

EQUITY NOTE: PANNERGY NYRT.

Recommendation: BUY

Target price (12M): HUF 1,106

30 April 2019

Highlights

Equity Analyst:
Dániel Módos

Phone:
+36 1 301 2810

Email:
modosd@otpbank.hu

We updated our forecast based on the information that became available over the past month. **The valuation increased very slightly, from HUF 1,090 to 1,106, and we maintained our BUY rating.** The main driver behind the increase was the purchase of the third reinjection well in Miskolc. However, its positive effect on valuation was somewhat negated by the lower relative valuation, which stemmed from the lower EV/EBITDA ratios for the peers. Additionally, as natural gas prices are falling back to levels last seen in November 2016, we modified our price forecast and left the administrative prices unchanged for 2020/2021 (previously we expected a 2% increase). Despite the high expectations, the MNB's monetary policy did not affect risk-free rates much. But the HUF's depreciation sent the EUR/HUF back above 320, so its effect on net profit and revenues has been negligible so far.

The general meeting on 26 April accepted the share repurchase programme with the same conditions as last year. **On Monday, PannErgy announced to buy 1,000 shares each day when the price is below HUF 950.** As most of the increase in cash will be negated by the purchase of the third reinjection well in Miskolc and the above-mentioned share repurchases, we assume that further share repurchases could probably occur between January and April next year.

Recent events affecting our valuation:

After the annual report came out, we said we would update our valuation after the MNB's March rate decision, the production report, and the general meeting. Additionally, PannErgy announced that it started negotiations concerning the purchase of the third reinjection well of Miskolc. Below, we take account of how these factors affect our valuation:

Q1 production report:

- First of all, as [we stated previously](#), the production report of the first quarter was favourable and confirmed the expectation toward the capacity of the third well in Győr. It was also evident from the production report that there is room

for further increase in capacity (albeit it may be minor), which could confirm the management's expectation for 2020 as well.

- **Although the weather effect has been positive so far this year, this has no effect on our valuation** – neither did the bad weather last year. We consider them as temporary effects.

Risk-free rate and FX rates

- Concerning our valuation, the most important aspect of the MNB's March rate decision is its effect on the risk-free rate (10-year government bond yield) and the EUR/HUF exchange rate. The latter is important because Pannergy has EUR loans and part of its revenue is in EUR as well. In March the MNB raised the O/N deposit rate by 10 bps to -0.05% and reduced its outstanding FX swaps by around HUF 100 billion. So the long-term yields did not change much, still hovering around 3%. Additionally there are two main factors that could keep long-term yields relatively low. First of all, the global interest rate expectation shifted down in the past month. Second, as EU funds arrive, the government's increased fiscal reserves will reduce the bond supply, which helps the MNB keep the long end of the yield curve down. **Based on the above, we have no reason to change our risk-free rate from 3%.** As stated in the initial coverage report, we use higher risk-free rate for the terminal value in the FCF model, which could be closer to its equilibrium level.
- **The HUF's 1% depreciation against the EUR decreases Pannergy's net income by approximately HUF 66 million in the given year due to the change in the HUF equivalent of the FX debt, but increases revenues by around HUF 10-12 million indefinitely, which means that the two effects offset each other over a longer time horizon,** therefore the FX fluctuations have no effect on the valuation, but they could influence yearly net income. After the MNB's March rate decision, the HUF depreciated against the EUR from around 313 to above 320, which is almost the same as it was at the end of 2018 (321.5). So far, this has had no material impact on our net income forecast. However, the MNB is in a data-driven mode as domestic inflation pressure is mounting, but the global growth is slowing. This dichotomy could add to the volatility of the EUR/HUF exchange rate.

Share repurchase programmes

- The general meeting accepted the share repurchase programme with the same conditions as a year earlier. The total amount that can be bought if the price is below HUF 950 is HUF 1 billion. In that sense there is no change. **The company opted not to pay dividends, which can be explained by three things:** (1) if the market price is below the fair value, a share repurchase programme is more rewarding, in terms of company value. (2) New investment is in the pipeline,

which will reduce cash by around HUF 350 million. (3) Annual principal payment on the outstanding loans is around HUF 1,200 million, so most of PannErgy's cash is tied up as collateral.

