PannErgy Plc. and its Subsidiaries Consolidated Financial Statements and Annual Report prepared in accordance with the IFRS standards 2022

Including the Independent Auditor’s Report

THIS ANNOUNCEMENT IS PUBLISHED IN HUNGARIAN (MANDATORY, OFFICIAL) AND ENGLISH LANGUAGES. IN CASE OF ANY CONTRADICTION BETWEEN THESE TWO VERSIONS, THE OFFICIAL HUNGARIAN VERSION SHALL PREVAIL.

The attached pdf report is not the official report of the Company; the official report will be drawn up and published in ZIP (within that XHTML-XBRL) format as required by applicable legislation. The contents of the attached pdf report are fully identical with those of the report published in ZIP (within that XHTML-XBRL) format.

TABLE OF CONTENTS

PannErgy Plc. and its Subsidiaries

Consolidated financial statements compiled in conformity with the IFRS standards

31 December 2022

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Budapest, 22 March 2023

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note no.	31 December 2022	31 December 2021
		HUF Mn	**HUF Mn**
Goodwill	*15*	678	678
Other intangible assets	*15*	1,661	1,779
Tangible assets	*16*	19,081	18,992
Investment property	*16*	101	113
Marketable properties	*16*	-	-
Other invested financial assets	*17*	-	103
Financial assets (concession assets)	*18*	1,035	1,085
Receivables from deferred taxes	*33*	139	183
Long-term receivables	*19*	-	-
Total fixed assets		**22,695**	**22,933**
Inventories	*21*	25	7
Trade receivables	*22*	2,260	1,414
Other receivables	*23*	1,305	704
Prepaid income taxes	*33*	-	23
Securities	*24*	417	526
Liquid assets	*35*	629	1,276
Total current assets		**4,636**	**3,950**
TOTAL ASSETS		**27,331**	**26,883**
Subscribed capital	*25*	400	421
Reserves without comprehensive income for the reporting year	*27*	14,139	13,507
Net P/L for the reporting year	*34*	1,310	897
Reserve for repurchased treasury shares	*26*	-5,315	-4,845
Minority interests	*28*	-	-
Total equity		**10,534**	**9,980**
Long-term loans, leases	*29*	9,086	10,000
Other long-term deferred incomes	*29.4*	3,439	3,704
Provisions	*31*	144	-
Total long-term liabilities		**12,669**	**13,704**
Trade payables	*36*	779	704
Short-term credits	*30*	1,169	363
Short-term part of long-term credits	*30*	1,308	1,233
Short-term part of other long-term deferred revenues	*30.1*	275	285
Other short-term liabilities	*32*	597	614
Total short-term liabilities		**4,128**	**3,199**
TOTAL LIABILITIES AND EQUITY		**27,331**	**26,883**

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

	Note no.	2022	2021
		HUF Mn	HUF Mn
Revenue from sales	6	7,145	6,439
Direct cost of sales	8	-5,047	-4,859
Gross margin		**2,098**	**1,580**
Gross margin ratio %		**29%**	**25%**
Gross cash flow		**3,813**	**3,174**
Gross cash flow rate %		**53%**	**49%**
Indirect costs of sales	7	-582	-512
Other incomes	11	748	434
Other expenditures	10	-368	-219
Operating profit		**1,896**	**1,283**
Operating profit ratio %		**27%**	**20%**
EBITDA		**3,612**	**2,878**
EBITDA rate %		**51%**	**45%**
Financial profit	12-13	-480	-319
Profit before taxes		**1,416**	**964**
Income tax	33	-106	-67
Net P/L for the reporting year		**1,310**	**897**
Profit/loss, attributable to Shareholders of the Company		**1,310**	**897**
Share of non-controlling interests in net profit for the year	28	**-**	**-**
Earnings per ordinary share – Basic (HUF)		**82**	**55**
Earnings per ordinary share – Diluted (HUF)		82	55

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME

	2022	2021
	HUF Mn	HUF Mn
Net P/L for the reporting year	**1,310**	**897**
Other comprehensive income		
Other comprehensive income in the period with tax implications	-	-
Total comprehensive income for the year / attributable to	**1,310**	**897**
Shareholders of the Company	**1,310**	**897**
Share of minority (external) shareholders in total other comprehensive income	-	-

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Description	Subscribed capital	Reserves	Repurchased treasury share	Participation of external members	Equity
Balance as at 31 December 2020	**421**	**12,510**	**-3,184**	**-**	**9,747**
P/L for 2021	-	897	-	-	897
Changes in the participation of external members	-	-	-	-	-
Difference arising from consolidation or transformation	-	-16	-	-	-16
Share option programme	-	-	-	-	-
Repurchased treasury shares	-	1,266	-1,661	-	-395
Decrease in treasury shares	-	-	-	-	-
Distribution of dividends	-	-253	-	-	-253
Balance as at 31 December 2021	**421**	**14,404**	**-4,845**	**-**	**9,980**
P/L for 2022	-	1,310	-	-	1,310
Changes in the participation of external members	-	-	-	-	-
Difference arising from consolidation or transformation	-	-3	-	-	-3
Share option programme	-	-	-	-	-
Repurchased treasury shares	-	1,055	-1,514	-	-459
Decrease in treasury shares	-21	-1,023	1,044	-	-
Distribution of dividends	-	-294	-	-	-294
Balance as at 31 December 2022	**400**	**15,449**	**-5,315**	**-**	**10,534**

CONSOLIDATED STATEMENT OF CASH FLOWS

	Note no.	2022	2021
Liquid assets from operations		**HUF Mn**	**HUF Mn**
Profit before taxes		**1,416**	**964**
Adjustments in relation to the profit before taxes and the cash flow of business operations			
Amortisation and depreciation of tangible and intangible assets	15-16.	1,716	1,595
Effect of deferred taxes	33	44	57
Income tax expenditures	33	-106	-67
Exchange gain/loss on credits	14	37	33
Impairment of tangible assets, goodwill	10,16	-	-
Impairment losses and shortage of inventories	10,21	-	-
Impairment losses of receivables	10,39	1	1
Change in provisions in the reporting year	31	144	-
Changes in the fair value of properties	11,16	-	-
Profit on the sales of tangible assets	11	-	-
Changes in minority participations	28	-	-
Changes in working capital elements			
Increase/decrease in inventories	21	-18	21
Income taxes paid	23	-	-
Increase/decrease in receivables	22,23	-1,447	15
Increase/decrease in payables	32,36	58	252
Increase/decrease in prepaid income taxes	23	23	-12
Net liquid assets originating/used from operations		**1,868**	**2,859**
Liquid assets from investments			
Acquisition of investments in private companies	16	-	-
Increase/decrease in existing investments	16	-	-
Acquisition of tangible and intangible assets	15-16	-1,715	-1,273
Change in financial assets (concession assets)	18	-	-
Sales of tangible and intangible assets	15-16	90	34
Change in long-term and short-term deferred income	29.4	-275	-238
Changes in long-term receivables	19	-	2
Liquid assets from investment operations		**-2,106**	**-1,475**
Financial operations			
Increase/decrease in long-term loans	14,29	-952	-559
Increase/decrease in long-term loans	30	880	233
Difference from consolidation and changes in other reserves	27	-3	-5
Purchase of treasury shares	26	-459	-395
Distribution of dividends	27	-294	-253
Increase/decrease in securities	24	213	205
Liquid assets used for financial operations		**-615**	**-774**
Net increase/decrease in cash and cash equivalents		**-647**	**610**
Cash and cash equivalents as at 1 January		**1,276**	**666**
Cash and cash equivalents as at 31 December		**629**	**1,276**

Table of contents

1. General background and description of activities

PannErgy Plc. (hereinafter: PannErgy Plc., PannErgy or the Company), as the legal successor of Pannonplast Nyrt., has a history of almost one hundred years. Its mission is to build the future by providing clean and renewable energy solutions while providing the means – through the utilisation of geothermal energy as a renewable energy source – for sustainable development and value creation. As the predecessor of the Company was founded in 1922 under the name Magyar Gomb- és Műanyaggyár Rt. (Hungarian Button and Plastic Factory Ltd.), PannErgy celebrated its 100th anniversary in 2022.
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 organisations. 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 utilisation of renewable, and in particular geothermal energy resources. As at 31 December 2022, PannErgy Plc.'s subsidiaries operated projects for the utilisation 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: PannErgy Group or the Group) were compiled in conformity with the International Financial Reporting Standards adopted by the European Union (hereinafter: IFRS or EU IFRS). The consolidated financial statements were drawn up in compliance with the requirements of *Act C of 2000 on Accounting* relevant 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.

From 1 January 2017 PannErgy Plc., as a company listed in a regulated market of the European Economic Area, is required 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 at 31 December 2022.

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 financial statements need to be officially produced in XHTML format, which facilitates the use of inline XBRL (iXBRL), where data consolidated in conformity with the IFRS must be recorded. In accordance with the relevant legislation, as in the previous year, PannErgy compiles – and submits to the regulatory authorities – its official, consolidated financial statements for 2022 in XHTML format, which contains iXBRLs wherever required.

3. THE IMPACT OF THE RUSSIA–UKRAINE WAR AND THE PANDEMIC ON THE COMPANY'S REPORT

As in the previous period, PannErgy Plc. proceeds in the reporting period in accordance with the recommendations of the European Securities and Markets Authority (ESMA) regarding the presentation of the impacts of the Russia–Ukraine war and previously, the COVID-19 pandemic on the Company and its financial statements. Accordingly, the Company placed and continues to place special emphasis on business continuity planning, and for all critical areas of operation has emergency plans that are suitable to support the adoption of the necessary business continuity measures.

In accordance with the disclosure recommendations of ESMA, the Company, as a securities' issuer discloses, as promptly as possible and in accordance with its transparency obligations under the market abuse regulations, all relevant data and information on the impact of the Russia–Ukraine war, the pandemic or any other unexpected event on the Company' assets, income and financial position, operational activities, perspectives and plans.

In conformity with the ESMA recommendation, PannErgy Plc. publishes the following information in relation to the Russia–Ukraine war and the COVID19 pandemic in its consolidated financial statements for 2022:

Neither the military events of the Russia–Ukraine war commenced in the reporting period, nor the pandemic events started in previous years had a material impact on the figures presented in the Company's consolidated financial statements for 2022. In the reporting period the Company continued to provide services to its heat-receiving partners at a high level of operational safety; moreover, it was able to maintain the level of EBITDA – its key operational metric – and even increase it as planned relative to the preceding year.

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 on 1 January 2022 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 to 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).

The Group believes 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>

IFRS 17 Insurance Contracts, including the amendments to IFRS 17 (to be applied for reporting periods beginning on or after 1 January 2023);

Amendments to 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 to 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);

Amendments to 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 to 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).

Standards and interpretations issued by the IASB, but not endorsed by the EU:

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 to 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 to IFRS 16 Leases – Lease Liability in a Sale and Leaseback (to be applied to reporting periods beginning on or after 1 January 2024);

Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates and Joint Ventures – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (the effective date has been postponed for an indefinite time until 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 decision that it would not apply the endorsement process to this interim standard and that it would 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 individual/consolidated financial statements of the Company/the Group.

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 presentation currency.
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. Although some revenues and expenditures of the Company are incurred in a currency other than the functional currency (primarily in EUR or USD), their share is significantly lower than that of the transactions conducted in Hungarian forint; consequently, the use of any currency other than the Hungarian forint as functional currency is not warranted in this regard either. Accordingly, the effects of changes in exchange rates are not discussed in the consolidated financial statements.

4.5. *Translation 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 re-measurement of the financial assets and liabilities that arise from such transactions or recorded in foreign currencies are recognised 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 recognises 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 recognises 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.

With the exception of goodwill, intangible assets are recognised at cost by PannErgy Group in the consolidated financial statements because, due to the special nature of these assets, the notion of an active market is not applicable. These costs are reduced by accumulated amortisation and, where applicable, impairment, stated in line with the useful life of the asset.

The intangible assets of the Company consist of 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 capitalised 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 recognised at cost less accumulated depreciation. The cost of trademarks and licenses is amortised 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 amortisation charged until the end of the reporting period and the amortisation 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 capitalised. The values of such purchases are recognised 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 (IAS 36)*

The Company does not charge any amortisation 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 recognises amortisation are also subject to review for impairment in each case where events, changed circumstances or external or internal information sources indicate that the asset is impaired, i.e. its current recoverable amount is less than its current carrying amount.

Such external information sources include the following:

- there are observable indications that the asset's value has declined during the period significantly more than would be expected as a result of the passage of time or normal use;
- significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated;
- market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially;
- the carrying amount of the net assets of the entity is more than its market capitalisation.

Internal sources of information:

- evidence is available of obsolescence or physical damage of an asset;
- significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an

asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite;
- evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.

If any of these indications is present or the Company perceives such indications, it is required to make a formal estimate of the recoverable amount (impairment test), and the impairment will be reviewed.

If the realisable value falls below the book value, impairment must be recognised against the profit or loss with respect to assets carried at cost. The realisable 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 realisable value is the net present value of the future cash flows originating from their continuous use and realised at the cash-generating unit.

As the realisable 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 recognised impairment still exist. Any previously recognised impairment can be reversed only if there was a change in the circumstances that were taken into consideration at the time of the latest calculation of impairment. The option to reverse impairment is subject to restrictions. On the one hand, the carrying amount of the asset may not exceed its recoverable amount or the carrying amount of the asset net of amortisation, in the latter case not considering the effect of the recognition of the impairment.

For the purposes of making a formal estimate of the recoverable amount (impairment test), the Company applies the discount rate / effective interest rate defined in detail in Section *4.15.11, Effective Interest Rate.*

PannErgy determines the potential impairment of assets (impairment test) along the lines of the above principles. No circumstance was identified during the reporting period that may indicate that the recognition of impairments is not appropriate. No circumstance was identified in relation to impairments recognised for previous periods that may indicate that the impairments recognised in previous periods were inappropriate, or that the plans underlying the impairment tests were inappropriate.

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 recognised; therefore the Company recognises 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 recognised 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 classified as 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 recognised 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 on a separate line in the IFRS financial statements. 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 Fixed 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 recognising 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 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 re-measurement is performed on the basis of the measurement 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 measurement.

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 sale 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 recognised at historical cost less depreciation. The cost of tangible assets depend 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 capitalisation, subsequent costs are recognised 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-recognised. 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 recognised in the IFRS statement of profit or loss for the reporting year. The Company takes into account the amount realised 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-recognised; 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 capitalised. The values of such purchases are recognised 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.

The PannErgy Group does not recognise 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 under 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 recognised among other expenditures and incomes.

The Company does not charge any amortisation 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 recognises 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 recognised 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 recognised.

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 recognised 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 centre 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 Construction 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 capitalisation.

4.11. *Investments*

From among the methods set out in *IAS 27 Separate Financial Statements* for the measurement of investments, the Company uses the cost method for all its participations.

Impairment testing at specified intervals is an important element of the measurement 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 recognised and presented in the other expenses line of the statement of profit or loss for the reporting year.

Impairment has to be recognised 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.

PannErgy determines the potential impairment of goodwill (impairment test) along the lines of the above principles. No circumstance was identified during the reporting period that may indicate that the recognition of impairments is not appropriate. The Company backtested the impairments recognised for previous periods and no circumstance was identified that may indicate that the impairments recognised in previous periods were inappropriate, or that the plans underlying the impairment tests were inappropriate.

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 Arrangements*; the interpretation covers service concession arrangements in order to clarify how the operator of a concession is required to present the infrastructure covered by the service concession arrangement, its construction and operating phases and to record the associated incomes and expenditures. *IFRIC 12* offers two methods for recognising 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 to specific project companies engaged in heat generation and sale. 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 tangible 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 realised using such assets are recognised 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 may 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.

<u>Concession arrangement with the Hungarian Government</u>

On 1 February 2017, PannErgy entered into a concession agreement with the Minister for National Development acting on behalf of the Hungarian Government as grantor, in respect of the area located in the region surrounding the city of Győr in order to search for, extract and utilise geothermal energy. The agreement covers a fixed period of 35 years, which may be extended by 17.5 years without any further application. During the term of the agreement, PannErgy is entitled and required to carry out the mining activity related to the geothermal resource stated in the research work programme (research drilling below 2,500 metres and subsequently the utilisation of geothermal fluids) at the contracted location, supervised by the grantor. During the term of the agreement, the grantor Hungarian Government provides all required permits and licences. After the expiry of the agreement, the assets installed at the contracted location are either transferred to the Hungarian Government without the payment of consideration, or PannErgy is required to dismantle the assets, whichever is chosen by the grantor.

On 24 March 2022, PannErgy concluded a long-term heat supply contract – consolidated with previous amendments – with GYŐR-SZOL Győri Közszolgáltató és Vagyongazdálkodó Zrt. until 31 December 2030. GYŐR-SZOL Zrt. is required to satisfy the heat demand of district heating users to be supplied under the contract (in this particular case, households and industrial consumers) primarily from the heat purchased from PannErgy, in consideration of the maximum thermal capacity of PannErgy. Under the contract, the purchase price is the prevailing regulatory price set by the Hungarian Energy and Public Utility Regulatory Authority (HEA).

Key assumptions regarding the interpretation of IFRIC 12 and their justifications are as follows:
After the expiry of the concession agreement concluded on 1 February 2017, the Hungarian Government will either extend the concession agreement, or enter into a concession agreement with another entity, or decide to keep the assets installed at the contracted area since – with proper maintenance – those types of assets can be used for a long time with a minimum amount of expenditure, and an already installed system is much cheaper to operate than generating other known types of thermal energy. In addition, it is an environmentally friendly, sustainable solution. Therefore, continuing to use the assets would be the only rational decision and under these circumstances, PannErgy does not need to reckon with the obligation to dismantle the assets. In relation to the supply of Győr with district heating in the reporting period, in addition to the geothermal energy provided by PannErgy Group an alternative energy source was the thermal energy resulting from the operation of gas boilers and gas engines of Győr-Szol Zrt. and external partners, which can only be purchased at a far higher regulatory price. Accordingly, the only reasonable decision is the extension of the agreement until PannErgy is capable of providing thermal energy, i.e. until the expiry of the concession agreement.

In terms of its legal and accounting qualification, the project – implemented under and in accordance with the terms and conditions of the concession agreement – is in line with the *IFRIC 12* interpretation as follows:

- During the term of the agreement, the Hungarian Government as grantor and PannErgy are entitled and required to carry out the mining activity related to the geothermal resource stated in the research work programme (utilisation of geothermal fluids extracted from a depth below 2,500 metres) at the contracted location, supervised by the grantor; consequently the requirements of [IFRIC 12:3] are in place.
- Although not in the concession agreement, prices are defined in the legislation applicable to district heating producers (HEA Decree), and the Hungarian Energy and Public Utility Regulatory Authority determining the transfer price was established as an authority representing the Hungarian Government. In addition, GYŐR-SZOL Zrt. – the buyer – is owned 100% by the municipality, and was set up for the district heating supply of Győr. Consequently, the requirements of [IFRIC 12:5] A) are in place.
- During the term of the agreement, the grantor Hungarian Government provides all required permits and licences. After the expiry of the agreement, the assets installed at the contracted location are either transferred to the Hungarian Government without the payment of consideration, or PannErgy is required to dismantle the assets, whichever is chosen by the grantor. However, our key assumption is that the only rational decision is to continue to operate the assets; consequently, the requirements of [IFRIC 12:3] are in place.
- During the term of the agreement, the grantor Hungarian Government provides all required permits and licences. After the expiry of the agreement, the assets installed at the contracted location are either transferred to the Hungarian Government without the payment of

consideration, or PannErgy is required to dismantle the assets, whichever is chosen by the grantor. However, our key assumption is that the only rational decision is to continue to operate the assets; consequently, the requirements of [IFRIC 12:5] B) are in place.

In addition to the above, a key interpretative example for concession agreements under IFRIC 12 is the 'generation of renewable energy', which also confirms that the Company's agreement on the concession in Győr is a concession agreement within the meaning of IFRIC 12. If the contract is a concession agreement within the meaning of IFRIC 12, it is subject to the requirements of IFRIC 12; consequently, the assets should not be presented as tangible assets – they should be stated as financial assets, intangible assets or a combination of both under the operator's (PannErgy) contractual rights.

PannErgy sells the thermal energy generated under the concession agreement to Győr-Szol Zrt. at regulated heat tariffs. Regulated heat tariffs are subject to separate legislation (Decree No. 50/2011 (IX. 30.) of the Ministry for National Development), which provides under Section 5 that the pre-tax profit of district heating suppliers may not exceed 4.5% of the gross asset value. Accordingly, until the expiry of the concession agreement, PannErgy is entitled to receive a fixed income percentage, which is supported by the fact that the concession agreement should be presented as a financial asset.

Gains and losses on financial assets and financial liabilities recognised at amortised cost are recognised in P/L through the amortisation process and when the financial asset or financial liability is derecognised or impaired.

