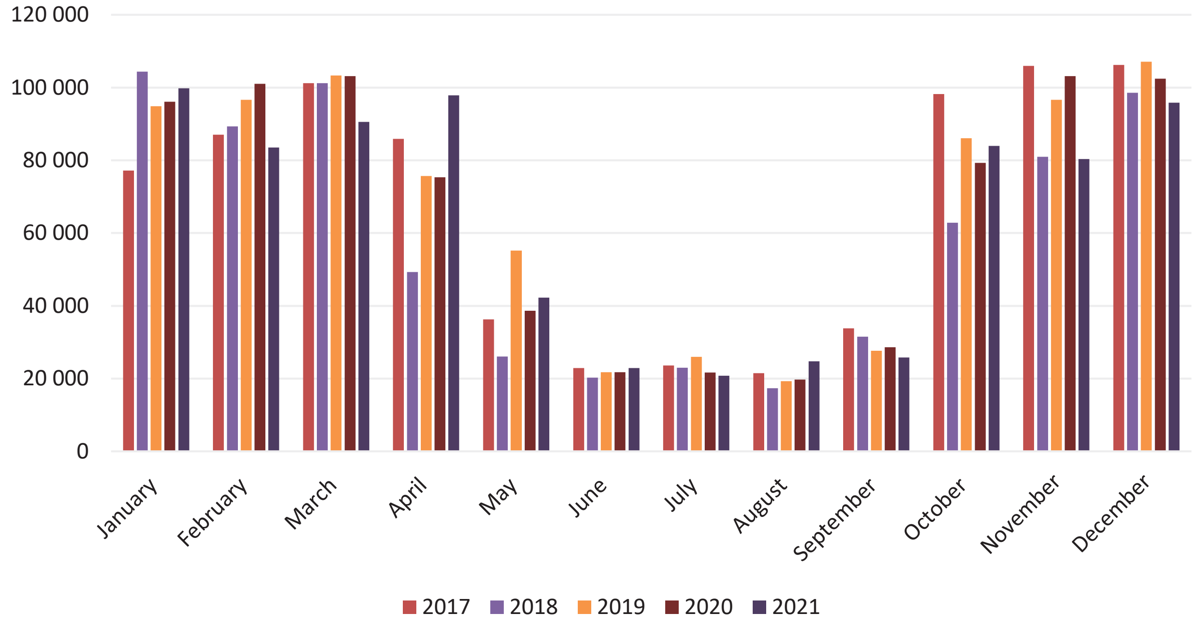
A total of 162,958 GJ of thermal energy was sold thereafter in 2021 Q2, 20% down year-on-year, primarily as a result of the weather conditions, which were less favourable for the input of geothermal energy.

The Geothermal System of Miskolc sold a total of 71,287 GJ thermal energy in 2021 Q3, up 2% compared to the thermal energy sales of the same period in 2020.

The Geothermal System of Miskolc sold a total of 260,127 GJ worth of thermal energy in 2021 Q4, 9% down year-on-year, primarily as a consequence of a service interruption, which occurred on 2 November 2021 and which was disclosed by the Company thereafter. The repair works relating to the service interruption were successfully completed on 11 November 2021 as regards the production of geothermal energy and geothermal heat supply to the district heating system of MIHŐ Miskolci Hőszolgáltató Ltd. was available at full capacity from that date after the appropriate test operation.

Overall, the Company realised 768,264 GJ heat sales in the commercial operations of the Geothermal System of Miskolc during the first half of 2021, down 3% from the 790,835 GJ heat sold during the previous year.

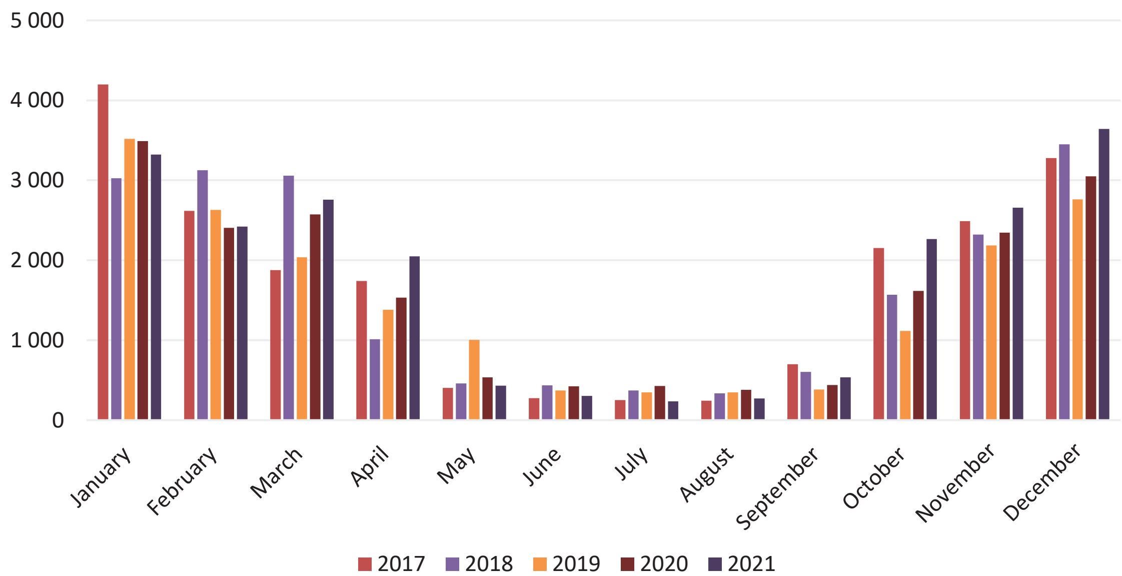
The amounts of heat sold in Miskolc were as follows during the reporting period (GJ):