- **On 29 April, PannErgy announced the timing and the amount of daily share repurchases of its share buyback programme. It will buy 1,000 shares every day when the price is below HUF 950.** Until the end of the programme, there are 250 working days. Using the average price between yesterday's close and the maximum purchase price, the company could buy at an average price of HUF 810, so the programme is estimated to cost around HUF 200 million. As the maximum amount of share repurchases is HUF 1 billion, there may be room for further purchases. **As most of the increase in cash will be negated by the purchase of the third reinjection well in Miskolc and the above-mentioned share repurchases, we assume that further share repurchases could probably take place between January and April next year.**
- The effect and the potential impact of the share repurchase programme were discussed in a [previous Equity note](#).

Repurchasing the third reinjection well in Miskolc

- Based on the available information, the target price is HUF 740 million, and the target company's HUF 340 million worth of bank loan will be assumed. This transaction will boost EBITDA by HUF 164 million annually.
- When updating our model, we took into account the following assumptions. PannErgy will pay half of the purchase price by cash and the other half from loans, and the interest rate of the new and the assumed debt is the same as the current average interest rate (2.75%). The amortization period is 20 years, loan maturity is five years.
- Based on that, yearly amortization could increase by HUF 50 million, and interest expense may grow by around HUF 20 million. Therefore income before tax could increase by around HUF 90 million per year.

Gas prices

- Our model assumes that administrative prices will increase by 2% in September 2020. But since then **natural gas prices (which can be thought of as the alternative of the price of geothermal heating) fell to levels not seen since 2016 November.** Based on the above, we do not see any increase in administrative prices for 2020. Even the probability of reduction has become higher. But for now, we assume it will be unchanged.

Appendix:

Income statement

P/L Table consolidated (million HUF)	2016	2017	2018F	2019F	2020F	2021F
Revenue	4 529	4 699	4 679	5 451	5 547	5 645
Revenue from other operations	897	500	527	527	527	527
Revenue from geothermal-heat	3 632	4 024	4 152	4 783	4 877	4 975
Other revenue	101	537	407	141	143	144
OPEX	2 914	3 012	2 903	3 019	3 019	3 095
from which: Depreciation	1 435	1 300	1 317	1 367	1 376	1 385
EBITDA	1 715	2 241	2 231	2 432	2 528	2 551
EBIT	281	923	906	1 066	1 152	1 166
EBT	-131	626	525	822	943	1 002
Income Taxes	28	121	90	99	113	120
Non-controlling interest	-8	17	1	22	26	27
Net income	-151	488	434	701	804	855
EPS (HUF)	-30	4	25	39	45	48

Balance sheet

Balance sheet - consolidated (million HUF)	2016	2017	2018F	2019F	2020F	2021F
Non-current assets	22 282	21 633	22 780	22 413	20 957	19 493
Current assets	2 978	3 389	3 030	2 865	3 296	3 974
Total assets	25 259	25 022	25 810	25 278	24 253	23 467
Total equity	8 889	9 025	9 867	10 355	11 160	12 014
Non-current liabilities	13 479	13 066	12 256	11 803	10 239	8 324
Current liabilities	2 887	2 931	3 687	3 120	2 855	3 128
Total equity and liabilities	25 256	25 022	25 810	25 278	24 253	23 467

Cash flow statement

Cash flow statement (million HUF)	2016	2017	2018F	2019F	2020F	2021F
Profit before taxes	-131	451	525	822	943	1 002
Cash flow from operations	775	1 895	2 266	2 288	2 475	2 209
Cash flow from investment	-1 632	-1 142	-2 766	-1 105	-368	-369
Cash flow from financing activities	473	-201	320	-1 164	-1 554	-1 189
Change in cash and cash equivalents	-384	552	-180	19	553	651

FCFF valuation

Valuation summary (million HUF)	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	Terminal year
Revenue from geothermal heat	4 783	4 877	4 975	5 074	5 176	5 279	5 385	5 492	5 602	5 714	5 829
EBITDA	2 432	2 528	2 551	2 573	2 517	2 539	2 559	2 530	2 548	2 565	2 616
Depreciation	1 367	1 376	1 385	1 394	1 099	1 108	1 117	834	839	839	839
Working capital sales	150	0	0	0	0	0	0	0	0	0	0
Capex	93	93	93	93	93	93	93	93	93	40	40
FCFF	2 062	2 297	2 318	2 339	2 254	2 274	2 294	2 234	2 250	2 318	2 365
WACC	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5	9,0
PV(FCFF)	1 917	1 986	1 864	1 749	1 568	1 471	1 379	1 249	1 170	1 121	14 144

Share price estimation	
Enterprise value	29 618
Net debt (-)	8 389
Equity value	21 229
Number of shares	17 764
Required return on equity	12,3
Target price for the next 12 M (HUF)	1342