If there is objective evidence that there are impairment losses on the loans and receivables recognised at amortised cost or on the investments held to maturity, the amount of the loss should be defined as the difference between the carrying amount of the asset and the present value of the estimated future cash flow (excluding any future credit losses that are yet to arise) discounted by the initial effective interest rate of the financial asset (i.e. the effective interest rate calculated upon initial recognition). The carrying amount of the asset should be reduced directly or through the application of an impairment account. The amount of the loss is recognised in P/L.

According to the IFRIC 12 interpretation, it is possible to measure the IFRIC 12 asset at amortised cost, which means that the value of the financial asset changes only through amortisation, or in the event of a material change in the underlying key assumptions or when a triggering event is identified. Since under the above legislation regulating the definition of regulated heat tariffs, the profitability of district heating suppliers is pegged to 4.5% of pre-tax profits in the long run, the occurrence of a change in external circumstances that would have no effect on revenues is essentially impossible. As the standard uses the term 'profit or loss' for the recognition of amortisation, the depreciation charge applied by the Company is appropriate. Since there is no objective evidence for impairment loss, there are no other accounting items that affect P/L in relation to the IFRIC 12 asset.

Accordingly, in the consolidated statement of financial position the value of the investment implemented under the concession agreement is presented under fixed assets, as a financial asset measured at amortised cost and adjusted for current year depreciation, the value of which is identical with that of the discounted cash flows expected during the term of the concession agreement.

PannErgy determines the potential impairment of the IFRIC 12 asset (impairment test) along the lines of the above principles. No circumstance was identified during the reporting period that may indicate that the recognition of impairments is not appropriate. The impairments recognised for previous periods were backtested, and no circumstance was identified that may indicate that the impairments recognised in previous periods were inappropriate, or that the plans underlying the impairment tests were inappropriate.

4.14. *Inventories*

The overwhelming majority of the inventories recognised 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 realisable 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 of 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 realisable 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 realisable 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 realisable value of an inventory item that necessitate the write-back of a previously recognised impairment, the Company may do so up to the amount of the previously recognised impairment. Both write-offs and write-backs need to be stated among other expenditures. The write-off (write-back) must be recognised 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 measurement of inventories.

4.15. *Financial instruments*

IFRS 9 Financial Instruments addresses the classification, measurement and presentation of financial assets and financial liabilities, and it replaced the sections of the former *IAS 39* standard applicable to the classification and measurement of financial instruments. *IFRS 9* requires the classification of financial assets into categories measured at fair value and amortised cost, respectively. Financial assets need to be classified into these categories at the time of their initial recognition.

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 recognised by the Company at fair value. The fair value of a financial instrument is the price that the Company could realise 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 measurement.

Fair value can be determined on the basis of exact market prices or, in the absence thereof, using measurement 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 recognises all financial instruments at fair value initially, at the time of the transaction, that is, on the day on which 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 applies an *IFRS 9* compatible model based on expected credit losses.

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 recognised among non-current assets, in conformity with their maturities.

The Company's trade receivables consist almost exclusively of receivables from domestic undertakings based on long-term contractual relations. Upon determining the ratings for the 2022 business year, we found that there was no need to establish a standard collection process for the trade receivables of the Company as its trade debtors always paid on time, observing the due dates of payment. Nevertheless, in the reporting period the Company determined impairment losses expected to occur based on the 'expected credit loss' model, meaning that an impairment provision 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 Kft., GYŐR-SZOL Zrt., Szentlőrinc Közüzemi Nonprofit Kft.) and priority strategic business partners (Audi Hungaria Zrt.), 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 recognises no impairment for these loans. These financial assets to be held to maturity are valued in the consolidated financial statements at amortised 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 amortised cost of the loans was adequate.

Based on the expected lending loss model, the Company classifies loans provided and recorded at amortised 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 measurement 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 recognised.

The commitment fees of the credit line are recognised as a transaction cost (and thus they are to be taken into account in the calculation of the amortised 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 capitalised 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 capitalised. Any other borrowing cost is recognised 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, recognising 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. For such transactions the Group applies hedge accounting as defined in *IFRS 9*, that is, on 31 December – at 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 realised and the amount recognised 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 recognised 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; namely, it strives to ensure that 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.

4.15.5. Liquid assets

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

4.15.6. ‘Held to collect’ financial assets

The Company recognises 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 measurement 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 recognised at fair value, while subsequently they are measured at amortised 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 recognised in equal instalments against the profit or loss over the useful life of the asset.

Any state aid that has become repayable needs to be recognised 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 subsidised 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 subsidised 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 recognised at fair value, while subsequently they are measured at amortised 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 amortised 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 included in ‘other financial liabilities’ by nature, the Company applies the effective interest rate measurement method as per Note no. 4.15.11.
Interest, dividends, gains and losses related to financial instruments classified under liabilities are recognised 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

In the base period, the Company determined an effective interest rate of 2.4%; future, expected cash flows were discounted by this rate. The above definition of the effective interest rate for the base

period was based on the fact that on average, this contractual HUF and EUR-based fixed rate was used for the financing of PannErgy Group.
In consideration of the significant volatility of money markets and other market circumstances, during the reporting period the Company changed the definition of the effective interest rate used for measurement purposes, increasing it to 4.5% for the following reasons:

In the case of PannErgy Group, all of the assets are in use. With proper maintenance, these assets can be used for a very long time with a minimum amount of expenditure, and an already installed system is much more cost efficient than generating other known types of thermal energy. In addition, it is an environmentally friendly, sustainable solution. Consequently, the only rational decision on the Company's part is to continue to operate the assets. Pursuant to the legislation on the determination of regulated heat tariffs (Section 5 of Decree No. 50/2011 (IX. 30.) of the Ministry for National Development), the pre-tax profit of district heating suppliers may not exceed 4.5% of the gross asset value. In other words, profitability is statutorily capped over the long term; therefore, essentially no change can occur in external circumstances that may have an impact on the effective interest rates on the revenue/profitability side. Based on the above, the only variable that is relevant to the definition of the effective interest rate by PannErgy Group is whether the market interest rates or other market rates of return on investments have increased during the period, and whether these increases are likely to affect the discount rate used for calculating an asset's value in use.

The discount rate should be a pre-tax discount rate that reflects the current assessment of the market of:

- the time value of money, and
- asset-specific risks for which future cash flow estimates have not been adjusted.

The Company can consider the following rates as a baseline for estimating the discount rate:

- the entity's weighted average cost of capital, which can be determined by using procedures such as the capital asset pricing model;
- the entity's incremental borrowing rate; and
- other market borrowing rates.

The discount rate is independent of the capital structure of the Company and of the method applied by the entity to finance the purchase of the asset, as the future cash flows likely to be generated by the asset do not depend on the method applied by the entity to finance the purchase of the asset.

Pursuant to the abovementioned legislation on the determination of regulated heat tariffs (Section 5 of Decree No. 50/2011 (IX. 30.) of the Ministry for National Development), the sales prices – as regulated heat tariffs – defined for the Company's project companies – as district heating suppliers – are determined in such a way that they cannot persistently exceed 4.5% of the pre-tax profit; therefore, the PannErgy Group's average pre-tax cost of capital can be considered 4.5%.
This 4.5% pre-tax cost of capital is also confirmed by the new, long-term, fixed financing options potentially available to the Company in the reporting period in respect of the financing of future revenues, calculated at the 75%–25% HUF/EUR rate, which is consistent with practice.

PannErgy determines the 4.5% effective interest rate defined in accordance with the above principles to be the discount rate, as the best estimate for the relevant discount rate. It applies this rate for the impairment testing of assets (including the impairment of financial assets as per IFRIC 12), for determining the presentation value and the related lease liability of right-of-use assets under the *IFRS 16 Leases* standard, and for any other relevant purposes.

The change in the effective interest rate resulted in a change in the historical cost of the assets leased by the Company. The change affected assets stated under tangible assets and measured in accordance with the *IFRS 16 Leases* standard, as well as the related lease liabilities. The impact of the change is described in detail in the relevant notes. The modification did not affect anything else.

The Company has no assets that may warrant the discounting of values in the statement of financial position. 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 recognised in the consolidated financial statements as a net amount if the net settlement of the recognised amounts is legally permitted and the Company intends to settle the amounts on a net basis, or intends to simultaneously realise 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 cash on hand, 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 on the deposit accounts with agreed maturity held with financial institutions, as well as demand 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 recognised 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 recognised 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 recognised 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 recognised 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. *Repurchased treasury share*

The Company may repurchase its treasury shares at the stock exchange pursuant to the authorisation 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 repurchased treasury shares and the effect of their fair measurement at the end of the reporting period is recognised directly through equity, on the 'Reserve for repurchased treasury shares' line.

The above procedure ensures that no gain or loss is recognised 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 re-measurement at the end of the reporting period).

4.19. *Earnings per share*

To determine earnings per share, the Company used the quotient of the profit/loss for the period and the Company's closing number of shares on the last day of the period less repurchased treasury shares.

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 programme running in the reporting period as an item decreasing the volume of own shares provided that the conditions set out in the share option programme 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 recognised under tax expenses/revenues in the period when the modification occurs.

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

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, recognising them under other expenses. In the case of PannErgy, there was only a limited number of items that reduced the revenues used for the calculation of the tax base for the local business tax and the innovation contribution; therefore, these taxes are more like revenue-type taxes and as such, they are not subject to *IAS 12* and are presented under operating expenses.**

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

4.21. *Provisioning*

The Company recognises 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 recognises 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 recognised 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 recognise it in the statement of financial position.

Provisions are recognised 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 recognised 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 recognised 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 recognised for the recovery.

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

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

The Company does not have a share option programme.

The Company applies the provisions of *IFRS 2 Share-based Payment* to the recognition of actual share-based payments when measuring potential future share option programmes. 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 staff costs.

The Company also applies *IFRS 2 Share-based Payment* to share-based payments outside the scope of the share option programme, even though they are not common practice at the Company either, and 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 recognised 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.

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 in assets or the decrease in 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.

Under *IFRS 15 Revenue from Contracts with Customers*, revenue from sales is recognised as control over the goods or services is passed to the customer; in other words, the customer is able to control 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 the revenue.

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 recognised 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 recognise as revenue income from the sales of tangible assets and other incomes that are not realised in the course of its ordinary activities.

In the period covered by the present consolidated financial statements, 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 capitalisation and subsequent depreciation of such assets;
2) each customer contract meets the requirement set out in the standard that the seller may recognise 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 recognised.
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 recognised;
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 recognised 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 may 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 recognise 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 also realise interest income on the loans granted in connection with the operation and governance of the holding, or obtain dividend income on its shareholder investments; these, however, are eliminated in the course of consolidation. The Company does not regard such interest and dividend income as income from ordinary course of business – i.e. it does not treat them as sales revenues – but recognises them under income from financial transactions.

Interest income is recognised 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 recognised 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 recognised when the Company becomes entitled to the dividend.

4.25. *Leases*

In compiling the consolidated financial statements, the Company applied the provisions of *IFRS 16 Leases* to its lease receivables and lease liabilities and its contractual schemes.
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; in the financial statements lessees have to show an asset embodying the right of use under the transaction and a leasing liability, that is, the obligation to make the lease payments. *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 are shown under the new *IFRS 16* lease standard as depreciation of the right-of-use asset and as the 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.

4.26. *Distribution of dividends*

Dividends distributable to the shareholders of the Company are recognised 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 recognised at fair value if the Company is reasonably certain to receive such aid because it will meet the relevant criteria.

Based on the income approach accounting, the Company recognises 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 recognises 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 recognised in equal instalments against the profit or loss over the useful life of the asset.

Any state aid that has become repayable needs to be recognised 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 subsidised 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 subsidised 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*

In line with IFRS requirements, the Company needs to present its operating segments. **As in the base period, the Company identified a single operating segment during the reporting 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 Nyrt., does not identify the utilisation – in the way of property management – of industrial facilities and related office premises formerly used by Pannonplast Nyrt. in its plastics manufacturing operations as a separate operating segment for the purposes of the following *IFRS 8* principles:

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 maximising the efficiency of the Energy segment; the utilisation 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.

The property utilisation – as asset management – of industrial facilities other than those serving geothermal heat generation purposes and the related office areas are not a central element in the strategy of the PannErgy Group; the assessment of the performance of the utilisation of the aforesaid properties is a negligible part of the work of the operative management and supreme bodies of the Company; information regarding the utilisation 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 of 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.

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. Nevertheless, in the reporting period the Company identified – based on size – segments broken down by region/project location within its only operating segment, Energy. 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*

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

Consolidated quantity of heat sold (GJ), consolidated gross cash-flow, consolidated 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.

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

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 continuously 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 Reporting Period* 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 realisation 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;
- Measurement 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*

	2022 HUF Mn	2021 HUF Mn
Energy	6,635	5,583
Property management [1]	510	856
Total	**7,145**	**6,439**

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

6.2. *Breakdown of sales revenues by geographical location*

	2022 HUF Mn	2021 HUF Mn
Revenue from domestic sales	6,995	6,280
Revenue from sales to the EU	150	159
Revenue from sales outside the EU	-	-
Total	**7,145**	**6,439**

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

	2022 HUF Mn	2021 HUF Mn
Heat sales	6,238	5,323
Electricity sales	631	841
Mediated and re-invoiced services	100	91
Sale of products	149	159
Rent for buildings and tangible assets	27	25
Total	**7,145**	**6,439**

In the reporting period the consolidated sales revenue of the Company increased by HUF 706 million, up 11% year-on-year. The breakdown of sales revenue by activities and services reveals that income from the sale of heat rose by 17% year-on-year to HUF 915 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 revenue from electric power sales was down 25% in the reporting period; however, the Company realised a higher margin on these sales compared to the base period. The HUF 177 million revenue from

electricity sales derives from the sale of electricity relating to the Company's project in Berekfürdő, which surpasses the HUF 37 million revenue of the base period significantly, thanks to the higher level of the volume sold as a result of efficiency improving projects on the one hand, and to the steep increase in electricity prices typical during the reporting period on the other hand. The significantly higher level of revenue contributed to the consolidated gross margin of the Group with a substantial margin content in the reporting period.
Within the HUF 631 million revenue, the HUF 454 million above the revenue realised from the sale of electricity through the Berekfürdő project consists of items unrelated to the Group's core activity, Energy – these are pass-through items with practically no margin. This sales revenue was generated by reinvoicing electricity charges relating to the operation of PannErgy Plc.'s properties in Debrecen to co-owners of the property concerned, which is in undivided joint ownership. The significant year-on-year contraction in the revenues from these pass-through items can be attributed to the Company's decision, in June 2022, on divesting the utility distribution system of Debrecen.

In addition to the above, the Company recognised HUF 149 million as revenue from the sale of intangible and tangible assets stated in its books as assets held for sale; the margin realised by the Company on these sales amounted to HUF 46 million.

The rent from buildings and tangible assets during the reporting period came from the utilisation of the Company's properties in Debrecen; amounting to HUF 27 million, the rental fee revenue moderately surpassed the previous year's amount.

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

	2022 31 December HUF Mn	2021 31 December HUF Mn
Assets used in domestic production	22,695	22,933
Assets used in production abroad (within and outside the EU)	-	-
Total	**22,695**	**22,933**

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:

	2022	as a % of total sales in 2022	2021	as a % of total sales in 2021
Total sales revenue from key customers	**5,994**	**84%**	**5,194**	**81%**
Revenue from sales	**7,145**	**100%**	**6,439**	**100%**

7. INDIRECT COSTS OF SALES

	2022 HUF Mn	2021 HUF Mn
Indirect personnel-type costs	167	145
Expert fees, bookkeeping, audit fees	142	117
Office and operating costs	138	110
Costs related to public and stock exchange presence and corporate social responsibility	85	97
Banking costs	25	23
Insurance premiums	20	14
Other fees and duties payable to authorities	4	5
Indirect depreciation (property, plant and equipment)	1	1
Total	**582**	**512**

The PannErgy Group's indirect operating costs increased by 14% during the reporting period year-on-year.

Indirect staff costs were up 15% year-on-year, in line with the labour market processes typical in the reporting period. During the reporting period, 4 persons left the Company. Relative to the previous year with 6 entries and 3 exits, this implies a less intensive fluctuation.
The period-end headcount of the PannErgy Group was below the corresponding figure of the previous year; on 31 December 2022 the actual number of employees was 14 persons, less than the 18 persons recorded on 31 December 2021. The average statistical staff number for the whole year dropped from 23 persons in the base period to 22 in the reporting period. Salary-type payments are summarised in *Note no. 9 Headcount and wage costs*.

Costs of experts incurred in the reporting period include legal and consulting costs relating to the bank 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 21% during the reporting period. In the category of consultancy costs the PannErgy Group's auditing costs amounted to HUF 16 million, in connection with the auditing of the annual reports and the transformation-related statements of assets and liabilities. Of this, 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 statements.

The 25% rise in office and operating costs can be primarily attributed to the steeply rising consumer and industrial price indices seen in the reporting period, affecting energy and utilities, as well as other purchases and services.

The costs of public and stock exchange presence, stated as indirect costs, decreased by 12% during the reporting period. 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.

8. DIRECT COSTS OF SALES

	2022 HUF Mn	2021 HUF Mn
Direct depreciation (geothermal assets)	1,715	1,594
Maintenance and operating costs	1,126	1,014
Electricity charges	1,076	844
Costs of goods sold, mediated services	605	849
Facility maintenance costs, rental	421	387
Insurance costs (directly related to production)	54	44
Maintenance materials	1	-
Production-related research and development costs	-	109
Other direct costs	49	18
Total	**5,047**	**4,859**

The direct costs of sales increased in the reporting period by 4% year-on-year. As a result of the higher level of efficiency and operational safety improving projects implemented in the reporting year and in the previous year, the amount of direct depreciation rose by 8% year-on-year; compared to the HUF 1,594 million recorded in the base period, the Company booked HUF 1,715 million as the direct cost of the amortisation of assets used directly in geothermal heat generation in the reporting period.

The 11% increase in maintenance and operating costs and the 9% rise in facility management costs are attributable to the steadily expanding assets of geothermal projects, the additional operational and maintenance tasks resulting from the efficiency and capacity increasing projects, higher operational/efficiency expectations and the price hikes typical of the reporting period, moving in tandem with changes in the consumer and industrial price indices affecting both purchases and services.

In the ‘Costs of goods sold, mediated services’ category, HUF 605 million was stated as expenses of sales not related to geothermal operations; they mostly consisted of re-invoiced (‘pass-through’) services related to the utilisation of real properties owned by the Company in Debrecen. These costs are related to the value of electricity sales (HUF 631 million) as stated under revenues and to the HUF 100 million value of mediated and re-invoiced 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 rose to HUF 1,076 million from HUF 844 million in the previous year; the Company is trying to offset the negative effects exerted by the typical energy market environment of the reporting period – manifested in unpredictability and price levels surpassing those of the previous period several times over – by continuously monitoring the spot and futures electricity market and by efficient contracting activity.

9. Headcount and wage costs

	2022	2021
Average statistical headcount (persons)	22	23
Wage cost (HUF Mn)	140	117
Other personnel-type payments (HUF Mn)	8	8
Taxes and contributions on wages (HUF Mn)	19	20
Total	**167**	**145**

The average statistical headcount of PannErgy Group was 22 in 2022, which implies a negligible decline compared to the 23 persons recorded in 2021. On 31 December 2022 the actual number of staff working for PannErgy Group was 14, 4 persons less than the 18 recorded on 31 December 2021. 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 previous year, PannErgy Group made no contributions to any voluntary pension fund for its employees or executive officers in 2022. The Company has no liabilities or commitments to employees or past and present executive officers in relation to pension payment or pension benefits.

10. Other expenditures

	2022 HUF Mn	2021 HUF Mn
Provisioning	144	-
Local taxes, duties, fines	140	124
Mining fee	74	74
Aids granted to offset costs	3	3
Cost relating to insurance events	2	2
Fines, penalties, default interest, compensations paid	-	3
Impairment losses of receivables	-	1
Other	5	12
Total	**368**	**219**

The most substantial (HUF 140 million) item of other expenses consists of local taxes, most notably the local business tax paid to the municipalities at the sites of geothermal projects. 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, recognising them under other expenses. In the case of PannErgy, there was only a limited number of items that

reduced the revenues used for the calculation of the tax base for the local business tax and the innovation contribution; therefore, these taxes are more like revenue-type taxes and as such, they are not subject to *IAS 12* and are presented under operating expenses.
In the reporting period, the Company allocated provisions of HUF 144 million for a liability arising from the possible consequence of a lawsuit related to an account payable unrecognised by the Company, related to a tender conducted years ago, not involving any non-refundable grant. The Company has no overdue debt.
Another major item in addition to the above is the mining fee payable relating to geothermal heat production; as in the previous period, under this heading the Company incurred expenditures of HUF 74 million in the reporting period.