4.3. *The geothermal heating facility of Szentlőrinc (Szentlőrinci Geotermia CPlc.)*

In Szentlőrinc, the volume of heat sold was 20,895 GJ, 9% more 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 may be significantly higher than that of district heating systems with complex heat resources.

The amounts of heat sold in Szentlőrinc were as follows during the reporting period (GJ):



4.4. *Geothermal methane utilization facility of Berekfürdő (Berekfürdő Energia Ltd.)*

The Geothermal Methane Utilization Small Power Plant of Berekfürdő sold a total of 1,017 MWh electricity during the reporting period, exceeding the 782 MWh sold in 2020. The 30% growth enabling the above substantial sales revenue increase took place in the fourth quarter of the preceding year and the first quarter of the reporting period, as a result of the investment projects aimed at improving the efficiency of the gas motors. A total of 1,143 GJ thermal energy was sold in 2021, falling short of the 2,238 GJ sold in 2020, partly as a consequence of the impact of the pandemic during the period under review on the heat recipients in Berekfürdő.

5. Overview of the Energy Industry, the Sector of Our Core Operations

These days, environmental protection and sustainability are becoming increasingly important. Regulators and market players are beginning to fully recognise the vital importance of these areas, and their role in shaping the future. It is evident that PannErgy was well ahead of its time in understanding the importance of this segment, almost 15 years in advance.

In 2007, when formulating its new corporate strategy to shareholders, the Company's management opted to focus on renewable energy production as a core activity, while scaling back plastics manufacture, which was more harmful to the environment.

The PannErgy Group is still committed to implementing its long-term strategy focusing on the utilization of renewable energy sources. The focus of the strategy is to become the region’s dominant company in the utilization of geothermal energy, to maintain this position and to provide highly reliable environmentally friendly services that are free of geopolitical risks to the Hungarian population, as well as to the industrial and institutional market in Hungary, while continuing to create shareholder value.

The Company is fully committed to the utilisation of one of the most active thermal water sources in Europe for the production of energy. Since geothermal heat can be utilised by households and industrial consumers in the long-term, the environmentally sound investment projects implemented by PannErgy could enable significant reductions in expenditures relating to energy and greenhouse gas emission quotas.
The increase in the demand for energy is unstoppable in the long term – in spite of temporary set-backs from time to time – however, both the domestic and the global resources or its possibilities are limited. Professional, effective and efficient geothermal energy production is not only a form of utilization of a hitherto hardly used immense source of energy but also one of the most environmentally friendly and cleanest form of energy generation. The European Union has not only come to welcome such forms of energy generation but it is now guiding member states, including Hungary, by way of a strictly regulated program and clear-cut objectives as well.
That said, it is important to note that the production of renewable energy from deep geothermal wells is involves numerous professional challenges hindering the implementation of projects and their safe and efficient operation. PannErgy enjoys a strong competitive advantage in this specialised field, with decades of experience and a proven track record of success in financial, operational and environmental projects.

Main milestones of the Company's history:

Year	Event
1922	PannErgy's legal predecessor is established.
1991	On 31 May 1991, the company – still a plastics company at the time – becomes a joint-stock company
1994	Among the first issuers to list shares on the Budapest Stock Exchange
2007	In November 2007, the Company changes its name to PannErgy and announces its new strategy. Based on well-founded calculation and research the Company set itself a goal hitherto untapped in Hungary: Generation and utilisation of energy from geothermal sources
2010	Acquisition of sole ownership of Berekfürdő Energia Termelő és Szolgáltató Ltd. This acquisition allows PannErgy to expand its alternative energy portfolio with a power plant fueled with methane obtained from thermal water, which would otherwise be significantly damaging to the environment, as well as the associated technological expertise.
2011	Deepening a geothermal well in Szentlőrinc, construction of a surface system. The Company achieved its first success in 2010 with its geothermal developments by launching its commercial geothermic heat generation and sale of energy operations on 1 January 2011 in the town of Szentlőrinc. The project fully replaced Szentlőrinc's district heating system, which was previously based on crude oil, then on natural gas.
2013	In May 2013, production commenced at Central Europe's largest geothermal power plant, in the form of an investment project implemented by PannErgy. Geotermia CPlc.'s Miskolc project supplying the Avas district of Miskolc won the international GeoPower Market's "Best Heating Project 2013" award.
2014	PannErgy had also implemented the second phase of the Geothermal Project of Miskolc by September 2014. The system – implemented by Kuala Plc. – then began to supply thermal energy in the town of Miskolc to the Downtown and the University heating districts as well.
2014	In addition to the district heating system of Miskolc, its primary heat consumer, the capacity of the Miskolc Geothermal System allowed the company to supply further consumers with environmentally friendly geothermal energy. This is how heating supply was established towards the Company's first industrial customer partner, Joyson (formerly Takata) Safety Systems Hungary Ltd.
2014	PannErgy launched its second largest investment project – the Győr Geothermal Project – in the Kisalföld region in early 2014, by deepening four geothermal wells (two production and two reinjection wells) in the villages of Bőny and Pér.
2015	November 2015 saw the inauguration of Győr-Moson-Sopron County's most significant and important energy investment – and not only among geothermal projects –, the Győr Geothermal Project. This project allowed PannErgy to significantly offset fossil fuel emissions by selling heat to Győr-Szol CPlc. and Audi.
2016	In 2016, the Company successfully completed its first major development investment programme for existing geothermal systems, resulting in a significant expansion of its existing competences. A thorough understanding of the somewhat unpredictable chemical and physical challenges of the well system in Győr enabled us to increase the resiliency of the system. By way of capacity upgrades, we increased the maximum thermal water yield capacity of the Győr Geothermal System to 960 m3/h.
2017	PannErgy concluded a concession contract in February 2017 with the Hungarian State for the exploration, extraction and utilization of geothermal energy in the region of Győr, for a period of 35 years. PannErgy Koncessziós Ltd. was established to examine the geothermal resources over 2,500 meters below the surface, in the zone specified by the concession rights acquired under the concession contract. Accordingly, the company decided to drill a new geothermal well, to further increase its thermal capacity.
2018	The third production well in Bőnyi, BON-PE-03, was bored under the concession won the year before. PannErgy begins to use the additional quantity of heat supplied by its increased capacity for selling additional green energy to its existing customers.
2019	On 28 June 2019, the Company acquired full ownership in Well Research Ltd., owner of the reinjection well (ID: KIS-PE-01B) bored at Kistokaj and connected to the Geothermal System of Miskolc.
2020	Reliable heat generation during the pandemic, ensuring the achievement of the reporting year's planned EBITDA figures, in addition to further investments in capacity expansion and efficiency improvements.
2021	By 2022, the continued capacity expansion and efficiency improvement investment programme started the year before will enable the company to reach a consolidated annual EBITDA level of HUF 3,150–3,250 million by 2022. PannErgy further increased its emissions savings by purchasing carbon dioxide quotas to offset its overall operations, overshooting its planned carbon dioxide emissions savings.

6. The PannErgy group's strategy, environmental objectives

The core element of the strategy of the PannErgy Group, the region's dominant company utilising geothermal heat, is to play a key role in countering climate change by its environmentally friendly services of high operational reliability, and to enable major reductions in energy related expenditures by implementing environment preserving capital projects. PannErgy Plc. uses clean and renewable energy solutions to build the future, giving every generation the opportunity to create value by applying the principles of environmental protection and sustainability. The Company has set itself the goal of becoming a market leader in the Central and Eastern European region through the use of geothermal energy, which provides significant economical and ecological value for now and in the future.

6.1. *Sustainability management and environmental, social and governance (ESG) performance summary and report*

The PannErgy Group believes that is extremely important to determine the influence and impact its activities have on the environment and on society as a whole. Accordingly, it will release its first ESG report by first half of 2022 – ahead of the deadlines prescribed in the applicable legal regulations – showing, in addition to the data presented in these consolidated financial statements, the environmental and social impacts of the operation of the PannErgy Group during the reporting period, along with the Company's sustainability and environmental strategy and actions. The purpose of the ESG report to be issued will be to enable investors and other market participants to familiarise themselves with these details, to which end the Company provides deeper and more detailed disclosures, focusing on climate change, climate risk, and sustainable development.

As a renewable energy producer and a major contributor to carbon footprint reductions, the Company sees ESG as a significant opportunity for establishing a framework to identify non-financial aspects that may have a material impact on the performance of an investment, including the assessment and presentation of new non-financial risks.