Relative valuation

Relative valuation			
Company name	Country	Market capitalization (billion HUF)	EV/EBITDA
Polaris Infrastructure	Canada	37,8	5,1
Ormat Technologies	USA	856,4	11,1
ARISE	Germany	20,3	8,5
ABO Invest	Germany	25,5	11,6
Northland Power	Canada	919,4	10,5
Falck	Denmark	297,5	8,0
Average			9,1
Median			9,5

Risks surrounding PannErgy's economic activity

- Price risk:** The administered price is set at a level that takes into account the cost of doing business and providing a fair profit. However, the administered price setting has inherent risks related to the administrative authority. Moreover, at the moment PannErgy provides heat at a lower cost than its peers (natural gas). However, if natural gas prices fall significantly, then costumers who do not have mandatory purchase agreement with PannErgy could switch to other sources of heat.
- Environmental risks:** Extreme weather conditions during the heating season could harm the profit target of the company. If the winter season is too short or too cold –due to global warming or other extreme weather conditions– the costs are higher, as the output from the drilling wells drops.
- Operational risks:** Maintenance costs increased significantly at the Győr Project in 2016 due to scaling issues concerning the tubing and pumps, and this has reduced production. Although the problem was taken care of, we identify it as a source of risk in the future as well. This could be a risk to our depreciation forecast as well.
- Improving energy efficiency risk:** It is not necessarily a PannErgy-specific risk, but in the long term, the building of passive houses and the coming investment – which increases the energy efficiency of houses and flats – could decrease demand for heat.

Notes:

[The initiation report, which contains the assumptions of the models used, is available here.](#)

[The valuation methodology used in this present equity research note to determine our price targets and recommendations is available here. \(Also available in Hungarian\)](#)

This investment recommendation has not used proprietary models.

The risk warning, which includes the adequate explanations of the length of time of the investment to which the recommendation relates as well as a sensitivity analysis of the assumptions, is indicated in the part of this recommendation where the length of time and the risks of the investment are presented.

Any information relating to the date and time for the price mentioned in this recommendation is revealed in the part of the recommendation where the given price is indicated.

OTP Bank Plc's recommendations and price targets history for PannErgy in the past twelve months:

Date	Recommendations	Target Price	Publication
15/12/2017	BUY	HUF 1,024	Initiation of coverage
16/01/2018	BUY	HUF 1,024	Equity note
13/02/2018	BUY	HUF 1,024	Equity note
21/03/2018	BUY	HUF 1,032	Equity note
17/04/2018	BUY	HUF 1,032	Equity note
17/07/2018	BUY	HUF 1,032	Equity note
03/08/2018	BUY	HUF 1,032	Equity note
04/09/2018	BUY	HUF 1,046	Equity note
02/10/2018	BUY	HUF 1,072	Equity note
16/10/2018	BUY	HUF 1,072	Equity note
16/01/2019	BUY	HUF 1,090	Equity note
25/03/2019	Under revision	-	Equity note
16/04/2019	Under revision	-	Equity note

Period	Recommendations	Percent of recommendation
2017Q4	BUY HOLD SELL	100% 0% 0%
2018Q1	BUY HOLD SELL	100% 0% 0%
2018Q2	BUY HOLD SELL	100% 0% 0%
2018Q3	BUY HOLD SELL	100% 0% 0%
2018Q4	BUY HOLD SELL	100% 0% 0%
2019Q1	BUY HOLD SELL Under revision	93,5% 0% 0% 6,5%

[The list of all recommendations made in the past 12 months is available here.](#)

Disclaimer 1

This research/commentary was prepared by the assignment of the Budapest Stock Exchange Ltd. (registered seat: 1054 Budapest, Szabadság tér 7. Platina torony I. ép. IV. emelet; company registration number: 01-10-044764, hereinafter: BSE) under the agreement that was concluded by and between BSE and OTP Bank Plc (registered seat: H-1051 Budapest, Nádor utca 16., Hungary, company registration number: 01-10-041585, hereinafter: OTP Bank or Investment Service Provider).

The BSE shall not be liable for the content of this research/commentary, especially for the accuracy and completeness of the information therein and for the forecasts and conclusions. The Service Provider is entitled to all copyrights regarding this research/commentary however BSE is entitled to use and advertise/disseminate it without amending its content.

This research/commentary shall not be qualified as investment advice specified in Point 9 Section 4 (2) of Act No. CXXXVIII of 2007 on Investment Firms and Commodity Dealers and on the Regulations Governing their Activities. Furthermore, this document shall not be qualified as an offer or call to tenders for the purchase, sale or hold of the financial instrument(s) concerned by the research/commentary.