11. OTHER INCOMES

	2022 HUF Mn	2021 HUF Mn
Aid received for development purposes	275	283
Fines, compensation received	359	41
Profit on the sale of tangible assets	90	26
Ex post discounts received	-	59
Income relating to insurance events	-	5
Other	24	20
Total	**748**	**434**

One of the most significant items of the HUF 748 million ‘other income’ in the reporting year is development aid received in the amount of HUF 275 million, comprising the reversal 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 together amounted to HUF 359 million in the category of ‘other incomes’ during the reporting period. The items in this category included penalties, compensations or other damage-related income-type items received or acknowledged in relation to machine or equipment failures and service interruptions as well as ex-post discounts based on agreements.
In the reporting period the Company realised a profit of HUF 90 million on the sale of tangible assets, specifically from the transaction relating to the real properties owned by PannErgy Plc. in Debrecen.

12. FINANCIAL INCOMES

	2022 HUF Mn	2021 HUF Mn
FX gains on FX loans	164	10
FX gains related to receivables	81	67
FX gains related to FX accounts	72	3

FX gains related to liabilities	48	14
Exchange gains on securities held for trading	19	13
Gains on derivative transactions	1	3
Interest and interest-type income	5	2
Gain arising from the fair measurement of securities	-	-
Total	**390**	**112**

Income from financial transactions included an amount of HUF 365 million in realised and unrealised exchange gains relating to various receivables and liabilities, of which HUF 125 million is related to the FX lease liabilities recognised in accordance with the *IFRS 16 Leases standard*. The HUF 1 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

	2022 HUF Mn	2021 HUF Mn
FX loss on FX loans	407	43
Interest and interest-type expenses	307	295
Loss on derivative transactions	74	-
FX loss related to receivables	46	31
FX loss related to liabilities	36	47
FX loss related to FX accounts	-	8
Loss arising from the fair measurement of securities	-	5
Other financial expenditures	-	2
Total	**870**	**431**

Financial expenditures amounted to HUF 870 million in the reporting period, substantially higher than the HUF 439 million posted in the previous period.

One of the most important items among financial expenditures is the interest paid on credit and loan liabilities. HUF 307 million was booked for the reporting period under this heading. An amount of HUF 489 million was recognised as exchange loss on various foreign currency 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 125 million regarding all types of assets and liabilities, cumulating 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 translated to HUF at the exchange rate prevailing at the end of the period, and the (financially unrealised) exchange rate differences resulting from such translations are recognised in the statement of profit or loss under financial transactions. The loss on the period-end revaluations is the result of a decline in 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 largely 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 disbursing investment loans. In the case of the Company, the currency of the FX items mentioned above is always EUR.

The HUF 74 million FX loss on derivative transactions in the reporting year resulted from forward FX transactions, concluded in conformity with the trade payables of the PannErgy Group incurred in foreign currencies.

As a consequence of the above, the PannErgy Group recognises a loss of HUF 480 million for the reporting period as profit/loss on financial transactions.

14. OTHER INFORMATION RELATING TO FINANCIAL TRANSACTIONS

	2022	2021
Opening EUR/HUF exchange rate	369.00	365.13
EUR/HUF exchange rate on 31 December	400.25	369.00
Annual change in the EUR/HUF exchange rate	31.25	3.87

15. Intangible assets

Gross value

data in HUF million

	Goodwill	Know-how	Valuable rights	Purchased software	Total
1 January 2021	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
Purchase	-	148	-	-	148
Sale	-	-	-	-	-
Impairment, write-off	-	-	-	-	-
Reclassification to financial assets					
Reclassification to inventories	-	-109	-	-	-109
31 December 2022	678	2,463	108	49	3,298

Accumulated depreciation

	Goodwill	Know-how	Valuable rights	Purchased software	Total
1 January 2021	-	503	89	48	640
Increase	-	211	1	1	213
Sale	-	-	-	-	-
Impairment, write-off	-	-	-	-	-
Reclassification	-	-52	-	-	-52
31 December 2021	-	662	90	49	801
Increase	-	180	1	-	181
Sale	-	-	-	-	-
Impairment, write-off	-	-	-	-	-
Reclassification to financial assets	-	-15	-	-	-15
Reclassification to inventories	-	-8	-	-	-8
31 December 2022	-	819	91	49	959

Net value

1 January 2022	678	1,761	18	-	2,457
31 December 2022	678	1,644	17	-	2,339

HUF 517 million of the HUF 678 million goodwill stated by the Company relates to the 7% minority participation in PannErgy Geothermal Power Plants Zrt. purchased in prior periods. Another HUF 160 million goodwill is related to the Company's two project companies in Miskolc (Miskolci Geotermia Kft., Kuala Kft.), and HUF 1 million to its subsidiary in Szentlőrinc, all in connection with previously purchased minority participations.
On 31 December 2022 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. According to the result, no impairment needs to be recognised.

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 recognised in the reporting period regarding assets stated among intangible assets.

As regards intangible assets, assets of HUF 148 million were purchased in the reporting period, and scheduled amortisation amounted to HUF 181 million. In addition, in the reporting period the Company reclassified to inventories intangible assets of a geothermal know-how nature in the amount of HUF 101 million based on utilisation for sales purposes; in the above progress table they are presented in a separate line.

At the end of the period, from the depreciation of geothermal know-how the Company reclassified HUF 15 million to financial assets; under the interpretation of IFRIC 12, they are related to the amortisation of concession assets of an intangible nature reclassified to financial assets in the reporting period.

16. TANGIBLE ASSETS

data in HUF million

Gross value	Marketable properties	Investment property	Properties	Machinery and vehicles	Investment	Total
1 January 2021	-	166	17,073	9,457	144	26,840
Purchase	-	-	-	-	1,103	1,103
Capitalisation	-	-	125	961	-1,086	-
Sale	-	-33	-	-20	-	-53
IFRS 16 Lease remeasurement	-	-	-	-	-	-
Reclassification to intangible assets or financial assets	-	-	-	-	-	-
Other changes, write-off	-	-	-	242	-	242
31 December 2021	-	133	17,198	10,640	161	28,132
Purchase	-	-	-	-	1,567	1,567
Capitalisation	-	-	95	1,327	-1,422	-
Sale	-	-	-	-	-	-
IFRS 16 Lease remeasurement	-	-	-	66	-	66
Reclassification to intangible assets or financial assets	-	-	-	-	-	-
Other changes, write-off	-	-	-	-	-	-
31 December 2022	-	133	17,293	12,033	306	29,765

Accumulated depreciation	Marketable properties	Investment property	Properties	Machinery and vehicles	Investment	Total
1 January 2021	-	7	2,772	4,848	-	7,627
Increase	-	12	705	664	-	1,381
Sale	-	-	-	-19	-	-19
IFRS 16 Lease remeasurement						
Reclassification, scrapping	-	-	-45	83	-	38
31 December 2021	-	19	3,432	5,576	-	9,027
Increase	-	13	727	795	-	1,535
Sale	-	-	-	-	-	-
IFRS 16 Lease remeasurement	-	-	-	59	-	59
Reclassification, scrapping	-	-	-36	-1	-	-37
31 December 2022	-	32	4,123	6,428	-	10,583

Net value	Marketable properties	Investment property	Properties	Machinery and vehicles	Investment	Total
1 January 2022	-	113	13,766	5,065	161	19,105
31 December 2022	-	101	13,170	5,605	306	19,182

PannErgy Group posted depreciation of HUF 1,716 million for the reporting period, of which HUF 181 million was for intangible assets, HUF 727 million for land and buildings, HUF 795 million for machines and equipment and HUF 13 million for investment properties.

In 2022, tangible assets of HUF 1,567 million were purchased in relation to geothermal heat generation; the gross value rose by HUF 1,422 million as they were commissioned during the reporting period. The projects were aimed at efficiency and operational safety improvement, and primarily affected the two primary project locations (Győr, Miskolc). At the end of the period, the Company recognised capital work in progress at a value of HUF 306 million; primarily this comprises geothermal developments completed in 2023 Q1.

Some special geothermal equipment and machines used for the Company's geothermal projects in Győr and Miskolc operate under long-term lease contracts. Based on the content of the lease agreement and in line with the requirements of the *IFRS 16 Leases* standard, the long term lease liability was calculated against the cost of the leased assets based on the present value of the lease fees paid by the Company during the lease term. In the reporting period the Company remeasured lease contracts in accordance with the requirements of the *IFRS 16* standard. Based on the change in the reporting period in the effective interest rate used for calculating the present value of leasing fees and on the exchange rate movements in the reporting period compared to the original presentation of FX denominated contracts, the gross value of the relevant leased assets stated among machinery and equipment rose by HUF 66 million, while the related amortisation affecting previous periods rose by HUF 59 million.

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 it utilises them by letting. In accordance with the Accounting Policy and the options listed in the *IAS 40* standard, investment properties are recognised at cost in the consolidated financial statements. At the end of the reporting period, investment properties are stated in the consolidated financial statements at the carrying amount less amortisation, i.e. HUF 101 million. Their fair value was HUF 121 million at the end of the reporting period.

Certain properties and machinery serve as collateral for outstanding investment loans. In this context, the following material restrictions of title or mortgages were registered on 31 December 2022:

PannErgy	Financing entity	Amount of collateral charged to tangible assets	Collateral
Miskolci Geotermia Kft. and Kuala Kft.	Unicredit Bank Hungary Zrt. and CIB Bank Zrt.	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 Kft. and DD Energy Kft.	Unicredit Bank Hungary Zrt. and CIB Bank Zrt.	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 Kft., DD Energy Kft., Kuala Kft., Miskolci Geotermia Kft.	Unicredit Bank Hungary Zrt. and CIB Bank Zrt.	HUF 1,984 million and EUR 2,460,227	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 Kft.	Budapest Bank Zrt.	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 Kft.	Széchenyi Bank Zrt.	HUF 540 million	General mortgage on assets (all movable assets and immovable properties)
PannErgy Plc.	Budapest Bank Zrt.	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 measurement 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 organised into a separate economic entity, and each group of assets is used in a single market.
On 31 December 2022, an impairment test was performed at all PannErgy group members where the overwhelming majority of assets consists of 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 measurement 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 the coming 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 at 31 December 2022.
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 recognised.

17. Other invested financial assets

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Government securities	-	103
Total	**-**	**103**

The Company had no other non-current financial investments in the reporting period. Government bonds purchased for investment purposes in the amount of HUF 103 million stated in the previous year matured in the reporting period; the Company purchased short-term government securities – Discount Treasury Bills – instead, and this reallocation resulted in the decline stated in the reporting period.

18. Financial assets (concession assets)

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
The project of Arrabona Koncessziós Kft. in the region of Győr	1,035	1,085

The PannErgy Group reported financial assets relating to concession agreements in the amount of HUF 1,035 million in its consolidated financial statements on 31 December 2022, in conformity with the

IFRIC 12 interpretation and with the relevant part of the Accounting Policy – *Section 4.13 Financial assets related to concession agreements (IFRIC 12)* of these financial statements. 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. In the consolidated statement of financial position the value of the investment implemented under the concession agreement is presented under fixed assets, as a financial asset measured at amortised cost and adjusted for current year depreciation, the value of which is identical with that of the discounted cash flows expected during the term of the concession agreement.

19. LONG-TERM RECEIVABLES

The PannErgy Group states no long term receivables in its consolidated financial statements on 31 December 2022.

20. LEASE RECEIVABLES

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

21. INVENTORIES

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Materials	12	7
Goods	13	-
Total	**25**	**7**

On the one hand, the inventories shown in the 2022 consolidated financial statements include reserve maintenance materials purchased in the amount of HUF 12 million to provide for the efficient, safe and secure operation of the geothermal projects. On the other hand, they comprise goods purchased for resale – also in relation to geothermal activity – in the amount of HUF 13 million.

22. TRADE RECEIVABLES

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Trade receivables	2,261	1,415
Impairment loss provisioning for doubtful receivables, and provisions reversed	-1	-1
Total	**2,260**	**1,414**

Trade receivables indicate a 60% increase compared to the base period, primarily due to the credit period open to buyers which, although it was only marginally longer compared to the base period, affected the reporting date nevertheless. 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, the Company did not have to allocate significant impairment loss provision for any partner during the reporting period. Impairment loss provisions of HUF 1 million were reversed in the reporting period and HUF 1 million impairment provision was allocated for another buyer partner. At the end of the period the impairment allocated for doubtful receivables amounted to HUF 1 million.

The Company's impairment provision matrix pertaining to the reporting period is presented in *Note no. 39 Impairments*.

23. Other receivables

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Prepayments given	571	12
Other receivables from suppliers	332	339
Other tax receivables	299	210
Deferred items for the next period	103	62
Approved state grant not settled by the cut-off date	-	50
Other receivables associated with assignments	-	25
Receivables associated with derivative transactions	-	4
Other loans provided	-	2
Total	**1,305**	**704**

At the end of the period the Company stated HUF 571 million in prepayments given; these receivables are related to the electricity purchases of coming periods and cover advances paid to suppliers and deposits made. The Group recognised HUF 332 million as other receivables from suppliers; these receivables cover compensations, ex post discounts and other settlements. The details of other tax receivables reveal that the single largest item is a HUF 299 million value added tax receivable from the tax authority. The substantial amount of the value added tax receivable is associated with the increased intensity of capital projects in Q4 of the reporting period. HUF 9 million and HUF 94 million of the deferred items of the next period are associated with sales revenues and costs, respectively.

24. Securities

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Held to maturity securities	417	526

In the reporting period the Company's short-term securities portfolio decreased by HUF 109 million in line with the maturity dates of the securities. In terms of their nature, these held-to-maturity securities are short-term discount Treasury bills and government bonds reclassified from long-term financial instruments as they mature in 2023. In line with the investment loan contracts, the securities were blocked by the creditor financial institutions as security deposits.

25. SUBSCRIBED CAPITAL

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Subscribed capital	400	421

After a contraction by HUF 21 million due to the capital reduction conducted on the basis of the General Meeting's resolution adopted on 29 April 2022 and registered by the competent Court of Registration on 25 July 2022, the subscribed capital amounted to HUF 400 million on 31 December 2022. During the share capital reduction to HUF 400 million, a total of 1,054,655 treasury shares were cancelled.

The subscribed capital stated in the Company's consolidated financial statements as per the IFRS and the subscribed capital registered by the competent Court of Registration are fully identical, there is no difference between the two figures.

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 repurchased treasury shares.

After the capital reduction conducted during the reporting period, subscribed capital comprises a total of 20,000,000 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 Nyrt.) held common shares (HU0000073440 ISIN) of a nominal value of HUF 100 each; the nominal value splitting procedure took place thereafter.

26. REPURCHASED TREASURY SHARE

	31 December 2022	31 December 2021
Number of repurchased treasury shares	4,041,700	4,658,644
Nominal value (HUF Mn)	81	93
Cost (HUF Mn)	5,315	4,845

On 31 December 2022 the Company held a total of 4,041,700 PannErgy Plc. treasury shares, 616,944 less than it held on 31 December 2021. The decline can be primarily attributed to the capital reduction

performed in the reporting period when 1,054,655 treasury shares were derecognised. Moreover, 437,711 treasury shares were repurchased in the reporting period.
The 437,711-share increase in the Company's portfolio of treasury shares in the reporting period is linked to the Company's treasury share buyback programme that took place during the reporting period, in the framework of which 166,773 treasury shares were repurchased in 2022 H1, followed by the repurchase of 270,938 shares in 2022 H2.

With respect to treasury share transactions, more detailed information is provided in the Company's public disclosures; moreover, details of the treasury share buyback programmes commenced and completed during the reporting period are discussed in *Chapter 11 Treasury share buyback* of the Business and Management Report drawn up based on these consolidated financial statements.

27. RESERVES

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

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Capital reserve	8,354	10,516
Retained earnings	6,912	3,947
Other reserves	-1,127	-956
Total	**14,139**	**13,507**

The capital reserve is associated with two historical events: firstly, the subscribed capital reduction upon the Company's transformation into a company limited by shares and secondly, the exchange gain resulting from the share issue. 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.

The amount recognised as capital reserve dropped by HUF 2,162 million, while the value of retained earnings rose by HUF 2,965 million in the reporting period. Besides the transfer of the after-tax profit of the year preceding the reporting year to retained earnings and the shifts in reserve resulting from the changes in treasury shares, the main reason for the changes in the reporting period is the reclassification between the capital reserve and retained earnings, which was intended to correct inconsistencies in the classification of some capital components during the Company's transformation into a limited company and during the subsequent years.
In the reporting period the General Meeting of the Company decided that it would pay a gross amount of HUF 18.11 per share to the shareholders entitled to dividends for the year 2021 in the total amount of HUF 294 million. Dividend payments commenced on 14 July 2022, and with the exception of an amount of HUF 30 thousand, by the end of the reporting year the prescribed dividend of HUF 294 million was paid to shareholders in full. Dividend payments of the reporting year reduced the Company's retained earnings by HUF 294 million. More detailed information is provided regarding the dividend in the public disclosures. Details of dividend payments made during the reporting period are presented in *Chapter 10. Dividend payment* of the Business and Management Report that was drawn up based on these consolidated financial statements.

In accordance with the provisions of Section 114/B of Act C of 2000 on Accounting, the Company has drawn up the Equity Correlation Table of PannErgy Plc. – as a company on its own – as at 31 December 2022, which is presented in *Note no. 27 Reserves* of the separate financial statements; that Equity Correlation Table will serve as the basis for calculating dividends for 2022 as dividend payment limitation.

In relation to subsidiary-specific transformations in the reporting period, reserves show – under retained earnings – a difference of HUF –3 million resulting from consolidation. This is related to the sale – and exclusion from the scope of consolidation – of TT-Geotermia Zrt. and Szentlőrinci Geotermia Kft.'s transformation resulting from the change in its company form (from a limited company to a limited liability company).

On the line of 'other reserves', the Company recognises earmarked reserves tied up in relation to shares other than treasury shares, reclassified from retained earnings under a different legal title.

PannErgy Group's consolidated statement of financial position shows the reserve allocated for repurchased treasury shares on a separate line. 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.

28. Minority interests

In the reporting period the Company did not recognise any minority (subsidiary, external) interests. As in the base period, in 2022 there were no transactions related to minority interests. Accordingly, the Company does not recognise any portion of the P/L of subsidiaries as payable to minority shareholders, or any movements in minority shareholdings due to the purchase/sale of a stake in subsidiaries.

29. Long-term liabilities

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
HUF based loan secured with collateral	7,657	8,609
EUR based loan secured with collateral	2,737	2,541
Financial lease liabilities	-	83
Short-term part reclassified to short-term credits	-1,308	-1,233
Long-term loans, leases, total	**9,086**	**10,000**

The decline in long term loans – in particular, EUR and HUF loans – resulted from instalments made during the reporting period.

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

The interest rates applied to outstanding EUR loans at the Group's relevant companies are based on the 6M EURIBOR – in some cases the 1M EURIBOR –, regardless of which financial institution provided the funding. In view of this fact and the contractual interest margins, the weighted average interest rate on secured EUR-based loans was 2.99% in consideration of the loan amounts as at 31 December 2022, which exceeds the average interest rate of 2.56% of the previous year, also taking into account the interest fixing effect of interest swap transactions. Without the interest swap transactions the weighted average interest rate on EUR-based loans would have been 3.18% on the cut-off date; the fixing of the lending rates of investment loans by means of interest swap transactions affords considerable predictability, and mitigates the interest rate risk faced by the Company significantly. Most of the HUF-based secured loans carry a fixed interest rate of 2.40% and 2.50%; in some cases 2.00% and 1M BUBOR +1.85% –2.00%. Based on the loan amounts outstanding on 31 December 2022, their weighted average interest rate is 2.42% – very similar to the corresponding value in the base period.

29.2. *Maturity dates of long-term loans*

HUF 5,454 million of the total amount of long-term loans and leases (HUF 9,086 million) is made up of items maturing in 1–5 years, while HUF 3,632 million is made up of items maturing in over 5 years, fully comprising long term loans denominated in HUF or EUR.

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

On 31 December 2022, the Company did not recognise any long-term liabilities in relation to leases.

29.4. *Other long-term deferred incomes*

	2022 HUF Mn	2021 HUF Mn
Other long-term deferred incomes	3,714	3,989
Short-term part of the long-term incomes	-275	-285
Other long-term deferred incomes, total	**3,439**	**3,704**

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 recognised in the consolidated statement of profit or loss 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*

data in HUF millions

Group entity	Project ID	Eligible investment cost	Aid granted	Aid drawn down	Aid deferred income (liability)
Szentlőrinci Geotermia Kft.	EEOP-4.2.0/B-09-2009-0026	883	442	427	310
Berekfürdő Energia Kft.	EEOP 4.4.0/A/09-2009-0009	250	125	125	31
DoverDrill Mélyfúró Kft.	EDIOP-2.1.2-8-1-4-16-2017-00166	1,250	500	450	338
Miskolci Geotermia Kft.	EEOP 4.7.0-2010-0001	632	316	314	212
Miskolci Geotermia Kft.	EEOP 4.2.0/B-11-2011-0007	2,856	1,000	1,000	652
Miskolci Geotermia Kft.	EDOP-1.2.1/B-12-2012-0005	323	162	148	16
Kuala Kft.	EEOP 4.7.0/11-2011-0003	619	309	309	244
Kuala Kft.	EEOP-4.10.0/B-12-2013-0012	2,836	1,000	1,000	652
DD Energy Kft.	EEOP-4.10/B-12-2013-0010	3,997	1,000	1,000	617
Arrabona Koncessziós Kft.	EEOP-4.10/B-12-2013-0011	3,509	1,000	992	642
Government aids on 31 December 2022 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):					**3,714**

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.