In recognition of the Company's efforts in the field of renewable energy and sustainability, PannErgy Plc. was awarded the "Award for Responsibility, Sustainability and Corporate Governance" at the BSE Legek 2021 awards ceremony, in addition to two other issuers.

6.2. *PannErgy for the prevention of climate change, carbon saving operation*

The ESG report referred to in section 6.1 also includes, among other things, the PannErgy Group's greenhouse gas emission savings balance.

Since PannErgy's core business is renewable geothermal energy production with minimal emissions, the Company's business is based on emission savings instead of emissions.

The Company has defined the total annual emissions savings and the savings rate as key indicators for its overall strategic environmental objectives. Total annual emissions savings is the amount of emissions (in tonnes) saved by the Company during the relevant business period from its direct and indirect heat-transfer partners, as a result of its core green energy production activity. The emissions savings rate is the ratio between the green house gas emissions of the energy used in the production and sale of the geothermal energy produced and theoretical green house gas emissions calculated for a hypothetical production using an alternative fossil fuel source typical of the region.

PannErgy's consolidated greenhouse gas emissions savings rate in the reporting year was 81%, meaning that, in environmental terms, it saved approximately 4/5 units compared to fossil fuel emissions.

Based on these greenhouse gas emissions related to energy production, the Company emitted only 19.4%, that is, less than one-fifth, of the GHG environmental burden of the natural gas-based power generation of 90% efficiency considered for the purpose of offsetting emissions in the reporting period.

In 2021, the Company will have offset (saved) approximately 79 thousand tonnes of CO_2-equivalent GHG emissions. The CO_2 impact associated with the electric power demand of geothermal power generation has been fully offset by the Company through the purchase of a Guarantee of Origin (Scope 2) representing 23,000 MWh of electric power generation (Chapter 5.7.2). Therefore, the GHG emissions from the electricity consumption associated with power generation were considered as carbon-neutral in the present calculation. Similarly, the Company considered the emissions of the power plant in Berekfürdő – which produces electricity and heat by burning methane gas captured from geothermal fluids – as a carbon-neutral activity, due to its small size and the positive GHG impact of converting methane to carbon dioxide.

The Company is proud that, since the implementation of its geothermal strategy, it has been able to replace the emission of more than 500 thousand tons of carbon dioxide with green heat production.

7. THE PANNERGY GROUP'S SUBSIDIARIES

PannErgy Plc., the parent company, has a 100% share of ownership in PannErgy Geotermikus Erőművek CPlc. the Group's technical/professional leader company, which in turn is 100% direct owner of all PannErgy project companies and group member companies.
The PannErgy Group has subsidiaries only in Hungary and the member companies are operating in the territory of Hungary.

7.1. *The PannErgy Group's subsidiaries, ratios of participations and consolidation*

PannErgy subsidiaries	Share capital (HUF Mn)	Shareholding (%)	Voting rights (%)	Consolidation ratio (%)
PannErgy Geothermal Power Plants Ltd.	2,073	100.00	100.00	100.00
DoverDrill Mélyfúró Ltd.	86	100.00	100.00	100.00
Arrabona Koncessziós Ltd.	6	100.00	100.00	100.00
TT Geotermia CPlc.	6	100.00	100.00	100.00
Szentlőrinci Geotermia Ltd. [1]	5	100.00	100.00	100.00
Miskolci Geotermia Ltd. [1 2]	5	100.00	100.00	100.00
DD Energy Ltd.	3	100.00	100.00	100.00
Kuala Ltd.	3	100.00	100.00	100.00
Berekfürdő Energia Ltd. [3]	3	100.00	100.00	100.00

1: As of 31 December 2021, Miskolci Geotermia Ltd. and Szentlőrinci Geotermia Ltd. have been restructured and will continue to operate as limited liability companies instead of private companies limited by shares. Szentlőrinci Geotermia CPlc's restructuring was registered with the Court of Registration on 25 January 2022.

2 Well Research Ltd. merged into Miskolci Geotermia CPlc., with effect from 30 June 2021, whereby it was terminated, and Miskolci Geotermia CPlc. (currently Ltd.) became its general legal successor.

3 The subscribed capital of Berekfürdő Energia Ltd. was decreased during the reporting period, from HUF 24 million to HUF 3 million, as of 31 September 2021.

Apart from the above, there were no other significant changes or restructurings in the PannErgy Group.