At the end of the reporting period the PannErgy Group did not recognise any advances in relation to grants and it did not receive any amount under this title during the period.

30. SHORT-TERM CREDITS

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Short-term part of long-term credits	1,308	1,233
Other short-term credits	1,029	230
Short-term part of long term lease liabilities	140	133
Total	**2,477**	**1,596**

The surge in short-term loans in the reporting period resulted from the working capital loan received during the period in relation to the FX-denominated electricity purchases of PannErgy Group. The short-term financing surplus for the loan is transitional; it was necessitated by the cash flow needs related to the higher amount of contractual trade payables in the period following the reporting period.

Short-term lease liabilities stem 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 for 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 did not recognise any long-term lease liability in December 2022; all lease liabilities are stated under short-term credits. Other than the lease contracts of the above geothermal equipment – classified as leasing –, HUF 10 million was stated as short-term lease liabilities for the lease of motor vehicles at the end of the reporting period.
In the reporting period, the Company applied a 4.5% effective interest rate for the initial recognition of lease liabilities when calculating the present value of the lease fees payable during the term of the lease contracts. This is a change compared to the previous year as an effective interest rate of 2.5% was applied in the base period. As a result of the modification, the initial recognition value of lease liabilities rose by HUF 65 million.

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

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Short-term part of other long-term deferred revenues	275	285
Total	**275**	**285**

The part of the grants won under application schemes relating to geothermal projects which can be used within a year, which is recognised in the statement of profit or loss 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 2022	31 December 2021
	HUF Mn	HUF Mn
Opening balance as of 1 January.	-	-
Provisioning	144	-
Release of provisions	-	-
Closing balance on 31 December	**144**	**-**

In the reporting period, the Company allocated provisions of HUF 144 million for a liability arising from the possible consequence of a lawsuit related to an account payable unrecognised by the Company, related to a tender conducted years ago, not involving any non-refundable grant. The Company has no overdue debt.

In its consolidated statement of financial position for the reporting year and for the previous year, the PannErgy Group discloses no provisions for environmental or re-vegetation liabilities, costs associated with redundancy programmes 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 2022	31 December 2021
	HUF Mn	HUF Mn
Tax and contribution liabilities	296	206
Deferred items for the next period	219	392
Liabilities relating to derivative transactions	60	-
Wages and social security	11	11
Other liabilities	11	5
Other short-term liabilities, total	**597**	**614**

Of the items of the HUF 219 million carried forward to the next period, HUF 117 million represents other compensation-type deferred revenues from suppliers to be recognised in the coming period, while HUF 102 million is the sum of the costs affecting the reporting period and recognised in the reporting period as costs and expenditures, which will be invoiced in the coming period. HUF 2 million of this latter amount represents interests payable for the coming period.

At the end of the reporting period the Company's records show tax and contribution liabilities in a total amount of HUF 296 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 220 million, the corporate income tax liabilities of Group members in the amount of HUF 35 million, and the mining annuity liabilities of the project companies engaged in geothermal heat generation, in a total amount of HUF 25 million.

Within other liabilities, the most significant item represents other short-term 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*

	2022 HUF Mn	2021 HUF Mn
Tax liabilities for the reporting year	62	10
Effect of deferred taxes	44	57
Total	**106**	**67**

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.
In accordance with its accounting policy – which is based on the provisions of the *IAS 12* standard –, the local business tax payable to municipalities is recognised under other expenditures instead of the income tax items.

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:

	2022 HUF Mn	2021 HUF Mn
Amounts recovered from deferred losses	19	75
The difference stemming from depreciation according to the Accounting Act and the depreciation according to the Tax Act	2	-6
Tangible assets depreciation difference from consolidation	170	185
Receivables from deferred taxes (gross)	*191*	*254*
Deferred tax liabilities (gross)	*-52*	*-71*
Deferred tax to be recognised (net)	**139**	**183**
Deferred tax recognised in previous year	183	240
Deferred tax recognised/reversed	-44	-57
Receivables from deferred taxes on 31 December	**139**	**183**

The deferred tax receivable of HUF 139 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 deferred tax receivables is HUF 191 million. This is reduced by another HUF 52 million, i.e. 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 standards, leaving HUF 139 million as deferred tax receivables 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 statements of profit or loss of PannErgy Group members with the income tax rates applying to them, and the corporate income tax figures actually stated in the statements of profit or loss are calculated as follows:

	2022 HUF Mn	2021 HUF Mn
Profits before taxes (individual companies)	**1,408**	**1,005**
The tax payable on the basis of the member company's profit/loss at the applicable tax rate (9%)	127	90
Effects of different tax rates (minimum profit tax)	4	1
Tax implications of non-deductible expenditures, effects of differences in depreciation and other tax-decreasing items	7	-67
Tax allowances	-25	-11
Use during the reporting year of the negative tax base carried over from previous years	-51	-3
Tax liabilities for the reporting year	**62**	**10**
Write-off of tax receivables assessed earlier for negative tax bases	**44**	**57**
Income tax (as per the profit & loss account)	**106**	**67**

34. Earnings per share

	2022	2021
Profit/loss, attributable to shareholders of the Company (HUF Mn)	1,310	897
Number of shares less treasury shares	15,958,300	16,396,011
Profit/loss per share (HUF)	**82**	**55**
Diluted profit/loss per share (HUF)	**82**	**55**

There is no difference between the profit/loss per share and the diluted profit/loss per share at the end of the reporting period because, as in the base period, the Company calculates the diluted profit/loss per share without taking into account any adjustment factor.

35. Cash and cash equivalents

The PannErgy Group had the following portfolio of cash and cash equivalents on 31 December 2022:

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Bank account and cash at hand	492	1,061
Separated, blocked cash	137	215
Cash and cash equivalents	**629**	**1,276**

The bank account and cash on hand category also includes amounts in regard to which use for purposes other than the accountholder's own business operations is subject to the financing institution's consent.
Cash items stated among separated blocked cash items are amounts held by financial institutions on current accounts, blocked as collateral for loan repayment, with restricted access by borrowers.

The short-term government bonds of HUF 57 million and discount Treasury bills of HUF 360 million held by the Company are recognised under current assets as securities.

36. Trade payables

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Trade payables	779	704
Total	**779**	**704**

At the end of the reporting period the Company's trade payables are 11% higher than at the end of the base period.

37. FINANCIAL INSTRUMENTS

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

	31 December 2022 HUF Mn	31 December 2021 HUF Mn
Financial assets	**3,982**	**2,772**
Financial assets available for sale (AFS)	***417***	***629***
Other invested financial assets (government securities)	-	103
Securities	417	526
Loans and Receivables (LAR)	***3,565***	***2,141***
Loans provided	-	2
Trade receivables	2,260	1,414
Other short term receivables, prepaid income taxes	1,305	721
Financial instruments held to maturity (Held to Collect, HTC)	***-***	***4***
Long term financial receivables	-	-
Financial instruments, Fair Value to Profit and Loss (FVTPL)	**-**	**4**
Derivative transactions	-	4
Financial liabilities	**12,939**	**12,914**
Other financial liabilities	***12,879***	***12,914***
Trade payables	779	704
Long-term loans, lease liabilities	9,086	10,000
Long-term loans, lease liabilities	2,477	1,596
Other financial liabilities	537	614
Financial liabilities, Fair Value to Profit and Loss, (FVTPL)	***60***	***-***
Derivative transactions – liabilities (under other short-term liabilities)	60	-

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 short-term securities held for trading, in an amount of HUF 417 million. The Company invested some of its separated cash – the use of which is subject to the creditor financial institution's consent – in short-term government securities for investment purposes: HUF 57 million in government bonds and HUF 360 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 recognised by the Company among the current assets. The value of loans and receivables are initially shown at fair value, and thereafter at amortised 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 recognised 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 recognised at fair value, while subsequently they are measured at amortised cost that are defined with the effective interest method.

38. Share-based benefits

The Company had no share option programme in place during the base period or the reporting period; accordingly, no such measurement 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:

2022				data in HUF millions
	Impairments, opening balance	**Impairment provisioning**	**Impairment reversal**	**Impairments, closing balance**
Trade receivables	1	1	1	1
Total impairment	**1**	**1**	**1**	**1**

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

No impairment provisioning and reversal were recognised during the reporting period regarding tangible assets and inventories. HUF 1 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.

The Company's statement of its 2022 impairment provision matrix underlying the impairment charges applied in the reporting period:

data in HUF millions

Impairment provision matrix	Balances outstanding at the beginning of 2022	Balances outstanding at the end of 2022	Loss from default 2022	Default rate 2022	Expected default rate 2023	Expected credit loss 2023	Stage 1 impairment [1]	Stage 2 impairment [1]	Stage 3 impairment [1]
Financial assets available for sale (AFS)	**-**	**-**	**-**			**-**	**-**	**-**	**-**
Investments available for sale	-	-	-	0%	0%	-	-	-	-
Long-term investments	-	-	-	0%	0%	-	-	-	-
Other financial investments (long-term securities)	-	-	-	0%	0%	-	-	-	-
Securities (short-term)	-	-	-	0%	0%	-	-	-	-
Loans and Receivables (LAR)	**1**	**1**	**1**			**-**	**-**	**-**	**1**
Loans provided	-	-	-	0%	0%	-	-	-	-
Trade receivables	1	1	1	0%	0%	-	-	-	1
Other current receivables	-	-	-	0%	0%	-	-	-	-
Held to maturity financial assets (HTM)	**-**	**-**	**-**			**-**	**-**	**-**	**-**
Long term financial receivables	-	-	-	0%	0%	-	-	-	-
Liquid assets	**-**	**-**	**--**	**0%**	**0%**	**-**	**-**	**-**	**-**
Total	**1**	**1**	**1**			**-**	**-**	**-**	**1**

[1] Loss rates applied: Stage 1: 0%, Stage 2: 25%, Stage 3: 100%

40. OFF-BALANCE SHEET LIABILITIES AND COMMITMENTS

40.1. *Contractual obligations and commitments for investment*

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

Through its member, Kuala Kft., PannErgy Plc. submitted its application No. GEOTERM-2021.2-2021-00002 in response to the tender notice entitled ‘Grants for the activities of geothermal-based heat production projects’ announced under the Climate and Nature Protection Action Plan, and it was awarded a grant of **HUF 994 million** by the donor – the Ministry for Innovation and Technology – **in November 2022. The grant is related to the boring of the third geothermal production well of the Miskolc Geothermal Project.** The project is expected to increase the usable capacity of the system by up to 15%–20% and the growing number of production wells will improve its operational continuity significantly, whereby the spare capacity untypical of geothermal power plants will become available. After the geothermal system of Győr, this may become PannErgy’s second system with spare capacity, providing the means to restart heat production in the event of a failure by way of a few hours’ of reswitching instead of a well-pump replacement that may take 7 to 12 days. The completion of the project is expected before the commencement of the 2023/2024 district heating season.

In addition, the Ministry for Innovation and Technology, as donor, **awarded a grant of HUF 1,623 million** to application No. GEOTERM-2021.3-2022-00001 submitted by PannErgy Geotermikus Erőművek Zrt. in response to the tender notice entitled ‘Grants for the activities of geothermal-based heat production projects’ announced under the Climate and Nature Protection Action Plan. **The grant is related to the boring of a geothermal production well to be implemented near Budapest.** After a successful implementation, the project may become part of a complex geothermal heat supply system and participate in supplying the heating and hot water needs of potential heat-receiving partners in and around Budapest (district heating providers, industrial facilities, etc.). Boring the well is the first step of creating a possible geothermal system. A thorough analysis of the relevant data is required before the additional elements of the project may be designed. Drilling works may begin in 2024 provided that the seismic measurements preceding the drilling reconfirm the conclusions of months of preparatory efforts expended so far.

Until the publication of these financial statements, the Incentive Agreements relevant to the above grants had not been concluded and the conditions for drawing down the grants were not in place yet. At present, professional and administrative preparations are in progress preceding contract conclusion for the projects; therefore, in the absence of signed contracts, there is no contractual investment commitment in relation to ongoing projects.

<u>Commitments relating to asset management transactions</u>

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 expects 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

Collateral of various types was provided at the end of the reporting period to the creditor financial institutions under external financing agreements concluded by members of the PannErgy Group in amounts of HUF 8,006 million and EUR 8,537 thousand. 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 no 16. Tangible assets*.

40.2.2 Contingent commitments relating to application schemes and Incentive Agreements concluded

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 Geotermikus Erőművek Zrt. 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 Zrt. and without a value limit for Kuala Kft. No future cash outflow is expected in relation to this contingent commitment, therefore no specific provision needs to be formed.

In addition, beyond the restrictions on title and pledges concerning the real properties and machinery included in *Note no. 16 Tangible Assets*, on 31 December 2022 the Company has a single short-term working capital loan liability which is secured by receivables as follows:

PannErgy	**Financing entity**	**Amount of collateral charged to tangible assets**	**Collateral**
DD Energy Kft.	UniCredit Bank Hungary Zrt.	EUR 2,300,000	Pledged account; Total liabilities outstanding or incurred in the future under financing documents up to a total amount of EUR 2,300,000 (that is two million three hundred thousand euros)

40.2.4 Leases

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:

	2022 31 December HUF Mn	**2021 31 December HUF Mn**
Within 1 year	140	133
Over 1 year but within 5 years	-	83
Over 5 years	-	-
Total	**140**	**216**

The lease liabilities are related to the long-term lease contracts concerning the special geothermal installations and equipment used for the Company's geothermal projects. The Company leases such assets for 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 – on 31 December 2022, the Company showed HUF 130 million as long-term lease liabilities, recognised under short-term credits in line with their maturity dates. Moreover, the Company has HUF 10 million short-term lease liabilities 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, cash flow and fair value interest rate 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 can be attributed to EUR-based long-term investment loans taken out for the implementation of geothermal projects; moreover, the Company also has foreign and domestic suppliers with which accounts are settled and invoices are issued 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 maximising the coverage of its EUR loan debt liabilities by the above mentioned EUR-based revenues. In 2022, in a fundamentally changed energy market environment, the Company continuously conducted FX forward transactions in order to mitigate the risk of exchange rate losses on the financial settlement of FX liabilities to be incurred in the near future. These transactions were not cash-flow hedge transactions; the P/L resulting from such transactions during the reporting year appears in the financial income and financial expenditures categories of the consolidated financial statements.

In view of PannErgy Group's foreign exchange receivables and liabilities, and assuming a 10% increase/decrease relative to the EUR/HUF rate prevailing on 31 December 2022, with the forint being the functional currency, the positive/negative effects on the P/L are presented in the table below:

Description	EUR		USD	
	2022	**2021**	**2021**	**2020**
Resulting change in P/L (HUF Mn)	-328	-238	-	-

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

	EUR value (Th) 2022	Change in profit as a result of 10% change in exchange rate	EUR value (Th) 2021	Change in profit as a result of 10% change in exchange rate
Trade receivables	1,205	48	1,265	47
Trade payables	861	-34	870	-32
FX credits	8,537	-342	6,888	-253
Total		**-328**		**-238**

41.2.2 Price risk

The Company runs no risks relating to exchange traded commodities or financial instruments. It should be mentioned, however, that even though it is essentially a regulatory risk, the selling price of the bulk of the geothermal heat sold by PannErgy Group members that are engaged in generating and selling geothermal heat is a regulated price, which is reviewed and in some cases modified regularly – sometimes even on a quarterly basis – by the competent price-setting authority, i.e. the Hungarian Energy and Public Utility Regulation Authority (HEA). This may influence PannErgy Group's profitability through 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 lending rates on 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 risk due to its fixed-rate loans.

The Company's long-term and short-term FX loan portfolio was worth HUF 3,415 million (EUR 8,537 thousand) at the end of 2022, while its portfolio of long-term and short-term forint loans amounted to HUF 8,006 million, relative to the HUF 2,542 million (EUR 6,888 thousand) worth of the FX loan portfolio and the HUF 8,839 million forint loan portfolio stated at the end of 2021. The lending rates on FX loans are typically based on the 6M EURIBOR, while those on HUF loans are typically fixed at 2.50% and 2.40%.

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. The Company calculates the effect of interest rate fluctuations on P/L based on these scenarios. 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 by fixed interest rates for the entire remaining term of each loan via interest rate swap (IRS) transactions, taking advantage of the previously favourable interest rate environment. The interest rates fixed under the above transactions will remain unchanged even if market rates 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 under income from financial transactions or under financial expenditures, as the case may be.

The Company's interest sensitivity is characterised by the fact that a 1% increase in interest rates would have resulted in a HUF 114 million increase in the Group's profit at the end of 2022, in contrast with the additional cost of HUF 112 million that would have been recorded at end-2021, 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. At the end of the reporting period, within long-term and short-term loans the share of forint-denominated loans was 70% as opposed to 78% in the previous year. The growth in the share of EUR-denominated loans reflect the EUR-denominated short-term working capital loans taken out by the Company in the reporting period in order to finance trade liabilities to be paid in EUR. However, the Company eliminated the moderate interest rate risk associated with its EUR-based loans by way of the interest rate swaps mentioned above, as they replaced the variable interest rates on investment loans by fixed rates.

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 way of bank transfer. No credit limit was exceeded during the reporting period, and management does not expect losses from default on the part of the partners concerned. 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:

data in HUF millions

	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	2,260	1,789	463	8	-	-

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 2022 are presented in relation to the lending risk in a breakdown by time to maturity:

31/12/2022 data in HUF millions

Conditions	**<1 month**	**1-3 months**	**3-12 months**	**1-5 years**	**>5 years**	**Total**
Non-interest bearing or demand	629	-	-	-	-	629
Variable rate	-	-	-	-	-	-
Fixed rate	-	-	417	-	-	417
Total	**629**	**-**	**417**	**-**	**-**	**1,046**

The Company's cash is stated in the category of non-interest bearing or on-demand assets, while the Company's securities shown among its current assets are stated in the category of variable and fixed rate assets.

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 life cycles 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.

Financial liabilities broken down by due date (data in HUF millions):

31/12/2022

	Amount	**0-6 months**	**6-12 months**	**1-2 years**	**3-5 years**	**Over 5 years**
Non-derivative financial liabilities						
Credits	11,563	1,477	1,001	1,311	4,143	3,632
Trade payables	779	751	28	-	-	-
Other financial liabilities	537	597	-	-	-	-

Derivative financial liabilities	60	60	-	-	-	-

The above table is a collection of the amortised 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 goal in shaping its capital structure is to maintain continuous operability in order to generate profits for its shareholders and to minimise the cost of capital through an optimised 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 2022 HUF Mn	**31 December 2021 HUF Mn**
Subscribed capital	400	421
Total equity	10,534	9,980
Equity / Subscribed capital	**26.34**	**23.71**

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*

As regards the COVID-19 virus that broke out in previous years and subsequently transformed into a pandemic, the expected human and economic impacts of its various mutants will affect a wide variety of segments, areas and participants of society and the economy; since the implications can only be roughly estimated, the pandemic continues to carry a risk. The potential adverse future consequences of the pandemic will have a limited impact on the operation of the Company by nature; this is explained in more detail in *Chapter 3. The impact of the Russia–Ukraine war and the pandemic on the Company's report.*

41.10. *Risk associated with the Russia–Ukraine war*

On 24 February 2022 a war broke out between Russia and Ukraine. In response, the European Union and other international parties adopted wide-ranging, comprehensive economic and other legal sanctions in various areas against Russia and others. Both the war and the sanctions – those already in place and those adopted in future – have perceivable direct and indirect economic implications that may have an impact on the operating environment of PannErgy. At the time of the preparation of these consolidated financial statements, the impact of future consequences and effects cannot be estimated. Based on the information available, the potential adverse effects of the war are expected to have a limited impact on the operation of the Company because

- the Company has no exposure to Russian or Ukrainian buyers, suppliers, or creditors;
- the Russia–Ukraine war exerts no direct, significant impact on the Company's revenues in the reporting period, on the measurement of its assets or on its investments.

In addition, it should be noted that the geothermal heat production activity of the Company contributes directly to reducing the exposure of Hungary's energy dependence to external market participants and circumstances.

41.11. *Risk of the adverse effects of climate change*

The activity of the Company is not affected directly and significantly by the adverse effects of climate change; they do not exert a material impact on revenues that may jeopardise the level of revenues presented in these financial statements. In addition, the activity of the Company is climate-neutral in the sense that the utility and value of the assets required for its core activity – geothermal heat generation – are not affected by the potential negative effects of the climate change. The Company does not need to resort to extra projects to eliminate the adverse effects of climate change, nor does it incur any extra costs (e.g. maintenance) in this regard.
Moreover, it should be noted that the core element of the strategy of PannErgy Group – as 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. The environmental strategy of PannErgy designed to mitigate or prevent the negative effects of the climate change is described in *Section 6 Strategy and Environmental Objectives of the PannErgy Group* of the Business and Management Report.

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 Kft.	86.00	100.00	100.00	100.00
Arrabona Koncessziós Kft.	6.10	100.00	100.00	100.00
Szentlőrinci Geotermia Kft.	5.00	100.00	100.00	100.00
Miskolci Geotermia Kft.	5.00	100.00	100.00	100.00
DD Energy Kft.	3.10	100.00	100.00	100.00
Kuala Kft.	3.00	100.00	100.00	100.00
Berekfürdő Energia Kft.	3.00	100.00	100.00	100.00
Geo2Business Kft.	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 Zrt. 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*

<u>The following transactions involving/affecting investments and participations took place during the reporting period:</u>

Of the consolidated subsidiaries of the PannErgy Group, TT-Geotermia Zrt. was sold on 8 June 2022; upon the transfer of the title of ownership, TT-Geotermia Zrt. was removed from PannErgy Plc.'s scope of consolidation.

On 3 November 2022, PannErgy Plc. decided to establish Geo2Business Kft. a new business association. The purpose of this new subsidiary is to provide services to customers who/that are smaller than district heating providers and multinational companies. The Court of Registration registered Geo2Business Kft. on 8 November 2022.

In the case of Miskolci Geotermia Kft. and Szentlőrinci Geotermia Kft., based on a decision adopted by the owner PannErgy Geotermikus Erőművek Zrt., the legal form of the former Miskolci Geotermia Zrt. and Szentlőrinci Geotermia Zrt. – both covered by the PannErgy Group's scope of consolidation – was changed from a private limited company ('Zrt.') into a limited liability company ('Kft.') as of 31 December 2021. The restructuring took place on 31 December 2021 in the case of Miskolci Geotermia Kft., and in the case of Szentlőrinci Geotermia Zrt. the restructuring was registered with the Court of Registration on 25 January 2022.

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. As in the base period, the Company identified a single operating segment during the reporting 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. As in the base period, PannErgy Group, the legal successor of Pannonplast Nyrt., does not identify the utilisation – as property management – of industrial facilities and related office premises formerly used by Pannonplast Nyrt. in its plastics manufacturing operation as a separate operating segment in the reporting period for the following reasons:

- under the requirements of *IFRS 8 Operating Segments*, based on the management approaches applied to segments and the criteria for the presentation of operating segments, the asset management and property utilisation activity performed beyond the Energy segment does not form a fully independent component. This should be regarded as an 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;
- the performance assessment of the utilisation of the aforesaid properties is a negligible part of the work of the Company's operative management and supreme bodies; the internal control reporting system does not focus on information regarding the utilisation of properties as they are considered 'pass-through' items;
- In view of the principles detailed in Section *4.29 Segment Reports* of these consolidated financial statements, 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 maximising the efficiency of the Energy segment; the utilisation 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.

Notwithstanding the above, the Company examined the limit values of the property utilisation activity linked to the identification of operating segments, and found that the HUF 510 million revenue of this activity in the reporting period accounted for 7% of the HUF 7,145 million revenue realised by PannErgy Group in the reporting period. A significant part of this revenue – 94% – is made up of pass-through items with no margin, i.e. public utility fees re-invoiced to tenants, the HUF 3 million profit content of the property utilisation activity in the reporting year and its less than 1% share in the Company's consolidated after-tax profit underpin how insignificant this area is in reality. Accordingly, the asset management and property utilisation 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.

Based on the above, only one operating segment can be identified at PannErgy Group (Energy); consequently, the Company has to fulfil disclosure obligations covering the entity as a whole. 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.

Statement of profit or loss 2022 (data in HUF millions)	Győr	Miskolc	Holding governance, other activities	Total
Revenue from sales	**4,014**	**2,154**	**977**	**7,145**
Revenues among segments	-	-	-	-
Direct cost of sales	**-2,573**	**-1,581**	**-893**	**-5,047**
Gross margin	**1,441**	**573**	**84**	**2,098**
Gross margin ratio %	***36%***	***27%***	***9%***	***29%***
Indirect costs of sales	-107	-139	-336	-582
Other incomes	204	150	394	748
Other expenditures	-127	-76	-165	-368
Operating profit	**1,411**	**508**	**-23**	**1,896**
Operating profit ratio %	**35%**	**24%**	**-2%**	**27%**
Direct depreciation	938	543	234	1,715
Indirect depreciation	-	-	1	1
Total depreciation	**938**	**543**	**235**	**1,716**
Extraordinary depreciation	-	-	-	-
EBITDA	**2,349**	**1,051**	**212**	**3,612**
EBITDA rate %	**59%**	**49%**	**22%**	**51%**
Financial profit	-220	-187	-73	-480
Profit before taxes	**1,191**	**321**	**-96**	**1,416**
Income tax	6	5	95	106
Net P/L for the reporting year	**1,185**	**316**	**-191**	**1,310**

Statement of financial position 2022 (data in HUF millions)	Győr	Miskolc	Holding governance, other activities	Total
Goodwill	264	379	35	678
Other intangible assets	144	98	1,419	1,661
Tangible assets	9,123	8,711	1,247	19,081
Investment property	-	-	101	101
Marketable properties	-	-	-	-
Other invested financial assets	-	-	-	-
Financial assets (concession assets)	1,035	-	-	1,035
Receivables from deferred taxes	31	82	26	139
Long-term receivables	-	-	-	-
Total fixed assets	**10,597**	**9,270**	**2,828**	**22,695**
Inventories	7	1	17	25
Trade receivables	1,410	780	70	2,260
Other receivables	566	441	298	1,305
Securities	296	121	-	417
Liquid assets	16	95	518	629
Total current assets	**2,295**	**1,438**	**903**	**4,636**
TOTAL ASSETS	**12,892**	**10,708**	**3,731**	**27,331**

Statement of financial position 2022 (data in HUF millions)	Győr	Miskolc	Holding governance, other activities	Total
Subscribed capital	-	-	400	400
Reserves net of profit/loss of the reporting period	2,512	4,466	7,161	14,139
Net P/L for the reporting year	1,185	316	-191	1,310
Reserve for repurchased treasury shares	-	-	-5,315	-5,315
Minority interests	-	-	-	-
Total equity	**3,697**	**4,782**	**2,055**	**10,534**
Long-term loans, leases	5,822	3,085	179	9,086
Other long-term deferred incomes	1,156	1,678	605	3,439
Provisions	-	-	144	144
Total long-term liabilities	**6,978**	**4,763**	**928**	**12,669**
Trade payables	408	307	64	779
Short-term credits	740	70	359	1,169
Short-term part of long-term credits	811	430	67	1,308
Short-term part of other long-term deferred revenues	104	99	72	275
Other short-term liabilities	154	257	186	597
Total short-term liabilities	**2,217**	**1,163**	**748**	**4,128**
LIABILITIES AND EQUITY	**12,892**	**10,708**	**3,731**	**27,331**

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 2021 consolidated financial statements; the basis data presented in these financial statements are the same as those in the 2021 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 vehicle lease services to PannErgy Plc. – in 2022 such services amounted to HUF 113 million, of which business management consultancy services were provided in the amount of HUF 69 million, and long-term vehicle leases in the amount of HUF 44 million. Corresponding services amounted to HUF 66 million in the base period, of which business management consultancy services represented HUF 51 million and long-term vehicle lease services represented HUF 15 million. For the most part, the HUF 47 million increase in transactions with the Company's management reflected the renewal of the vehicle fleet of the PannErgy Group in the reporting period; the value of long-term vehicle lease services with affiliated but not consolidated parties grew by HUF 29 million in 2022.

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	**2022 HUF Mn**	**2021 HUF Mn**
Revenue from sales	2	3
Costs of goods and services	113	66
Receivables at the end of the reporting period	-	-
Liabilities at the end of the reporting period	7	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*

Neither in 2022 nor in 2021 did the PannErgy Group provide loans to affiliated but not consolidated parties, and no loans were disbursed to members of the Group's management.

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

Elimination of profit & loss account items:	**2022 HUF Mn**	**2021 HUF Mn**
Revenue from sales	1,933	2,067
Direct cost of sales	1,904	2,044
Indirect cost of sales	30	33
Other incomes	583	2
Other expenditures	504	2
Finance incomes	1,171	220
Finance costs	1,1171	363

Elimination of statement of financial position items:	**2022 HUF Mn**	**2021 HUF Mn**
Tangible assets	1,715	2,027
Intangible assets	36	36
Next period's items among other receivables	939	729
Other receivables, short term loans	8,949	7,052
Long-term loans granted	3,837	6,102
Long-term liabilities	3,837	6,102
Next period's items among other liabilities	939	729
Other short-term liabilities	8,949	7,052

45.5. *Management's compensation*

	2022 HUF Mn	**2021 HUF Mn**
Short-term employee benefits	13	13
Total	**13**	**13**

At the Company's General Meeting on 29 April 2022, by MB Resolution No. 7/2022 (IV. 29.) the Company set the remuneration of the Chairman of the Management Board at 195,000 HUF/month, while that of the other members of the MB at 155,000 HUF/month from 29 April 2022, i.e. management remunerations remained unchanged compared to the previous year.

Other than the above remunerations, no long-term benefits or share-based allocations were provided to members of the MB during the reporting period and the preceding base period. At present, the Company does not recognise any liabilities to past or present executive officers in respect of pension.

46. ADDITIONAL INFORMATION

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

46.1. *Proposal on the use of P/L of the reporting year and on the approval of dividend payment*

The proposal adopted by the Management Board on the use of the reporting year's P/L and on dividends, as put forward to the General Meeting, is the following:

'Defined in accordance with EU IFRS, the net P/L of PannErgy Plc., as an individual entity, is a profit of HUF 146,556 thousand for the reporting year, while its total assets amount to HUF 10,519,736 thousand.
The Company publishes extraordinary and other announcements on shareholder information in accordance with the prevailing legislation, available, inter alia, at the website of the Company and the Budapest Stock Exchange.

The Audit Committee at the Company has examined the Company's financial statements and the auditor's reports as well as the financial reporting processes in place at the Company, and deemed them acceptable.

In view of the anticipated investment opportunities and needs for 2023, the necessity of holding a certain level of free cash and cash equivalents required for safe and prudent operation and thus for maintaining a high level of financial and operational stability with adequate flexibility, the Management Board does not recommend the payment of dividends, and proposes that after-tax profit be transferred to retained earnings in full.'

46.2. *Audit information*

Pursuant to the relevant provisions of Act C of 2000 on Accounting, PannErgy Plc. is subject to mandatory audit; the separate and consolidated financial statements (report) of the Company drawn up in accordance with the IFRS standards are also audited by an independent auditor.

In the reporting period, the Company was audited by BLUE RIDGE AUDIT HUNGARY Kft. (address: H-1026 Budapest, Szilágyi Erzsébet fasor 79. fsz. 3, tax number: 13076858-2-41, company registration number: 01-09-717568, Chamber registration number: MKVK 004410); the audit report was signed by Gábor Merkel (Chamber registration number: MKVK 007363, address: H-2143 Kistarcsa, Király Andor utca 23).

For its audit pertaining to the reporting year, the auditor charged a fee of HUF 6,500 thousand and other than that, it received no remuneration (for any other external review, tax consultancy or other service) from the Company.

46.3. *Person responsible for the preparation of the report*

The person responsible for governing and managing the book-keeping tasks of PannErgy Plc. and the preparation of the report is József Ivánka – as head of accounting at PannErgy Plc. / PannErgy Group –

chartered accountant registered in IFRS and Business (licence number: 168953, address: H-1163 Budapest, Bronz utca 31/A).

46.4. *Members of the Company with controlling influence*

PannErgy Plc. is a public limited company. In line with *Section 8.2 (Shareholders with over 5% shareholdings in the Company as at 31 December 2022)* of the Business Report, none of the members of the Company has a majority interest – in particular, qualified majority – in the Company; consequently, there is no need to disclose any information on the name, registered office or voting share of such members.

46.5. *Persons authorised to act on behalf of the Company*

Members of the Management Board are entitled to represent and act on behalf of the Company as follows; they are authorised to sign the annual report:

Name	Position	Address	Date of taking office	Signature right
Dénes Gyimóthy	MB member, Chairman	94501 Komárno, Medercská ul. 748/73.	31/08/2007	independent
Katalin Gyimóthy	Member of the MB	H-8220 Balatonalmádi, Somfa utca 4.	28/04/2016	joint
Attila Juhász	Member of the MB	H-2251 Tápiószecső, Rákóczi út 6.	31/08/2007	joint
Kálmán Rencsár	Member of the MB	H-6320 Solt, Posta utca 51.	30/04/2020	joint
Gábor Briglovics	Member of the MB	H-2483 Gárdony, Barabás Miklós utca 10.	16/04/2021	joint

46.6. *Other disclosure obligations of the Company*

PannErgy Plc., as an entity compiling its annual report in accordance with the IFRS standards, is not subject to 'Reporting on payments to governments' under Section 114/I (3) of Act C of 2000 on Accounting („Accounting Act"), as its activity does not fall within the category of undertakings active in the extractive industry within the meaning of Regulation (EC) No 1893/2006 and Directive 2013/34/EU of the European Parliament and of the Council referred to in the Act.
Pursuant to Section 114/I (3) of the abovementioned Accounting Act and Chapter VI/B referred therein, the company is required to prepare a report containing corporate income tax information. PannErgy Plc., as the undertaking compiling the highest level, consolidated financial statements of the PannErgy Group, prepares and – concurrently with the publication and depositing of the annual report – publishes the above report.

46.7. *Registered office, website and contact information of the Company*

PannErgy Plc. has its registered office in Hungary at H–1117 Budapest, Budafoki út 56. The Company's separate and consolidated financial statements and report are available at the Company's registered office and on its website (https://www.pannergy.com).

47. 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
12 March 2023	Extraordinary information	Treasury share transactions
10 March 2023	Extraordinary information	Invitation to the General Meeting
10 March 2023	Miscellaneous information	Modification of PannErgy Plc.'s event calendar for 2023
9 March 2023	Extraordinary information	Detailed description of the share buyback programme
5 March 2023	Extraordinary information	Treasury share transactions
28 February 2023	Extraordinary information	Voting rights, share capital
26 February 2023	Extraordinary information	Treasury share transactions
17 February 2023	Extraordinary information	Treasury share transactions
10 February 2023	Extraordinary information	Treasury share transactions
3 February 2023	Extraordinary information	Treasury share transactions
31 January 2023	Extraordinary information	Voting rights, share capital
27 January 2023	Extraordinary information	Treasury share transactions
20 January 2023	Extraordinary information	Treasury share transactions
13 January 2023	Extraordinary information	Quarterly production report
13 January 2023	Extraordinary information	Treasury share transactions
8 January 2023	Extraordinary information	Treasury share transactions
2 January 2023	Extraordinary information	Voting rights, share capital
2 January 2023	Extraordinary information	Treasury share transactions

48. DATE OF AUTHORISATION OF DISCLOSURE

The Company's Management Board approved the financial statements and authorised their disclosure on 21 March 2023.

Dénes Gyimóthy
On behalf of the Management Board

PannErgy Plc.
Business and Management Report
2022

Based on the PannErgy Group's IFRS consolidated financial statements

Budapest, 22 March 2023

THIS ANNOUNCEMENT IS PUBLISHED IN HUNGARIAN (MANDATORY, OFFICIAL) AND ENGLISH LANGUAGES. IN CASE OF ANY CONTRADICTION BETWEEN THESE TWO VERSIONS, THE OFFICIAL HUNGARIAN VERSION SHALL PREVAIL.

The attached pdf report is not the official report of the Company; the official report will be drawn up and published in ZIP (within that XHTML-XBRL) format as required by applicable legislation. The contents of the attached pdf report are fully identical with those of the report published in ZIP (within that XHTML-XBRL) format.

1. EXECUTIVE SUMMARY

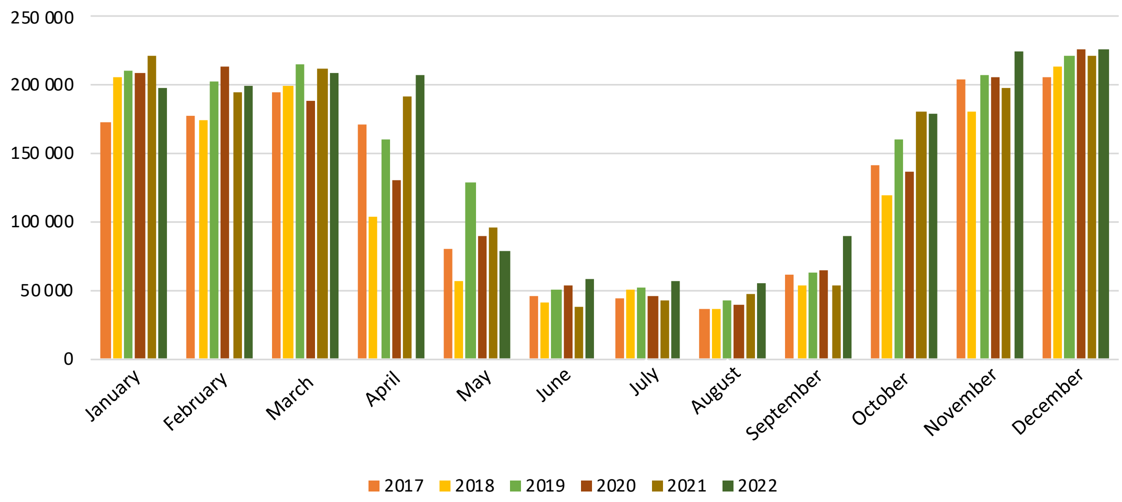
A significant increase in consolidated heat sales and consolidated EBITDA, improvement in the competitiveness of geothermal energy

Energy market conditions changed dramatically in 2022 both globally and in Hungary. Hydrocarbon and electricity prices soared; supply uncertainties, the theretofore unprecedented volatility and unpredictability that rendered operating activity impossible, as well as surging carbon dioxide emission quota costs increased the competitiveness of geothermal energy even further. Amid growing dependence on fossil fuels during the reporting period, the uncertainties in supplies and the contribution of PannErgy Group's core operation – geothermal energy generation – to easing that dependence and its unquestionable positive impact on sustainability and environmental protection underpinned the importance of geothermal energy. **Despite the changes in the environment, the Company was able to achieve the objectives set for the reporting period in order to create value for its shareholders:** it achieved its consolidated heat sales and EBITDA targets while ensuring that **PannErgy remained one of the largest company in Hungary to produce renewable energy.** In addition to combating climate change, PannErgy also makes a **significant contribution to reducing** the **fossil fuel dependency of Hungary** and Europe, exacerbated even more gravely by the ongoing armed conflicts.

Thanks to optimising its operation to the prevailing weather conditions and capacities, **PannErgy Group's consolidated heat sale amounted to 1,785 TJ in 2022, which represents a 5% increase over the performance of 1,699 TJ in the base period and a 2% increase over the plan for the reporting period, 1,752 TJ. It is partly thanks to this over-performance that the Company's consolidated sales revenues rose to HUF 7,145 million, exhibiting a positive change of 11%.**

PannErgy Group's consolidated EBITDA amounted to HUF 3,612 million, which is consistent with the EBITDA target range published in the Quarterly Production Report – 2022 Q4 on 13 January 2023. The consolidated EBITDA achieved in the reporting year **shows a remarkable improvement relative to the previous year: not only did it outperform the EBITDA achieved in the base year (HUF 2,878 million) by 26%, but also surpassed, by far, the EBITDA target range of HUF 3,250 – 3,350 million originally set for the business year of 2022.** The high level of EBITDA performance – which surpassed expectations – was supported by several internal factors: firstly, the Company's focus on efficiency in operation and financial management, and secondly, the capacity expansion as well as efficiency and operational safety improving projects of the previous year and the reporting year.

During the reporting period, PannErgy Group's indirect subsidiary, Arrabona Koncessziós Kft. concluded an agreement with GYŐR-SZOL Zrt. – the operator of the district heating system in Győr –, whereby the parties modify their existing cooperation to give priority to the geothermal heat source over any other energy source alternatives feeding into the district heating system. The agreement primarily affects the demand for heat outside the heating season, as in the heating season PannErgy has already operated close to its maximum capacity. Benefiting both parties concerned in several regards, this agreement contributed significantly to the Company's remarkable outperformance of the 2022 consolidated IFRS target range.