7.2. *Key 2021 data of PannErgy's consolidated subsidiaries based on individual, non-consolidated financial statements (in HUF million)*

PannErgy subsidiaries	Equity	Subscribed capital	Sales revenue	Business profit or loss	Profit after taxes	Headcount
PannErgy Plc.	10,633	421	275	34	37	-
PannErgy Geothermal Power Plants Ltd.	3,231	2,073	80	262	6	8
Arrabona Koncessziós Ltd.	2,186	6	2,346	696	588	2
DD Energy Ltd.	1,177	3	2,114	249	145	2
DoverDrill Ltd.	842	86	288	-3	1	3
Miskolci Geotermia CPlc.	410	5	1,414	204	56	6
Kuala Ltd.	173	3	1,115	135	69	2
Szentlőrinci Geotermia CPlc.	23	5	81	32	12	-
Berekfürdő Energia Ltd.	15	3	52	11	6	-
TT- Geotermia CPlc.	59	6	799	56	52	-

8. THE COMPANY'S OWNERSHIP STRUCTURE, SENIOR OFFICERS

8.1. *The Company's ownership structure as of 31 December 2021*

Shareholders	Total share capital = Introduced series					
	01/01/2021			31/12/2021		
	%	%	shares	%	%	shares
Domestic institutions	34.70	43.32	7,306,202	29.19	37.49	6,146,577
Foreign institutions	8.11	10.13	1,708,161	8.05	10.34	1,695,255
Domestic private individuals	27.00	33.70	5,684,997	30.38	39.01	6,395,910
Foreign private individuals	0.41	0.51	85,580	0.32	0.41	66,672
Employees, senior officers	1.93	2.41	407,000	1.94	2.49	409,505
Own holding	19.89	0.00	4,186,970	22.13	0.00	4,658,644
Owner belonging to the general government system	7.96	9.93	1,675,745	7.96	10.22	1,675,745
International Development Institutions	-	-	-	-	-	-
Other	-	-	-	0.03	0.04	6,347
Total	**100.00**	**100.00**	**21,054,655**	**100.00**	**100.00**	**21,054,655**

8.2. *Shareholders with over 5% shareholdings in the Company as of 31 December 2021*

Name	Investor category		Number of shares	Shareholding (%)	Voting rights (%)
Benji Invest Ltd. / FCI Kompozit Ltd.	Domestic	Company	3,174,010	15.08	19.36
MVM Energetika CPlc.	Domestic	Company	1,675,745	7.96	10.22
Soltút Ltd. / Kálmán Rencsár	Domestic	Company	1,151,240	5.47	7.02

8.3. *Changes in the number of treasury shares held by Company in the year under review*

Changes in the number of treasury shares held by the PannErgy Group in the year under review:

	01/01/2021	30/06/2021	31/12/2021
At company level	3,723,441	3,443,080	3,254,767
Subsidiaries [1]	935,203	935,203	935,203
Total	**4,658,644**	**4,378,283**	**4,189,970**

[1] PannErgy shares held by PannErgy Geothermal Power Plants Ltd., the Company's 100% subsidiary

8.4. *Senior officers of the Company*

The Company's senior officers are the members of the Board of Directors. Data of the members of the Board of Directors, and their respective shareholdings as of 31 December 2021:

Name	Position	Date of entry into office	Mandated until	Number of shares held
Balázs Bokorovics	Member, Chairman	31/08/2007	indefinite term	-
Dénes Gyimóthy	Member, Vice-Chairman Acting Chief Executive Officer	31.08.2007 (05.05.2015)	indefinite term	-
Katalin Gyimóthy	Member	28/04/2016	indefinite term	-
Lilla Martonfalvay	Member	28/04/2016	indefinite term	100,000
Attila Juhász	Member	31/08/2007	indefinite term	-
Kálmán Rencsár	Member	30/04/2020		307,000
Gábor Briglovics	Member	16/04/2021	indefinite term	-
Total number of shares held				**407,000**

The Company has no (strategic) employees influencing its operations.
PannErgy Group's Consolidated annual statements prepared in accordance with the international financial reporting standards and the annual report are signed by Dénes Gyimóthy, acting Chief Executive Officer, as authorised by the BoD.

9. HEADCOUNT INFORMATION

The average statistical headcount figures of the PannErgy Group during the reporting year are as follows:

Own staff	31/12/2021	31/12/2020	Change
PannErgy Plc.	-	-	-
Affiliated entities	23	27	-4
Total	**23**	**27**	**-4**

The PannErgy Group's 2021 average statistical headcount was 23, 4 persons fewer than the 27 of the preceding year. On 31 December 2021 the number of staff working for the PannErgy Group was 18; the difference between the average statistical headcount and the number of employees is attributable to part-time employment across group members and the increased headcount during the year.

10. DISTRIBUTION OF DIVIDENDS

It was on 16 April 2021 that the Company notified the investors about the resolutions taken by the Management Board on 16 April 2016 in the scope of power of the Company's General Meeting, pursuant to the authorisation stipulated in Section 9 (2) of Government Decree No 502/2021 (XI.16.) on the repeated implementation of derogating provisions governing the operation of partnerships and joint-stock companies during the state of emergency. Of those resolutions the management Board, by its PannErgy Plc. Management Board resolution No. 2021.04.16./1 the Management Board—acting in the capacity of the General Meeting in accordance with Section 9 (2) of Government Decree No 502/2020 (XI.16.) on the repeated implementation of derogating provisions governing the operation of partnerships and joint-stock companies during the state of emergency and in consideration of the report of the Management Board together with the opinion of the Audit Committee and the auditor—adopted the Company's 2020 individual (parent company) non-consolidated balance sheet and profit/loss statement as per the EU IFRSs with a HUF 11,458 million matching amount of assets and liabilities and a HUF 3 million profit/loss after taxes, that is, profit, as specified in the proposal and the auditor's report as well.

The Management Board – acting under the authority of the General Meeting and considering the report of the Management Board, the opinion of the Audit Committee and the auditor – acknowledged and adopted the Company's consolidated report relating to PannErgy Plc.'s business operations in 2020, as prepared in conformance to the EU IFRS, with an identical total value of HUF 26,733 million for assets and liabilities (balance sheet total), and profit/loss (profit) in an amount of HUF 237 million. Acting under the authority of the General Meeting, the Management Board adopted the Management Board's proposal for the payment of a dividend of HUF 15 per ordinary share, but not more than a total of HUF 253 million, to shareholders entitled to dividend payment under Sections 56.3 and 58 of the Company's Articles of Association, from the reporting year's profit after taxes and the positive retained earnings from previous periods' profitable operations. The total amount of profit after tax for the year under review will be utilised for the payment of dividends. The first dividend amount will be paid on 14 July 2021. For the purposes of dividend payment, the accounting date for shareholder verification is 30 June 2021. The Company disclosed details on the payment of dividends in its public communication dated 23 June 2021 on the regime of dividend payment for business year 2020.

Thereafter, on 29 June 2021 it disclosed the amount of the actual dividend. Accordingly, the Company pays a gross amount of HUF 15.15 to shareholders in the way of dividend for 2020, amounting to a total of HUF 253 million.

Dividends were paid from 14 July 2021, and with the exception of an amount of HUF 53,912 million the whole of the prescribed HUF 253 million had been paid to shareholders by 31 December 2021.

11. TREASURY SHARE BUYBACKS, BUYBACK PROGRAMS DURING THE REPORTING PERIOD

On 31 December 2021 the Company held a total of 4,658,644 PannErgy Plc. treasury shares, 468,674 more than the stock of treasury shares held on 31 December 2020. The change resulted from the purchase of treasury shares in the framework of the treasury share buyback program taking place during the reporting period; the treasury share portfolio decrease occurred during the reporting period.

A total of 188,313 and a total of 280,361 treasury shares were bought back in the first half and in the second half of 2021, respectively, under the above treasury share buyback programs. The portfolio of treasury shares did not decrease and there was no share option program in place during the period concerned.

The stock exchange closing price of PannErgy shares was HUF 1,040 per share at the end of the review period, to be compared to HUF 760 on 31 December 2020, up 37% year-on-year.

Details of the treasury share buyback program concluded during the reporting period:
By its resolution No. 2020.04.30./5. of 30 April 2020 the Board of Directors—acting in the capacity of the General Meeting in accordance with Section 9(2) of Government Decree 102/2020 (April 10) on derogating provisions governing the operation of partnerships and joint-stock companies during the state of danger—authorized the Board of Directors to purchase own shares up to an amount of HUF 1,000,000,000 (that is one billion Hungarian forints) at a share price amounting to at least HUF 1 and up to HUF 750 as the maximum. Under the program so adopted the Management Board was authorised to purchase as many shares as will make sure that the portfolio of treasury shares does not, at any time during the period covered by the authorisation, exceed 25% of the total portfolio of shares the Company has issued. The authorization was valid during the period starting on 1 May 2020 and ending on 29 April 2021, providing that treasury shares may only be purchased on the exchange. By its resolution 3./2020 (VIII.7.) the General Meeting held on 7 August 2020 approved – Pursuant to Sections 113 (4)-(6) of Act LVIII of 2020 on the Transitional Rules and Epidemiological Preparedness related to the Cessation of the State of Danger – resolution 2020.04.30./5. adopted by the Management Board in its scope of competence as general meeting concerning the purchase of treasury shares based on Management Board's authorisation.
The Company had purchased 9,813 shares by 29 April 2021 in the framework of this treasury share buyback programme; together with the 585,537 shares purchased in 2020 a total of 595,350 treasury shares were purchased under the program closed on 27 April 2020.