Consolidated volume of heat sold (GJ)

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

	2017	2018	2019	2020	2021	2022	2022 TARGET	2023 TARGET
January	172,758	205,199	209,999	209,678	221,966	197,923		
February	177,533	174,300	203,484	213,855	194,173	199,600		
March	194,634	199,090	215,693	189,195	211,762	209,267		
Q1	**544,925**	**578,589**	**629,176**	**612,728**	**627,901**	**606,790**	**646,020**	**627,429**
April	171,294	104,033	160,548	130,407	192,053	207,861		
May	79,700	56,758	129,300	89,190	96,333	78,637		
June	45,936	41,641	50,780	53,394	38,595	58,955		
Q2	**296,930**	**202,432**	**340,628**	**272,991**	**326,981**	**345,453**	**315,549**	**322,163**
July	44,865	51,247	52,406	45,297	42,919	56,299		
August	36,709	36,794	42,415	39,205	48,023	54,838		
September	61,502	53,650	63,731	64,096	53,870	90,033		
Q3	**143,076**	**141,691**	**158,552**	**148,598**	**144,812**	**201,170**	**163,654**	**193,218**
October	141,270	119,652	159,888	136,460	180,427	179,453		
November	204,045	180,263	206,686	205,417	197,872	224,871		
December	205,251	213,267	221,248	225,688	221198	226,770		
Q4	**550,566**	**513,182**	**587,822**	**567,565**	**599,497**	**631,094**	**626,790**	**646,444**
ANNUAL TOTAL	**1,535,497**	**1,435,894**	**1,716,178**	**1,601,882**	**1,699,190**	**1,784,507**	**1,752,012**	**1,789,254**

Consolidated actual and target amounts of heat sales, in GJ

The Company's consolidated sales revenues rose by 11%, while the direct costs of sales increased by 4%. As a combined result of the above, the Company's consolidated gross margin and consolidated gross cash-flow both improved. The consolidated gross margin rose by HUF 518 million, representing a more than 33% increase on nominal terms. A similarly positive, 20% improvement was reported for consolidated gross cash flow – HUF 639 million on nominal terms – compared to the base period.

As a combined result of the total indirect cost of sales and other income and expenses, indirect costs came to HUF –202 million in contrast with the HUF 297 million stated in the base period. As a net result, the Company's operating surplus amounted to HUF 1,896 million in the reporting period, up 48% year-on-year.

The consolidated EBITDA of the PannErgy Group rose to HUF 3,612 million in 2022, up more than 25% over the previous year's HUF 2,878 million performance (an increase of HUF 734 million). The EBITDA performance of the reporting period was achieved with a 51% EBITDA ratio compared to 45% in the basis year.

The Company incurred a financial loss of HUF –480 million, which shows a HUF 161 million increase compared to the base period, primarily reflecting the impact of FX exchange rate movements on revaluation in the reporting period.

The Company achieved a consolidated net profit of HUF 1,310 million (after-tax P/L) in 2022, surpassing the consolidated profit of HUF 897 million stated in the base period by a remarkable 46%.

Main profit/loss data (HUF million)	2022	2021
Revenue from sales	7,145	6,439
Direct cost of sales	-5,047	-4,859
Gross margin	**2,098**	**1,580**
Gross cash flow	**3,813**	**3,174**
Gross cash flow rate	**53%**	**49%**
Indirect costs of sales	-582	-512
Other revenues and expenditures	380	215
Operating profit (EBIT)	**1,896**	**1,283**
EBITDA	**3,612**	**2,878**
EBITDA rate	**51%**	**45%**
Financial profit	-480	-319
Profit before taxes	**1,416**	**964**
Consolidated net profit for the reporting period	**1,310**	**897**
Return on Equity (ROE) %	*12%*	*9%*
Return on Sales (ROS) %	*18%*	*14%*
Earnings per ordinary share (diluted EPS) (HUF)	*82*	*55*

The Company's EBITDA projection for the coming year (2023)

For the 2023 business year, the Company's management set a consolidated IFRS EBITDA target range of HUF 3,950 – 4,150 million, which is identical with the data shown in its Quarterly production report – 2022 Q4.
The median of the above 2023 EBITDA target range represents an increase of around 15% compared to the value of the base period, which includes, inter alia, the impact of the implemented and ongoing capacity expansion and efficiency improvement projects, including the successful boring of the third production well of the Miskolc Project in 2023 and its expected commissioning by the end of the year, as well as the recognition of the change in material and staff costs in the regulated pricing.

Change in PannErgy's regulated district heating producer tariffs

In Decree No. 20/2022. (IX. 30.) TIM of the Minister for Technology and Industry, published in Volume 159 of 2022 of the Hungarian Official Journal (Magyar Közlöny), the Minister announced the regulated

district heat production tariffs (heat supply tariffs) effective as from 1 October 2022 also applicable to subsidiaries subject to PannErgy's district heating price regulation, then in Decree No. 8/2022. (XII. 28.) EM of the Minister for Energy (the "Decree"), published in Volume 219 of 2022 of the Hungarian Official Journal (Magyar Közlöny), the Minister announced the regulated district heat production tariffs (heat supply tariffs) effective as from 1 January 2023 also applicable to subsidiaries subject to PannErgy's district heating price regulation, which tariffs PannErgy has presented in the form of extraordinary information at its official places of disclosure.
The Company drew the public's attention to the fact that, in addition to the date of the start of validity, no date for the end of validity has been specified in the Decree in respect of the above heat supply tariffs valid as of 1 January 2023. Therefore, in respect of the validity of the regulated heat tariffs announced, for district heating fees to separately managed institutions and other users, the Company takes as a reference period the three quarterly periods published by the Ministry for Energy, i.e. the period of validity until 30 September 2023.
The Company also informed the public that the material increase in regulated heat tariffs is mainly due to the official recognition of the more than 4.5-fold increase in the price of electricity required for geothermal heat generation and, therefore, these have a limited impact on the improvement of the Company's profitability.

The regulated prices defined for the district heating companies of the PannErgy Group in the reporting period are described in detail in *Section 3.2 Regulated district heating tariffs* both for the reporting period and for the base period.

Grants awarded in the reporting period

Through its member, Kuala Kft., PannErgy Plc. submitted its application No. GEOTERM-2021.2-2021-00002 in response to the tender notice entitled 'Grants for the activities of geothermal-based heat production projects' announced under the Climate and Nature Protection Action Plan, and it was awarded a grant of HUF 994 million by the donor – the Ministry for Innovation and Technology – in November 2022. The grant is related to the boring of the third geothermal production well of the Miskolc Geothermal Project. The project is expected to increase the usable capacity of the system by up to 15%–20% and the growing number of production wells will improve its operational continuity significantly, whereby the spare capacity untypical of geothermal power plants will become available. After the geothermal system of Győr, this may become PannErgy's second system with spare capacity, providing the means to restart heat production in the event of a failure by way of a few hours' of reswitching instead of a well-pump replacement that may take 7 to 12 days. The completion of the project is expected before the commencement of the 2023/2024 district heating season.

In addition, the Ministry for Innovation and Technology, as donor, awarded a grant of HUF 1,623 million to application No. GEOTERM-2021.3-2022-00001 submitted by PannErgy Geotermikus Erőművek Zrt. in response to the tender notice entitled 'Grants for the activities of geothermal-based heat production projects' announced under the Climate and Nature Protection Action Plan. The grant is related to the boring of a geothermal production well to be implemented near Budapest. After a successful implementation, the project may become part of a complex geothermal heat supply system and participate in supplying the heating and hot water needs of potential heat-receiving partners in and around Budapest (district heating providers, industrial facilities, etc.). Boring the well is the first step of creating a possible geothermal system. A thorough analysis of the relevant data is required before the additional elements of the project may be designed. Drilling works may begin in 2024 provided that the seismic measurements preceding the drilling reconfirm the conclusions of months of preparatory efforts expended so far.

Until the publication of these financial statements, the Incentive Agreements relevant to the above grants had not been concluded and the conditions for drawing down the grants were not in place yet. At present, professional and administrative preparations are in progress preceding contract conclusion for the projects.

Treasury share buyback programmes

On 31 December 2022 the Company held a total of 4,041,700 PannErgy Plc. treasury shares, 616,944 less than it held on 31 December 2021. The change reflects the combined effect of the treasury share cancellations related to the capital reduction effected in the reporting period and the purchases of treasury shares under the treasury share buyback programmes in place during the reporting period.

During the reduction of the share capital from HUF 421 million to HUF 400 million, a total of 1,054,655 treasury shares were cancelled, with the cancellations registered on 25 July 2022 by the Court of Registration. The decrease in the number of shares in respect of shares listed on the Budapest Stock Exchange took place on 9 August 2022.
Under the treasury share buyback programmes, a total of 166,773 and 270,938 treasury shares were repurchased in 2022 H1 and H2, respectively. Taken together, 437,711 shares were repurchased in 2022.

The stock exchange closing price of PannErgy shares was HUF 1,315 per share at the end of the reporting period, compared to the closing price of HUF 1,040 per share on 31 December 2021; accordingly, on the last day of the reporting period the price was 26% higher than the closing price at the end of the previous year.

Portfolio rationalisation transformations involving member companies, purchase and sale transactions and transactions affecting the subscribed capital during the reporting period

In order to increase other components of the Company's equity, on 29 April 2022, the Company's General Meeting approved the reduction of the Company's HUF 421,093,100 share capital by HUF 21,093,100 to HUF 400,000,000. During the share capital reduction to HUF 400 million, a total of 1,054,655 treasury shares were cancelled. The competent Court of Registration registered the capital reduction on 25 July 2022.

In the case of Miskolci Geotermia Kft. and Szentlőrinci Geotermia Kft., based on a decision adopted by the owner PannErgy Geotermikus Erőművek Zrt. in 2021, the legal form of the former Miskolci Geotermia Zrt. and Szentlőrinci Geotermia Zrt. – both covered by the PannErgy Group's scope of consolidation – was changed from a private limited company ('Zrt.') into a limited liability company ('Kft.') as of 31 December 2021. In the case of Szentlőrinci Geotermia Kft. the restructuring was registered with the Court of Registration on 25 January 2022.

Of the consolidated subsidiaries of the PannErgy Group, TT-Geotermia Zrt. was sold on 8 June 2022; upon the transfer of the title of ownership, TT-Geotermia Zrt. was removed from PannErgy Plc.'s scope of consolidation. TT-Geotermia owns some, mostly rather obsolete equipment and facilities that provide conventional utility distribution to PannErgy's properties held for utilisation and sale in Debrecen, as well as to several properties owned by third parties in their vicinity. The operation of the facilities and the related services were not part of PannErgy's defined strategy for renewable energy production, nor did they generate any significant economic results. In view of this, as well as the operational risks and required resources associated with the activity and the operation of the facilities, PannErgy decided to divest the utility distribution system of Debrecen by way of selling its entire shareholding in TT-Geotermia. The sales price specified in the purchase and sale agreement concluded in the reporting period was HUF 90 million.

On 3 November 2022, PannErgy Plc. decided to establish Geo2Business Kft. a new business association. The purpose of this new subsidiary is to provide services to customers who/that are smaller than district heating providers and multinational companies. The Court of Registration registered Geo2Business Kft. on 8 November 2022.

General meeting closing the previous business year, dividend payment

On 29 April 2022, the General Meeting of the Company approved PannErgy Plc.'s audited consolidated and separate (parent company) unconsolidated annual reports for 2022, drawn up in accordance with the EU IFRS standards. Thereafter, the General Meeting approved the Management Board's proposal on the payment of dividends; namely, that PannErgy pays to shareholders entitled to dividends per ordinary share a total of HUF 294 million dividends from the after-tax profit of the reporting year and from the positive balance of retained earnings set aside after the successful operation in previous periods. The cut-off date for ownership identification for dividend payment was 30 June 2022. The Company disclosed the amount of the actual dividend on 27 June 2022. Accordingly, starting from 14 July 2022, the Company paid a gross amount of HUF 18.11 per share to shareholders as dividend for 2021, amounting to a total of HUF 294 million.

2. PannErgy Group's profit or loss in 2022, key indicators of its business operations

In 2022 the PannErgy Group continued its activities aimed at accomplishing its geothermal energy production and utilisation 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 conditions and the efficiency of the operation of its geothermal projects, as well as by capacity enhancements. Having accomplished the goals and thanks to 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 its consolidated EBITDA increased during the reporting period, in excess of the Company's plans.

Key profit/loss figures (in HUF million)	2022	2021
Revenue from sales	**7,145**	**6,439**
Direct cost of sales	-5,047	-4,859
Gross margin	**2,098**	**1,580**
Gross margin ratio %	*29%*	*25%*
Gross cash flow	**3,813**	**3,174**
Gross cash flow rate %	*53%*	*49%*
Indirect costs of sales	-582	-512
Other incomes	748	434
Other expenditures	-368	-219
Operating profit (EBIT)	**1,896**	**1,283**
Operating profit ratio %	*27%*	*20%*
EBITDA	**3,612**	**2,878**
EBITDA rate %	*51%*	*45%*
Financial profit	-480	-319
Profit before taxes	**1,416**	**964**
Consolidated net earnings in the reporting year, as profit after taxes	**1,310**	**897**
Return on Equity, % (ROE)	12%	9%
Return on Sales, % (ROS)	18%	14%
Earnings per share (EPS), in HUF	82	55

Diluted earnings per share also amounted to HUF 82. Unlike in the previous period, there is no difference in determining diluted earnings per share.

<u>Detailed description of the Company's business operations in 2022:</u>

The Company's HUF 7,145 million consolidated sales revenue was up 11% year-on-year.
A breakdown of heat sale by project shows that the Geothermal Project of Győr contributed revenues of HUF 4,011 million to the PannErgy Group's business performance in 2022, up 23% over the HUF 3,262 million revenues recorded in 2021. Arrabona Koncessziós Kft.'s sales to Győr-Szol Zrt. amounted to HUF 2,425 million of the total figure above, while DD Energy Kft.'s sales to its automotive industry customer amounted to HUF 1,493 million (compared to HUF 1,734 million and HUF 1,527 million, respectively, in the previous year). Sales to heat-receiving partners realised within the framework of the Geothermal Project of Miskolc added up to HUF 2,102 million in the reporting period, of which HUF 2,075 million was sold to MIHŐ Miskolci Hőszolgáltató Kft. These sales figures surpass the revenues of HUF 1,980 million from the Miskolc project, and the HUF 1,933 million revenue from MIHŐ Miskolci Hőszolgáltató Kft. Regarding the Miskolc project alone this represents a sales revenue increase of 6% year-on-year.

The Company's two smaller-volume projects in Berekfürdő and Szentlőrinc also performed better in terms of sales revenues compared to the previous period. The sales revenue of the Szentlőrinc operation rose to HUF 82 million in the reporting period, up 5% over the HUF 78 million in the previous year. After a steep increase in revenue from heat tariffs, the revenue of Berekfürdő amounted to HUF 15 million compared to HUF 2 million in the previous year.

The HUF 177 million revenue from electricity sales derives from the sale of electricity relating to the Company's project in Berekfürdő, which surpasses the HUF 37 million revenue of the base period significantly, thanks to the higher level of the volume sold as a result of efficiency improving projects on the one hand, and to the steep increase in electricity prices typical during the reporting period on the other hand. The significantly higher level of revenue contributed to the consolidated gross margin of the Group with a substantial margin content in the reporting period.

Within the HUF 631 million revenue, the HUF 454 million above the revenue realised from the sale of electricity through the Berekfürdő project consists of items unrelated to the Groups core activity, Energy – these are pass-through items with practically no margin. This sales revenue was generated by reinvoicing electricity charges relating to the operation of PannErgy Plc.'s properties in Debrecen to co-owners of the property concerned, which is in undivided joint ownership. The significant year-on-year contraction in the revenues from these pass-through items can be attributed to the Company's decision, in June 2022, on divesting the utility distribution system of Debrecen.

Other re-invoiced utility services generated HUF 100 million sales revenue (HUF 3 million profit) during the utilisation of the properties not related to the Company's geothermal operations in the reporting period. A profit of HUF 27 million was realised from property rental fees. On the whole, sales revenues (including profits/losses) from the utilisation of the Company's properties in Debrecen remained unchanged relative to the corresponding figures of the preceding year.

In addition to the above, the Company recognised HUF 149 million as revenue from the sale of intangible and tangible assets stated in its books as assets held for sale; the margin realised by the Company on these sales amounted to HUF 46 million.

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 84% percent of the total sales of PannErgy Group in the reporting period, exceeding the 81% recorded for the basis period.

In the reporting period, direct costs of sales rose by 4% to HUF 5,047 million from the previous year's level of HUF 4,859 million, and since this did not exceed the growth in sales revenues in the reporting period, it had a positive effect on the change in the consolidated gross margin stated for the reporting period.

The amount of direct depreciation was up 8% year-on-year: the Company recognised direct costs for the amortisation of assets used directly for geothermal heat generation in an amount of HUF 1,715 million in the reporting period, compared to HUF 1,594 million in the previous year. The higher level of direct depreciation resulted primarily from the higher level of efficiency and operational safety improving projects implemented during the reporting year and the previous year.

The 11% increase in maintenance costs is attributable to the steadily expanding assets of geothermal projects, the additional operational and maintenance tasks resulting from the efficiency and capacity improving projects, higher operational/efficiency requirements, stepped up operational safety levels and requirements, as well as the price hikes typical of the reporting period, moving in tandem with changes in the consumer and industrial price indices affecting both purchases and services.

In the 'Costs of goods sold, mediated services' category, HUF 605 million was stated as expenses of sales not related to geothermal operations; they mostly consisted of re-invoiced ('pass-through') services related to the utilisation of real properties owned by the Company in Debrecen. These costs are related to the value of electricity sales (HUF 631 million) as stated under revenues and to the HUF 100 million value of mediated and re-invoiced 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 rose to HUF 1,076 million from HUF 844 million in the previous year; the Company is trying to offset the negative effects exerted by the typical energy market environment of the reporting period – manifested in unpredictability and price levels surpassing those of the previous period several times over – by continuously monitoring the spot and futures electricity market and by efficient contracting activity.

Accordingly, the Group stated HUF 3,813 million as gross cash flow in 2022, up 20% over the previous year's HUF 3,174 million.

In line with the inflation trends of the reporting period, the administrative and overhead, i.e. indirect operating costs of PannErgy Group increased by 14% during the reporting period year-on-year.

Indirect staff costs were up 15% year-on-year, in line with the labour market processes typical in the reporting period. During the reporting period, 4 persons left the Company. Relative to the previous year with 6 entries and 3 exits, this implies a less intensive fluctuation.

The period-end headcount of the PannErgy Group was below the corresponding figure of the previous year; on 31 December 2022 the actual number of employees was 14 persons, less than the 18 persons recorded on 31 December 2021. The average statistical staff number for the year as a whole dropped from 23 persons in the base period to 22 in the reporting period, which represents a marginal change.

Costs of experts incurred in the reporting period include legal and consulting costs relating to the bank 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 21% during the reporting period. In the category of consultancy costs the PannErgy Group's auditing costs amounted to HUF 16 million, in connection with the auditing of the annual reports and the transformation-related statements of assets and liabilities. Of this, 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 statements.

The 25% rise in office and operating costs can be primarily attributed to the steep rise in the consumer price index during the reporting period, affecting energy and utilities, as well as other purchases and services.

The costs of public and stock exchange presence, stated as indirect costs, decreased by 12% during the reporting period.

The balance of other revenues and expenditures during the reporting period is a revenue of HUF 380 million, compared to HUF 215 million recorded in the base period.

The most substantial (HUF 140 million) item that can be highlighted within the HUF 368 million portfolio of other expenses is made up of local taxes, most notably the local business tax paid to the municipalities 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, which is identical with the level recorded in the base period.

In the reporting period, the Company allocated provisions of HUF 144 million for a liability arising from the possible consequence of a lawsuit related to an account payable unrecognised by the Company, related to a tender conducted years ago, not involving any non-refundable grant. The Company has no overdue debt.

Within the HUF 748 million other income in the reporting year, the most significant item is development aid received, in the amount of HUF 275 million, comprising the write-back of deferred income in proportion to 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 359 million exceeding the HUF 105 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 90 million on the sale of tangible assets, resulting from the sale and purchase transaction relating to the real properties and equipment (utility distribution system) owned by the Group in Debrecen.
As a consequence of the above factors, the operating profit/loss (EBIT) amounted to a profit of HUF 1,896 million in the 2022 business year, up 48% over the HUF 1,283 million realised in 2021.

The business cash-flow (EBITDA) was an inflow of HUF 3,612 million with a 51% EBITDA ratio, HUF 734 million higher than the HUF 2,878 million EBITDA recorded for the corresponding period of the previous year.

Scheduled and extraordinary depreciation was recognised during the reporting period in a total amount of HUF 1,716 million, up 8% over the HUF 1,595 million stated in 2021. 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 recognised a loss of HUF 480 million for the reporting period as profit/loss on financial transactions, which shows an improvement of HUF 161 million relative to the losses on financial transactions reported in the previous period.

The amount of **interests paid** in relation to credit and loan liabilities rose by 4% to **HUF 307 million during the reporting period** from the HUF 295 million recorded in the preceding year. This is primarily due to the loans drawn down by member companies of PannErgy Group in relation to their ongoing projects in the reporting period.

Calculated for the end of the period, the unrealised financial P/L of PannErgy Group resulting from FX exchange rate changes amounted to a loss of HUF 125 million for all types of assets and liabilities, cumulating net exchange 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 statement of profit or loss under financial transactions. The loss on the period-end revaluations is the result of a decline in the HUF/EUR exchange rate relative to the previous periods.

In the reporting period, a total loss of HUF 73 million was recognised for financial derivative transactions under profit/loss on financial transactions.

As a combined result of the above, PannErgy Group's 2022 P/L before taxation amounted to a profit of HUF 1,416 million, surpassing the HUF 964 million profit posted for the previous year significantly by 47%, thanks to the circumstances described above.

The Company recognised HUF 106 million as corporate income tax liability in the reporting period; therefore, **its consolidated net profit after taxes (net P/L) amounted to HUF 1,310 million in the reporting period,** significantly higher than the HUF 897 million profit recognised for in the previous year.

Key data on the asset position (HUF million)	2022	2021
Fixed assets	**22,695**	**22,933**
Total current assets	4,636	3,950
Of which Liquid assets	*629*	*1,276*
Total assets	**27,331**	**26,883**
Total equity	**10,534**	**9,980**

At the end of the reporting period, the net stock of fixed assets was practically the same as in the base period, because the asset value reducing effect of the scheduled amortisation of intangible assets and tangible assets was offset by the asset value increasing effect of the capacity increasing and efficiency improving projects and the associated tangible asset procurements carried out in the reporting period. 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 1,035 million as a concession financial asset pursuant to the provisions of IFRIC 12 – is based on the calculation of the return on the assets and on amortisation in the reporting year.

The Company stated HUF 678 million as goodwill, similarly to the preceding period, For the most part, this is related to the minority interest acquired earlier in PannErgy Geotermikus Erőművek Zrt. in the amount of HUF 517 million. Another 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 Kft. (formerly known as Szentlőrinci Geotermia Zrt.).

Deferred tax receivables in the amount of HUF 139 million were recognised among assets, the value of which decreased by 24% compared to the base period in view of PannErgy Group's calculations relating to deferred tax recovery.

The stock of current assets grew by 17% year-on-year. This resulted primarily from the higher – HUF 2,260 million – level of trade receivables across the cut-off date – which exceeds, by far, the corresponding data of the base year – and from the advances paid for electricity purchases.

At the end of the reporting period, the Company stated inventories – maintenance materials and goods for use in the operation of the geothermal projects – in an amount of HUF 25 million.

Among its current assets the Company had liquid assets of HUF 629 million at the end of the period in contrast to the HUF 1,276 million stated at the end of the previous year. The decline primarily reflects the above position change in trade receivables and trade payables from advances.

The Company's equity increased by 6% year-on-year, as a result of the combined effect of the net profit generated for the Company's shareholders during the reporting period – which increased the equity –, the repurchase of treasury shares and dividends paid in the reporting period, both of which reduced the equity. **Equity per share (calculated for the number of shares less the portfolio of treasury shares) rose by 8% to HUF 660** from the previous year's HUF 609.

The portfolio of long-term credits dropped 9% year-on-year to HUF 9,086 million, which primarily reflects the effect of repayments made during the reporting period.

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 3,439 million is shown in the Company's statement of financial position, after a decline of 7% year-on-year, as a result of reversals recognised during the period concerned in proportion to amortisation.

Within short term liabilities the balance of trade payables stood at HUF 779 million, up 11% year-on-year.

The portfolio of short-term credits together with the short-term part of long-term credits amounted to HUF 2,477 million at the end of the reporting period, representing a 55% increase relative to the corresponding data of the previous year (HUF 1,596 million). The primary reason for the increase is the borrowing of a short-term working capital loan in the reporting period. A working capital loan was granted during the period in relation to the FX-denominated electricity purchases of PannErgy Group. The short-term financing surplus for the loan is transitional; it was necessitated by the cash flow needs related to the higher amount of contractual trade payables in the period following the reporting period.

Other short-term liabilities amounted to HUF 597 million at the end of the reporting period, of which the items due in the next period amount to HUF 219 million and the tax and contribution liabilities of HUF 296 million are the largest items.

Key indicators	2022	2021
Profitability indicators		
Return on assets, % (ROA)	5%	3%
Return on Equity, % (ROE)	12%	9%
Return on Sales, % (ROS)	18%	14%
Asset position indicators		
Ratio of fixed assets, %	83%	85%
Ratio of equity capital, %	39%	37%
Indebtedness rate, %	99%	97%
Financial indicators		
Liquidity ratio	112%	123%
Acid test ratio	112%	123%
Earnings per share (EPS), in HUF	**82**	**55**

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 indicators and asset ratios improved year-on-year. Of the asset ratios, the ratio of fixed assets decreased, primarily as a result of amortisation in the reporting year. Despite the payment of dividends and the repurchase of treasury shares, the equity ratio increased thanks to the Company's profits, the amount of which is significantly higher than in the previous year. The indebtedness ratio is below 100, which means that the value of long-term and short-term bank debts less cash and long-term and short-term securities is lower than the value of equity. Liquidity indicators declined marginally compared to the previous period as a result, inter alia, of the intensive construction activity of the reporting period. Nevertheless, they still exhibit adequate values above 100%.

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, utilisation 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. On 31 December 2022, PannErgy Group had 14 employees, while the annual average statistical headcount for 2022 is 22.

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 regulated tariffs announced for a pre-defined period in the EM Decree of the Minister for Energy. It is also possible to resort to interim price-setting, as happened in the reporting period due to the drastic energy market volatility observed in the reporting period.

In Decree No. 20/2022. (IX. 30.) TIM of the Minister for Technology and Industry, published in Volume 159 of 2022 of the Hungarian Official Journal (Magyar Közlöny), the Minister announced the regulated district heat production tariffs (heat supply tariffs) effective as from 1 October 2022 also applicable to subsidiaries subject to PannErgy's district heating price regulation, then in Decree No. 8/2022. (XII. 28.) EM of the Minister for Energy (the "Decree"), published in Volume 219 of 2022 of the Hungarian Official Journal (Magyar Közlöny), the Minister announced the regulated district heat production tariffs (heat supply tariffs) effective as from 1 January 2023 also applicable to subsidiaries subject to PannErgy's district heating price regulation, which tariffs PannErgy has presented in the form of extraordinary information at its official places of disclosure.

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

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

The regulated prices defined for the district heating companies of the PannErgy Group in the reporting period and in the base period are the following:

data in HUF/GJ	01/10/2020–30/09/2021	01/10/2021–30/09/2022	01/10/2022 31/12/2022	01/01/2023 30/09/2023
Arrabona Koncessziós Kft.	3,204	3,397	4,023	6,225
Kuala Kft.	2,626	2,650	3,176	5,211
Miskolci Geotermia Kft.	2,626	2,650	3,176	5,211
Szentlőrinci Geotermia Kft.	3,654	3,791	4,620	6,715

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 opportunities to boost its sales of geothermal heat to industrial partners as well, in the form of primary or secondary heat utilisation, besides the agreements concluded with heating utility partners. The Company’s major industrial consumers purchasing heat, include Audi Hungaria Zrt. 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 Kft.

3.4. *Real property utilisation*

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 – the town of Debrecen.

The PannErgy Group presents its industrial properties in Debrecen – which are not directly or indirectly related to the Group’s core operation, i.e. geothermal heat generation and sale – in its investment property portfolio. The Company intends to utilise them through lease arrangements. The Company’s revenue from letting these properties amounted to HUF 27 million in 2022.

At the end of the period, the properties were presented in the Company’s consolidated statement of financial position in an amount of HUF 101 million. Due to amortisation recognised for the reporting period, the value of these investment properties declined year-on-year.

4. ACHIEVEMENT OF PANNERGY'S MAIN TARGETS SET FOR 2022, AND THE ASSOCIATED RISKS

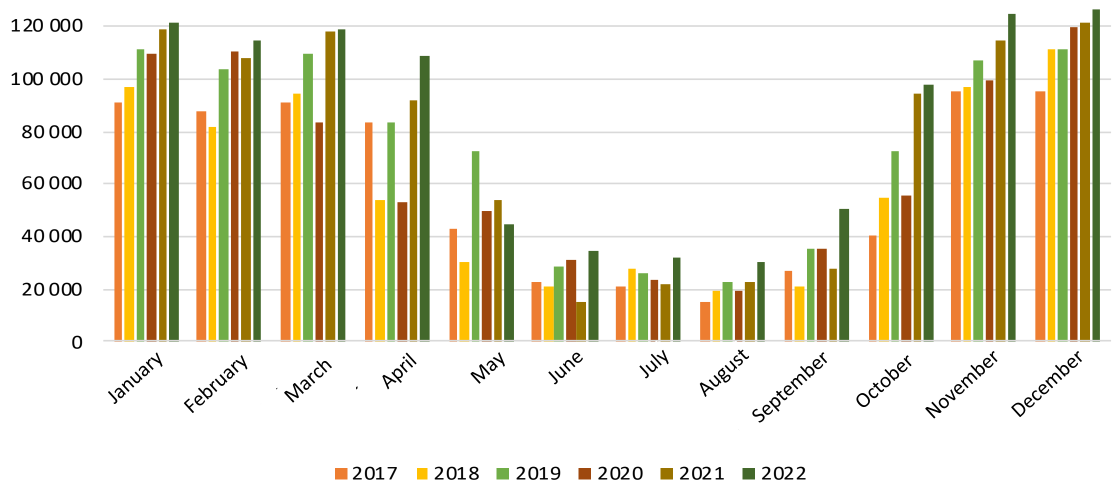
4.1. *Győr Geothermal Project (DD Energy Kft., Arrabona Koncessziós Kft.)*

The Geothermal System of Győr sold a historic seasonal record volume of thermal energy in all quarters of 2022. Compared to the base period, the thermal energy sold in 2022 Q1 (354,760 GJ), Q2 (187,141 GJ), Q3 (112,734 GJ) and Q4 (349,530 GJ) rose by 3%, 16%, 56% and 6%, respectively.

The primary reasons for the increase were the positive results of the investment activity in recent periods, appropriate weather conditions, and the announcement of the Company's commercial agreement with GYŐR-SZOL Zrt. in the reporting period, which secures priority to geothermal energy. Under the agreement, the geothermal heat input enjoys priority over any other energy source alternatives fed into the district heating system, primarily as it relates to the heat demand arising outside of the heating season.

For the first time in PannErgy's history, total annual heat sold in Győr exceeded 1 million GJ (1,004,165 GJ) in 2022, surpassing the heat sold in 2021 (908,887 GJ) by 10%.

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



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

The Geothermal System of Miskolc sold a total of 242,889 GJ thermal energy in 2022 Q1, down 11% year-on-year. The decline primarily reflects weather conditions not conducive to geothermal heat input.

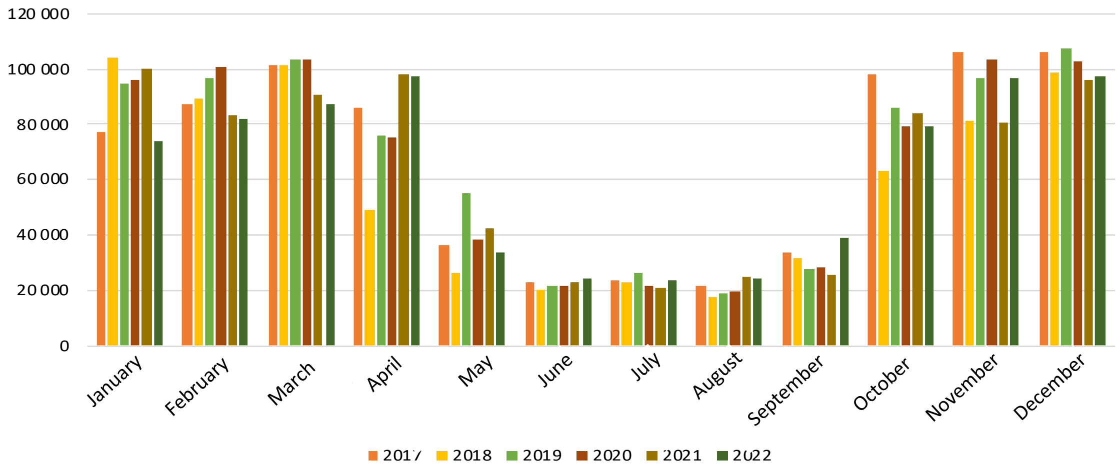
Subsequently in 2022 Q2, thermal energy of 154,988 GJ was sold, down 5% compared to the heat sold in 2021. The main reason for the contraction are unfavourable weather conditions in May relative to the base period.

The Geothermal System of Miskolc sold a total of 86,925 GJ thermal energy in 2022 Q3, up 22% compared to the thermal energy sales of the same period in 2021; the positive change is due to the combined effect of more efficient operation and better weather conditions than in the base period.

This positive trend continued in 2022 Q4, when the Geothermal System of Miskolc sold a total of 273,325 GJ thermal energy, exceeding the corresponding value achieved in the base period by 5%.

On the whole, the Company realised 758,127 GJ heat sales in the commercial operations of the Geothermal System of Miskolc in 2022, down 1% from the 768,264 GJ heat sold during the previous year.

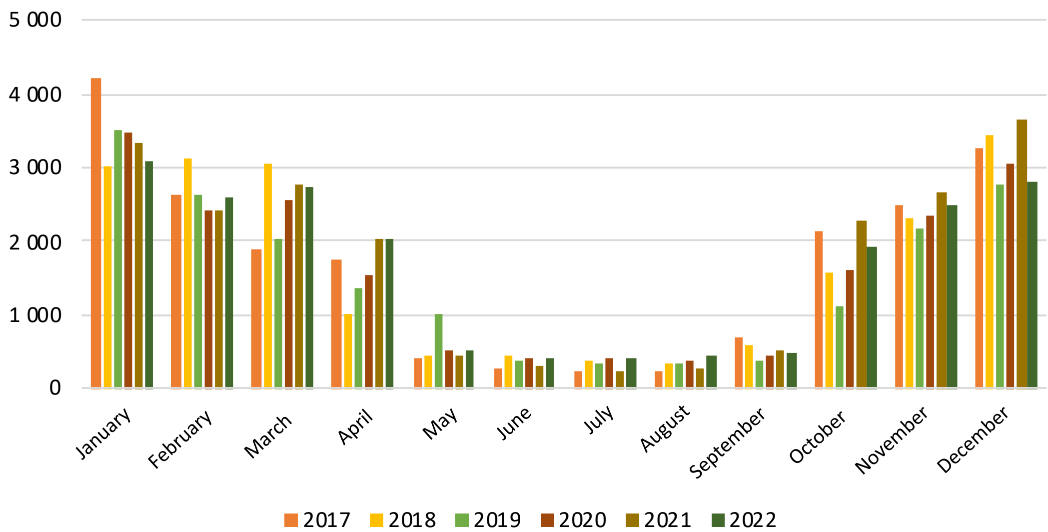
The amounts of heat sold in Miskolc were as follows during the reporting period (GJ):



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

In Szentlőrinc, compared to 20,895 GJ sold in the previous year, the volume of heat sold – 19,985 GJ – was 4% less than in the base period.
The Geothermal Facility of Szentlőrinc can fully meet the heat demand of the local district heating system on its own; thus the weather sensitivity of the geothermal heat input is significantly higher than that of district heating systems with complex heat resources. The contraction observed in the reporting period can also be attributed to these reasons.

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



4.4. *Geothermal methane utilisation facility of Berekfürdő (Berekfürdő Energia Kft.)*

The Geothermal Methane Utilisation Small Power Plant of Berekfürdő sold a total of 1,844 MWh electricity during the reporting period, exceeding the 1,017 MWh sold in the previous year. The 81% volume growth enabling the substantial sales revenue increase above took place in previous years and during the reporting period, as a result of the investment projects aimed at improving the efficiency of the gas engines.

A total of 2,230 GJ thermal energy was sold in 2022, which surpasses the 1,143 GJ achieved in the previous year significantly, partly because of the efficiency improvement observed also in heat input, and partly because of the lower figure recorded in the previous year due to the negative effect of the pandemic situation on heat-receiving partners in the base period.

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 recognising the importance of this segment 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 utilisation of renewable energy sources. The focus of the strategy is to become the region’s dominant company in the utilisation 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 are limited either in terms of volume or accessibility. Professional, effective and efficient geothermal energy production is not only a form of utilisation 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 programme 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 in 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 changed its name to PannErgy and announced its new strategy already under the new name. The production and utilisation of energy from geothermal sources are at the heart of the new strategy.
2010	Acquisition of sole (100%) ownership of Berekfürdő Energia Termelő és Szolgáltató Kft. This acquisition allows PannErgy to expand its alternative energy portfolio with a power plant fuelled with methane obtained from thermal water, which would otherwise be significantly damaging to the environment, as well as the associated technological expertise.
2011	Boring of a geothermal well in Szentlőrinc, construction of a surface system. Commercial geothermic heat generation and the sale of energy go live on 1 January 2011 in 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 Zrt.'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 Kft.
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 GY-M-S 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 Zrt. and Audi.
2016	In 2016, the Company successfully completed its first major development investment programme for existing geothermal systems; as a result, its existing competences expanded significantly. Thanks to this development, the system became more resilient to the chemical and physical challenges of the well system in Győr; owing to the capacity upgrade, the maximum thermal water yield capacity of the Győr Geothermal System increased to 960 m^3/h.
2017	PannErgy concluded a concession contract in February 2017 with the Hungarian State for the exploration, extraction and utilisation of geothermal energy in the region of Győr, for a period of 35 years. The Company examined the specificities of the geothermal resources over 2,500 metres below the surface, in the zone specified by the concession rights acquired under the concession contract. In order to increase its thermal capacity further, the Company decided to drill a new geothermal well.
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 sole (100%) ownership in Well Research Ltd., owner of the reinjection well (ID: KIS-PE-01B) at Kistokaj 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	The capacity expansion and efficiency improvement investment programme continued. By 2022 it will enable the company to reach a consolidated annual EBITDA level of HUF 3,250 – 3,350 million. PannErgy's consolidated greenhouse gas emissions savings rate was 81% in 2021; it saved approximately 4/5 units compared to fossil fuel emissions.
2022	**The consolidated annual EBITDA level of the Company is over HUF 3,600 million. The planned projects of PannErgy – the third production well of the Miskolc expansion and the Budapest project – were awarded grants. Total annual heat sold in Győr in 2022 exceeded 1 million GJ (1,004,165 GJ) for the first time in PannErgy's history.**

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 published its first ESG report in 2022 ahead of the deadlines prescribed in the applicable legal regulations. In addition to presenting the data included in these consolidated financial statements, the Company described 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, alongside two other issuers, PannErgy Plc. received a prestigious award at the 'BSE Legends 2021' awards ceremony on 23 February 2022 – the 'Award for Responsibility, Sustainability and Corporate Governance'.

Drawn up in accordance with GRI standards, the Company's sustainability/ESG report for 2022 will be published on 28 April 2023.

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

The ESG report referred to in Section 6.1 also presented, inter alia, the greenhouse gas emission savings balance of PannErgy Group.

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 was 78% in 2022 compared to the 81% reported in the base period, which means that in the reporting period it continued to save approximately 4/5 units compared to fossil fuel emissions. The decline reflects the fact that, in addition to its greenhouse gas emissions saving activity, the Company completely neutralised the CO_2 impact of the power needs of geothermal heat generation by purchasing a Guarantee of Origin (Scope 2) in the base period, and no such guarantees were purchased during the reporting period.

Based on the greenhouse gas emissions related to energy production, the Company emitted only 22%, 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 2022, the Company offset (saved) approximately 80 thousand tonnes of CO_2-equivalent GHG emissions. For the calculation of the GHG emissions savings rate, in order to define the GHG emission of the Group, the Company considered the CO_2 impact of the electricity needs of geothermal heat generation (Scope 2) and the GHG emissions related to administrative central operation and project-level site operation (Scope 1). As regards savings, 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.

7. THE PANNERGY GROUP'S SUBSIDIARIES

PannErgy Plc., the parent company, has a 100% share of ownership in PannErgy Geotermikus Erőművek Zrt. 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 Kft.	86	100.00	100.00	100.00
Arrabona Koncessziós Kft.	6	100.00	100.00	100.00
Szentlőrinci Geotermia Kft. [1]	5	100.00	100.00	100.00
Miskolci Geotermia Kft.	5	100.00	100.00	100.00
DD Energy Kft.	3	100.00	100.00	100.00
Kuala Kft.	3	100.00	100.00	100.00
Berekfürdő Energia Kft.	3	100.00	100.00	100.00
Geo2Business Kft. [2]	3	100.00	100.00	100.00

[1:] As at 31 December 2021, Miskolci Geotermia Kft. and Szentlőrinci Geotermia Kft. were restructured, and will continue to operate as limited liability companies instead of private companies limited by shares. In the case of Szentlőrinci Geotermia Zrt. the restructuring was registered with the Court of Registration on 25 January 2022.