Details of the treasury share buyback program commenced during the reporting period:
Acting in the capacity of the General Meeting in accordance with Section 9(2) of Government Decree 502/2020 (XI.16.) on the repeated implementation of derogating provisions governing the operation of partnerships and joint-stock companies during the state of emergency, the Management Board authorized the Management Board by its decision of 16 April 2021 to purchase treasury shares up to an amount of HUF 600 million at a share rate corresponding to at least HUF 1 and up to HUF 950 as the maximum. To the extent permitted by law and considering the provisions laid down in Section 3:222(1) of the Hungarian Civil Code, the Management Board is authorized to purchase ordinary shares of a HUF 20 nominal value up to a quantity with which the portfolio of own shares does not exceed, at any time during the term of the authorization, 25% of the total portfolio of shares issued. The treasury share buyback program covers the period starting on 17 April 2021 and ending on 14 April 2022. The shares may be purchased solely in trading at the stock exchange.
In the first half of 2021 – between 17 April and 30 June 2021 – a total of 178,500, and in the second half of the same year a total of 280,361 treasury shares were purchased under the treasury share buyback programme, at an average price of HUF 842 per share.

12. MAIN RISKS FACED BY THE COMPANY, ASSOCIATED UNCERTAINTIES

A particularly high geological risk is a specific feature of all geothermal projects, which the Group members mitigate by the gathering and integrated processing of the widest possible range of geological and other technical/professional and scientific information. The impacts of the risks relating to operational activities and their management are discussed in *Note 41. Financial risk management* in the 2021 consolidated financial statements.

These risks, which have already been disclosed in the previous year, have been supplemented by the Company with the risks arising from the Russian-Ukrainian war, details of which can be found in Note 41.10 to the consolidated financial statements for 2021.

The Company works out a Responsible Corporate Governance Report in accordance with the Responsible Corporate Governance Recommendations released by the Budapest Stock Exchange. The report contains corporate governance information and is adopted by the Company's supreme body simultaneously with the adoption of the annual consolidated report.

13. PUBLICITY

The Company posts regular and extraordinary notices on its website at (www.pannergy.com), among other things. The publications and public information released by PannErgy Plc. may make it considerably easier to understand and judge the Company's operations and economic position, therefore they are important supplements to the information disclosed herein.

14. MAIN EVENTS DURING THE PERIOD COVERED BY THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

References to the events concerned are presented in the following table. Based on the references the complete information is accessible at the Company's official places of disclosure.

Date	Type of news	Subject, brief content
21 March 2022	Extraordinary information	Amendment of the Agenda of the annual ordinary General Meeting
20 March 2022	Extraordinary information	Treasury share transactions
11 March 2022	Extraordinary information	Treasury share transactions
11 March 2022	Extraordinary information	Amendment of the Agenda of the annual ordinary General Meeting
6 March 2022	Extraordinary information	Treasury share transactions
3 March 2022	Extraordinary information	Changes to the implementation of the share-buyback program
28 February 2022	Extraordinary information	Voting rights, share capital
25 February 2022	Extraordinary information	Treasury share transactions
23 February 2022	Other information	PannErgy wins prestigious ESG award
17 February 2022	Extraordinary information	Amendment to the 2022 EBITDA plan
31 January 2022	Extraordinary information	Voting rights, share capital
14 January 2022	Extraordinary information	Quarterly production report
31 December 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
31 December 2021	Extraordinary information	Changes in the subsidiaries' data under the company law
30 December 2021	Extraordinary information	PannErgy signs market maker agreement
22 December 2021	Other information	PannErgy Nyrt's event calendar for 2022
12 December 2021	Extraordinary information	Treasury share transactions
30 November 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
11 November 2021	Extraordinary information	Operation of Miskolc Geothermal Project restored
4 November 2021	Extraordinary information	Developments related to the malfunction in the system of the Miskolc Geothermal Project
3 November 2021	Extraordinary information	Service failure in the system of the Miskolc Geothermal Project
1 November 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
15 October 2021	Extraordinary information	Quarterly production report
15 October 2021	Extraordinary information	Treasury share transactions
9 October 2021	Extraordinary information	Treasury share transactions