[2] On 3 November 2022, PannErgy Plc. decided to establish Geo2Business Kft. a new business association. The purpose of this new subsidiary is to provide services to customers who/that are smaller than district heating providers and multinational companies. The Court of Registration registered Geo2Business Kft. on 8 November 2022.

[3] Of the consolidated subsidiaries of the PannErgy Group, TT-Geotermia Zrt. was sold on 8 June 2022; upon the transfer of the title of ownership, TT-Geotermia Zrt. was removed from PannErgy Plc.'s scope of consolidation.

7.2. *Key 2022 data of PannErgy's consolidated subsidiaries based on their separate, unconsolidated reports (HUF millions)*

PannErgy subsidiaries	Equity	Subscribed capital	Sales revenue	Business profit or loss	Profit after taxes	Headcount
PannErgy Plc.	10,027	400	89	-331	147	-
PannErgy Geothermal Power Plants Ltd.	3,234	2,073	69	-102	4	8
Arrabona Koncessziós Kft.	2,564	6	2,834	498	378	2
DD Energy Kft.	1,637	3	2,362	569	461	2
DoverDrill Kft.	892	86	175	47	51	3
Miskolci Geotermia Kft.	412	5	1,500	381	2	5
Kuala Kft.	249	3	1,167	243	76	2
Szentlőrinci Geotermia Kft.	28	5	75	74	2	-
Szentlőrinci Geotermia Zrt.			9	-2	3	-

Berekfürdő Energia Kft.	232	3	195	236	217	-
Geo2Business Kft.	3	3	-	-	-	-

8. THE COMPANY'S OWNERSHIP STRUCTURE, SENIOR OFFICERS

8.1. *The Company's ownership structure as at 31 December 2022*

Shareholders	Total share capital = Introduced series					
	01.01.2021			31/12/2021		
	%	%	shares	%	%	shares
Domestic institutions	29.19	37.49	6,146,577	30.86	38.67	6,171,682
Foreign institutions	8.05	10.34	1,695,255	8.43	10.56	1,685,668
Domestic private individuals	30.38	39.01	6,395,910	30.25	37.92	6,051,532
Foreign private individuals	0.32	0.41	66,672	0.30	0.38	60,153
Employees, senior officers	1.94	2.49	409,505	1.55	1.94	309,505
Own holding	22.13	0.00	4,658,644	20.21	0.00	4,041,700
Owner belonging to the general government system	7.96	10.22	1,675,745	8.38	10.50	1,675,745
International Development Institutions	-	-	-	-	-	-
Other	0.03	0.04	6,347	0.02	0.03	4,015
Total	**100.00**	**100.00**	**21,054,655**	**100.00**	**100.00**	**20,000,000**

8.2. *Shareholders with a stake of over 5% in the Company as at 31 December 2022*

Name	Investor category		Number of shares	Shareholding (%)	Voting rights (%)
Benji Invest Kft/FCI Kompozit Kft.	Domestic	Company	3,186,010	15.93	19.96
MVM Energetika Zrt.	Domestic	Company	1,675,745	8.38	10.50
Soltút Kft. / Kálmán Rencsár	Domestic	Company	1,814,241	9.07	11.37

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:

	01/01/2022	30/06/2022	25/07/2022 [2]	31/12/2022
At company level	3,723,441	3,892,414	2,872,959	3,106,497
Subsidiaries [1]	935,203	935,203	935,203	935,203
Total	**4,658,644**	**4,827,617**	**3,808,162**	**4,041,700**

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

[2] After the reduction of the Company's share capital on 25/07/2022.

8.4. *Executive officers of the Company*

The Company's executive officers are the members of the Management Board. Data of the members of the Management Board and their respective shareholdings on 31 December 2022:

Name	Position	Date of taking office	Mandated until	Number of shares held
Dénes Gyimóthy	Member, Chairman	31/08/2007	indefinite term	-
István Jaksa	Chief Executive Officer	13/12/2022	indefinite term	2,505
Katalin Gyimóthy	Member	28/04/2016	indefinite term	-
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				**309,505**

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, Chairman of the Management Board, as authorised by the Management Board.

The information and rules prescribed in Sections 95/A and 95/B of the Accounting Act are included in PannErgy Plc.'s Articles of Association. The rules on the election and removal of executive officers and on the amendment of the Articles of Association are defined in the Company's Articles of Association. Pursuant to the Articles of Association, the supreme body of the Company is the General Meeting, which is composed of all shareholders. Unless provided otherwise by the Civil Code or, based on the authorisation thereof, by the Articles of Association, the following shall fall within the exclusive competence of the General Meeting:

- decisions to approve and amend the Articles of Association;
- decisions to elect and remove members of the Company's Management Board and to determine their remuneration;
- decisions on the evaluation of the work carried out by members of the Management Board in the previous business year and on granting the discharge available to them;
- decisions to increase the share capital by the issue of new shares or by taking recourse to the assets available over and above the share capital, except where the General Meeting authorises the Management Board to increase the share capital by the issue of new shares or by taking recourse to the assets available over and above the share capital;
- decisions to acquire treasury shares or to accept a public takeover bid for treasury shares, except where the acquisition is based on the authorisation granted by the General Meeting or by the Civil Code to the Management Board;
- decisions to reduce the share capital, unless provided otherwise by the Civil Code.

In lieu of a Board of Directors and a Supervisory Board, the Company has a Management Board in order to enable a consistent system of governance. The Management Board carries out the statutory functions of both the Board of Directors and the Supervisory Board. As part of its duties, the Management Board defines the Company's strategic policies and supervises the operation of the Company's management. More details on the tasks of the Management Board are included in the Corporate Governance Report disclosed concurrently with the consolidated financial statements.

In electing the members of its administrative, management and supervisory bodies, the Company strives to consider criteria regarding age, sex, and educational and professional background, in accordance with the principle of diversity.

9. Headcount information

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

Own staff	31/12/2022	31/12/2021	Change
PannErgy Plc.	-	-	-
Affiliated entities	22	23	-1
Total	**22**	**23**	**-1**

PannErgy Group's 2022 average statistical headcount was 22, less by 1 person than in the preceding year (23). On 31 December 2022 the number of staff working for the PannErgy Group was 14; the difference between the average statistical headcount and the number of employees at the end of the period is attributable to part-time employment across group members and the increased headcount during the year.

10. Distribution of dividends

In consideration of the Management Board's report and the Audit Committee's and the auditor's comments, by Resolution No. 2/2022 (IV. 29.) on 29 April 2022 the Company's General Meeting approved the Company's separate (parent company), unconsolidated 2021 balance sheet and profit and loss statement, prepared in accordance with the EU IFRS, with total assets of HUF 10,983 million and the same amount as total liabilities and an after-tax P/L (profit) of HUF 37 million, which figures are consistent with the proposal and the auditor's report. The General Meeting also approved the consolidated report on the business operations of PannErgy Group in 2021, prepared in accordance with the EU IFRS, with HUF 26,883 million for assets and liabilities (total assets), and an after-tax P/L (profit) of HUF 897 million.

After the approval of the consolidated and separate reports, by its Resolution No. 3/2022 (IV. 29.) the General Meeting approved the Management Board's proposal to the effect that PannErgy pays to shareholders entitled to dividends per ordinary share as per Sections 56.3 and 58 of the Company's Articles of Association a total of HUF 294 million dividends from the after-tax profit of the reporting year and from the positive balance of retained earnings set aside after the successful operation in previous periods. The cut-off date for ownership identification for dividend payment was 30 June 2022; the Company disclosed the details of the dividend payment in its communications on 16 June and 24 June 2022.

Thereafter, on 27 June 2022 it disclosed the amount of the actual dividend. Accordingly, the Company pays a gross amount of HUF 18.11 per share to shareholders in the way of dividend for 2021, amounting to a total of HUF 294 million.

Dividend payments commenced on 14 July 2022, and with the exception of an amount of HUF 30 thousand, by 31 December 2022 the prescribed dividend of HUF 294 million was paid to shareholders in full.

11. Treasury share buybacks, buyback programmes during the reporting period

On 31 December 2022 the Company held a total of 4,041,700 PannErgy Plc. treasury shares, 616,944 less than it held on 31 December 2021. The change reflects the combined effect of the treasury share cancellations related to the capital reduction effected in the reporting period and the purchases of treasury shares under the treasury share buyback programmes in place during the reporting period.

In order to increase other components of the Company's equity, by its Resolution No. 11/2022 (IV. 29.), on 29 April 2022 the Company's General Meeting approved the reduction of the Company's HUF 421,093,100 share capital by HUF 21,093,100 to HUF 400,000,000. During the share capital reduction to HUF 400 million, a total of 1,054,655 treasury shares were cancelled. The competent Court of Registration registered the capital reduction on 25 July 2022; based on the cancellation of the relevant treasury shares, the number of treasury shared changed to 3,808,162 on that day. The decrease in the number of shares in respect of shares listed on the Budapest Stock Exchange took place on 9 August 2022.

A total of 166,773, and 270,938 treasury shares were repurchased in 2022 H1 and 2022 H2, respectively, under the treasury share buyback programmes.

The stock exchange closing price of PannErgy shares was HUF 1,315 per share at the end of the reporting period, compared to the closing price of HUF 1,040 per share on the last day of the base period; accordingly, on the last day of the reporting period the price was 26% higher than the closing price at the end of the previous year.

<u>Details of the treasury share buyback programme concluded during the reporting period:</u>
On 16 April 2021, 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 – authorised the Management Board to purchase treasury shares up to HUF 600 million at a price of minimum HUF 1 and maximum HUF 950 per share. 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 authorised 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 authorisation, 25% of the total portfolio of shares issued. The treasury share buyback programme covered the period starting on 17 April 2021 and ending on 14 April 2022. The shares could only be purchased in stock exchange trading. A total of 76,573 treasury shares were purchased at an average price of HUF 909 apiece in H1 2022, between 1 January and 14 April 2022, under this treasury share buyback programme. The Company purchased a total of 535,434 treasury shares under the programme closed on 14 April 2022.

<u>Details of the treasury share buyback programme commenced during the reporting period:</u>
PannErgy Plc.'s regular annual General Meeting closing the business year 2021 – held on 29 April 2022 – authorised the Management Board by its Resolution No. 8/2022 (IV. 29.) to purchase treasury shares up to an amount of HUF 600 million (that is, six hundred million forints) at a price of minimum HUF 1 and maximum HUF 1,400 per share. 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 authorised 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 authorisation, 25% of the total portfolio of shares issued. The authorisation shall be valid for the period starting on 2 May 2022 and ending on 13 April 2023. The shares may be purchased solely in trading at the stock exchange. In the context of this own share repurchase programme PannErgy Plc. aims at purchasing 2,200 PannErgy Plc. ordinary shares per trading day at the Budapest Stock Exchange until withdrawal or the last day of the term of the General Meeting's authorisation. The purchase price equals to the current market price corresponding to the prevailing bid and ask prices, and must not exceed HUF 1,400 per share according to the resolution of the General Meeting. A total of 361,138 treasury shares were purchased at an average price of HUF 1,077 per share in 2022, i.e. between 2 May 2022 and 31 December 2022, under the relevant treasury share buyback programme.

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 2022 consolidated financial statements.

The Company added to the risks described in the previous year the risks arising from the Russia–Ukraine war; the relevant details are presented in *Section 41.10 Risks Associated with the Russia–Ukraine War* of the 2022 consolidated financial statements.

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
12 March 2023	Extraordinary information	Treasury share transactions
10 March 2023	Extraordinary information	Invitation to the General Meeting
10 March 2023	Miscellaneous information	Modification of PannErgy Plc.'s event calendar for 2023
9 March 2023	Extraordinary information	Detailed description of the share buyback programme
5 March 2023	Extraordinary information	Treasury share transactions
28 February 2023	Extraordinary information	Voting rights, share capital
26 February 2023	Extraordinary information	Treasury share transactions
17 February 2023	Extraordinary information	Treasury share transactions
10 February 2023	Extraordinary information	Treasury share transactions
3 February 2023	Extraordinary information	Treasury share transactions
31 January 2023	Extraordinary information	Voting rights, share capital
27 January 2023	Extraordinary information	Treasury share transactions
20 January 2023	Extraordinary information	Treasury share transactions
13 January 2023	Extraordinary information	Quarterly production report
13 January 2023	Extraordinary information	Treasury share transactions
8 January 2023	Extraordinary information	Treasury share transactions
2 January 2023	Extraordinary information	Voting rights, share capital
2 January 2023	Extraordinary information	Treasury share transactions
29 December 2022	Extraordinary information	Regulated heat tariffs valid from 1 January 2023
28 December 2022	Extraordinary information	Articles of Association
27 December 2022	Miscellaneous information	PannErgy Plc.'s event calendar for 2023
25 December 2022	Extraordinary information	Treasury share transactions
16 December 2022	Extraordinary information	Treasury share transactions
12 December 2022	Extraordinary information	Information on the shareholding of newly elected executive employees
12 December 2022	Extraordinary information	Realignment in PannErgy's top management
11 December 2022	Extraordinary information	Treasury share transactions
2 December 2022	Extraordinary information	Treasury share transactions exceeding the 20% voting right threshold
30 November 2022	Extraordinary information	Voting rights, share capital
27 November 2022	Extraordinary information	Treasury share transactions

20 November 2022	Extraordinary information	Treasury share transactions
18 November 2022	Extraordinary information	Grants were awarded for the planned projects of PannErgy
17 November 2022	Miscellaneous information	Tender notice
11 November 2022	Extraordinary information	Treasury share transactions
4 November 2022	Extraordinary information	Treasury share transactions
3 November 2022	Extraordinary information	Foundation of business association
1 November 2022	Extraordinary information	Voting rights, share capital
30 October 2022	Extraordinary information	Treasury share transactions
25 October 2022	Extraordinary information	Disclosure of Transactions by Persons Discharging Managerial Responsibilities
23 October 2022	Extraordinary information	Treasury share transactions
17 October 2022	Extraordinary information	Issuer statement on the editorial of the index.hu news portal
14 October 2022	Extraordinary information	Quarterly production report
14 October 2022	Extraordinary information	Treasury share transactions
9 October 2022	Extraordinary information	Treasury share transactions
1 October 2022	Extraordinary information	Regulated heat tariffs in effect from 1 October 2022
30 September 2022	Extraordinary information	Voting rights, share capital
30 September 2022	Extraordinary information	Treasury share transactions
25 September 2022	Extraordinary information	Treasury share transactions
18 September 2022	Extraordinary information	Treasury share transactions
13 September 2022	Extraordinary information	Disclosure of Transactions by Persons Discharging Managerial Responsibilities
11 September 2022	Extraordinary information	Treasury share transactions
7 September 2022	Extraordinary information	Disclosure of Transactions by Persons Discharging Managerial Responsibilities
2 September 2022	Extraordinary information	Treasury share transactions
31 August 2022	Extraordinary information	Semi-annual report
31 August 2022	Extraordinary information	Voting rights, share capital
26 August 2022	Extraordinary information	Treasury share transactions
19 August 2022	Extraordinary information	Treasury share transactions
12 August 2022	Extraordinary information	Treasury share transactions
8 August 2022	Miscellaneous information	Decision No. 280/2022 of the Stock Exchange on the modification of the Product List in connection with the reduction of PannErgy Plc.'s share capital
7 August 2022	Extraordinary information	Treasury share transactions
31 July 2022	Extraordinary information	Number of voting rights at PannErgy Plc.
31 July 2022	Extraordinary information	Treasury share transactions
26 July 2022	Extraordinary information	Articles of Association
26 July 2022	Extraordinary information	Registration of a share capital decrease
24 July 2022	Extraordinary information	Treasury share transactions
17 July 2022	Extraordinary information	Treasury share transactions
15 July 2022	Extraordinary information	Modification of PannErgy Plc.'s event calendar for 2022
15 July 2022	Extraordinary information	Quarterly production report
10 July 2022	Extraordinary information	Treasury share transactions
3 July 2022	Extraordinary information	Treasury share transactions
30 June 2022	Extraordinary information	Voting rights, share capital
28 June 2022	Extraordinary information	Articles of Association

27 June 2022	Extraordinary information	Amount of dividend per share
26 June 2022	Extraordinary information	Treasury share transactions
24 June 2022	Extraordinary information	Modification of announcement on the order of payment of dividends for FY2021
24 June 2022	Extraordinary information	Registration of new auditor with the court of registration completed
19 June 2022	Extraordinary information	Treasury share transactions
16 June 2022	Extraordinary information	Distribution of dividends
12 June 2022	Extraordinary information	Treasury share transactions
8 June 2022	Extraordinary information	TT-Geotermia Zrt. sold
6 June 2022	Extraordinary information	Treasury share transactions
31 May 2022	Extraordinary information	Number of voting rights at PannErgy Plc.
29 May 2022	Extraordinary information	Treasury share transactions
22 May 2022	Extraordinary information	Treasury share transactions
15 May 2022	Extraordinary information	Treasury share transactions
9 May 2022	Extraordinary information	Treasury share transactions
1 May 2022	Extraordinary information	Voting rights, share capital
1 May 2022	Extraordinary information	Detailed description of the share buyback programme
30 April 2022	Miscellaneous information	ESG Report
29 April 2022	Extraordinary information	Annual Report
29 April 2022	Extraordinary information	Remuneration report
29 April 2022	Extraordinary information	Responsible Corporate Governance Report
29 April 2022	Extraordinary information	General Meeting Resolutions
14 April 2022	Extraordinary information	Quarterly production report
13 April 2022	Extraordinary information	Information on General Meeting
5 April 2022	Extraordinary information	PannErgy sells its utility distribution system in Debrecen
31 March 2022	Extraordinary information	Voting rights, share capital
30 March 2022	Extraordinary information	Greater priority to the Győr Geothermal System – Modification of the 2022 EBITDA plan
28 March 2022	Extraordinary information	Treasury share transactions
23 March 2022	Extraordinary information	Proposals to the General Meeting
22 March 2022	Extraordinary information	Proposals to the General Meeting
21 March 2022	Extraordinary information	Supplementation of the agenda of PannErgy's annual regular general meeting
20 March 2022	Extraordinary information	Treasury share transactions
11 March 2022	Extraordinary information	Treasury share transactions
11 March 2022	Extraordinary information	Invitation to the General Meeting
6 March 2022	Extraordinary information	Treasury share transactions
3 March 2022	Extraordinary information	Changes to the implementation of the share-buyback programme
28 February 2022	Extraordinary information	Voting rights, share capital
25 February 2022	Extraordinary information	Treasury share transactions
23 February 2022	Miscellaneous 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

15. Date of authorisation of disclosure

The Company's Management Board approved the financial statements and authorised their disclosure on 21 March 2023.

Dénes Gyimóthy
On behalf of the Management Board

PannErgy Plc.
Declaration of the issuer
2022

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

Budapest, 22 March 2023

THIS ANNOUNCEMENT IS PUBLISHED IN HUNGARIAN (MANDATORY, OFFICIAL) AND ENGLISH LANGUAGES. IN CASE OF ANY CONTRADICTION BETWEEN THESE TWO VERSIONS, THE OFFICIAL HUNGARIAN VERSION SHALL PREVAIL.

The attached pdf report is not the official report of the Company; the official report will be drawn up and published in ZIP (within that XHTML-XBRL) format as required by applicable legislation. The contents of the attached pdf report are fully identical with those of the report published in ZIP (within that XHTML-XBRL) format.

DECLARATION

I, Dénes Gyimóthy, acting CEO, issue the following declaration on behalf of the Management Board in relation to the 2022 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 Annex 1 to Decree No. 24/2008 (VII. 15.) of the Minister of Finance:

- prepared to the best of our knowledge and in accordance with the applicable accounting regulations and the IFRS rules, the 2022 separate IFRS annual report of PannErgy Plc. disclosed simultaneously with the consolidated financial statements and business and management report provides a true and fair view of the assets, liabilities, financial position, profit or loss of PannErgy Plc. as a public securities issuer, and;

- the business report attached to the annual report provides a fair view of the position, development and performance of PannErgy Plc. as a public securities issuer, presenting the key risks and uncertainties;

- the 2022 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 fair view of the assets, liabilities, financial position, profit or loss of PannErgy Plc. as a public securities issuer, and the consolidated entities; and,

- the business and management report attached to the 2022 consolidated financial statements (aggregated consolidated management report), prepared in accordance with the applicable IFRS requirements, provides a fair view of the position, development and performance of PannErgy Plc. – as a public securities issuer – and the consolidated entities, while also presenting the key risks and uncertainties.

Dénes Gyimóthy
On behalf of the Management Board