3 October 2021	Extraordinary information	Treasury share transactions
1 October 2021	Extraordinary information	Regulated heat tariffs for the district heat supply period of 2021–2022
30 September 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
27 September 2021	Extraordinary information	PannErgy concluded a HUF 2.85 billion investment credit facility agreement
26 September 2021	Extraordinary information	Treasury share transactions
17 September 2021	Extraordinary information	Treasury share transactions
12 September 2021	Extraordinary information	Treasury share transactions
5 September 2021	Extraordinary information	Treasury share transactions
3 September 2021	Extraordinary information	Semi-annual report
31 August 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
29 August 2021	Extraordinary information	Treasury share transactions
22 August 2021	Extraordinary information	Treasury share transactions
15 August 2021	Extraordinary information	Treasury share transactions
8 August 2021	Extraordinary information	Treasury share transactions
1 August 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
1 August 2021	Extraordinary information	Treasury share transactions
25 July 2021	Extraordinary information	Treasury share transactions
23 July 2021	Extraordinary information	Change in investor's contact person
18 July 2021	Extraordinary information	Treasury share transactions
15 July 2021	Extraordinary information	Quarterly production report
11 July 2021	Extraordinary information	Treasury share transactions
4 July 2021	Extraordinary information	Treasury share transactions
30 June 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
29 June 2021	Extraordinary information	Distribution of dividends
27 June 2021	Extraordinary information	Treasury share transactions
23 June 2021	Other information	Distribution of dividends
23 June 2021	Extraordinary information	Corporate merger within the group of subsidiaries
20 June 2021	Extraordinary information	Treasury share transactions
14 June 2021	Extraordinary information	Articles of Association
13 June 2021	Extraordinary information	Treasury share transactions
5 June 2021	Extraordinary information	Treasury share transactions
31 May 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
30 May 2021	Extraordinary information	Treasury share transactions
25 May 2021	Extraordinary information	Treasury share transactions
14 May 2021	Extraordinary information	Treasury share transactions
14 May 2021	Extraordinary information	Detailed description of the share repurchasing programme
9 May 2021	Extraordinary information	Treasury share transactions
2 May 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
1 May 2021	Extraordinary information	Treasury share transactions
23 April 2021	Extraordinary information	Treasury share transactions exceeding the 20% voting right threshold
16 April 2021	Extraordinary information	Detailed description of the share repurchasing programme
16 April 2021	Extraordinary information	Statement on remuneration
16 April 2021	Extraordinary information	Responsible Corporate Governance Report
16 April 2021	Extraordinary information	Annual Report
16 April 2021	Extraordinary information	General Meeting Resolutions
15 April 2021	Extraordinary information	Quarterly production report
31 March 2021	Other information	Voting rights, share capital
26 March 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
26 March 2021	Extraordinary information	Proposals to the General Meeting
18 March 2021	Other information	Fully carbon-neutral operation at PannErgy

15 March 2021	Extraordinary information	Supplementation of the agenda of PannErgy's annual regular general meeting
5 March 2021	Extraordinary information	Invitation to the General Meeting
28 February 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
31 January 2021	Extraordinary information	Number of voting rights at PannErgy Plc.
15 January 2021	Extraordinary information	Quarterly production report, 2021 EBITDA plan
11 January 2021	Extraordinary information	Treasury share transaction
4 January 2021	Other information	Change in investor's contact person
1 January 2021	Other information	Voting rights, share capital

15. DATE OF AUTHORIZATION OF DISCLOSURE

The Company's Board approved the financial statements and authorized their disclosure on 22 March 2022.

Dénes Gyimóthy
Representing the Board of Directors

PannErgy Plc.
Declaration of the issuer
2021

Pursuant to Sections 2.4 and 3.4 of Appendix 1 to Decree 24/2008 of the Minister of Finance

Budapest, 22 March 2022

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

The attached pdf report is not the official report of the Company. The official version is prepared and published by the Company in XHTML-XBRL format in accordance with the legal requirements. The content of the attached pdf report is fully identical to the content of the report published in XHTML-XBRL format.

DECLARATION

I, Dénes Gyimóthy, acting CEO, representative of the Board of Directors, issue the following declaration in relation to the 2021 IFRS consolidated financial statements and business as well as management reports of the PannErgy Group, pursuant to the statutory requirement laid down in sections 2.4 and 3.4 of Appendix 1 to Decree 24/2008 of the Minister of Finance:

- the 2021 individual annual report of PannErgy Plc., prepared in accordance with the applicable IFRS rules, disclosed simultaneously with the consolidated financial statements and business as well as management report prepared pursuant to the applicable accounting regulations and the IFRS rules to the best of our knowledge, provides a true and reliable picture of the assets, liabilities, financial position, profit and loss of PannErgy Plc. as a public securities issuer, and;

- the business report attached to the annual report provides a reliable picture of the position, development and performance of PannErgy Plc. as public securities issuer company, laying out the key risks and uncertainties;

- the 2021 consolidated financial statements (aggregated consolidated annual report) of PannErgy Plc., prepared on the basis of the applicable accounting regulations to the best of our knowledge, in accordance with the IFRS rules, provides a true and reliable picture of the assets, liabilities, financial position, profit and loss of PannErgy Plc. as a public securities issuer, and the consolidated entities; and;

- the business and management report attached to the 2021 consolidated financial statements (aggregated consolidated management report), prepared in accordance with the applicable IFRS rules, provides a reliable picture of the position, development and performance of PannErgy Plc. as a public securities issuer company, and the consolidated entities laying out the key risks and uncertainties.

Dénes Gyimóthy
Representing the Board of Directors