Disclaimer 2

1. Pursuant to the Commission-delegated regulation 2017/565/EU of the European Parliament, the content of this document shall be considered as an investment research, which recommends or suggests an investment strategy, explicitly or implicitly concerning one or more financial instruments or the issuers of financial instruments, including any opinion as to the present or future value or price of such instruments. The statements in this investment research contain objective or independent explanation. Furthermore, pursuant to Directive 2014/65/EU of the European Parliament and of the Council, this document shall be considered as investment recommendation. This document does not take into account investors' individual interests, circumstances, or objectives; therefore, in the absence of personal recommendation, it shall not be considered as an investment advice.

OTP Bank intends to make this document available to its clients or to the public, or to make it accessible to other persons in a way that allows this document to be disseminated to the public.

2. Information herein reflects the market situation at the time of writing. It provides only momentary information and may change as market conditions and circumstances develop. Additional information may be available on request. Where a figure relates to a period on or before the date of communication, the figure relates to the past and indicates a historic data. Past performance is not a reliable indicator of future results and shall be not treated as such. OTP Bank makes no representation or warranty, express or implied, is made regarding future performance of any financial instrument mentioned in this communication. OTP Bank shall have no liability for the information contained in this for any loss or damage whether direct, indirect, financial, economic, or consequential, whether or not caused by the negligent act or omission of OTP Bank, provided that such limitation of liability shall not apply to any liability which cannot be excluded or limited under the applicable law.
3. The issuer of this report does not claim that the information presented herein is perfectly accurate or complete. However it is based on sources available to the public and widely believed to be reliable. Also the opinions and estimates presented herein reflect a professional subjective judgment at the original date of publication and are therefore subject to change thereafter without notice. Furthermore there can be no guarantees that any market developments will unfold as forecasted. Opinions and estimates constitute our judgment and are subject to change without notice.
4. The issuer(s) of the product(s) mentioned in this document do not hold more than 5% of OTP Bank's registered capital. OTP Bank is a market maker of the financial instrument that is discussed in this document. Neither was OTP Bank a lead-manager (organizer) or joint lead manager (organizer) of any public placement of the issuer's financial instruments (e.g. securities) in the previous 12 months. Regarding investment services defined in Sections A and B of Annex 1 of Directive 2014/65/EU, OTP Bank is not a party of the agreement with the issuer. OTP Bank maintains a conflict of interest policy and it keeps such records, and is has requirements that regulate the transmission of bank secrets and securities secrets, which requirements shall be considered as the effective internal organizational and management solutions as well as information barriers to prevent or manage conflicts of interest. The remuneration of the person(s) participating in preparing the recommendation is not directly related to the transactions carried out as part of the investment services specified in Sections A and B of Annex 1 of Directive 2014/65/EU, or to transactions carried out by them or by other legal entities of the same group or to trading fees that they or another legal person of the same group receive. OTP Bank does not hold net long or short positions that exceed 0.5% threshold of the issuer's total registered capital.
5. OTP Bank has developed appropriate internal procedures for (i) the personal transactions and tradings of financial analysts and other relevant persons, (ii) the physical separation of the financial analysts involved in the production of investment research and other relevant persons; moreover, information barriers have been implemented, (iii) for accepting and managing incentives and remuneration.
6. This communication does not contain a comprehensive analysis of the described issues; it is only for information purposes. No part, chapter, or the entirety of this information shall be considered as investment advice, not even if any part of this document contains a description of a certain financial instrument in terms of its possible price or yield development, and the related investment options. This information shall not be considered as legal, tax or accounting advice.
7. This information reflects the market situation at the time when the document was prepared. You may request more information from OTP Bank. This document was prepared based on publicly accessible information made available to OTP Bank from one or more sources. This document was prepared using data, facts and information from the following essential sources: Bloomberg, Reuters, Hungarian Central Statistical Office, Eurostat, Magyar Nemzeti Bank (Hungary's central bank), and European Central Bank (ECB). Although the information in this document has been prepared in good faith from sources that OTP Bank believes to be reliable, we do not represent or warrant its accuracy or completeness. This document represents the opinion and estimations of analysts at OTP Research, based on publicly available data. You may receive different recommendation from the staff of OTP Bank, in particular if you are provided investment advice based on an investment advice agreement. The content of this document is based on the opinion of OTP Research's analyst at the time when the document was prepared, and they may be subject to change at any time in the future without further notice.

8. Please be informed that, irrespective of the statements of this investment research, OTP Bank is entitled to deal or trade as market maker, acting in good faith and in accordance with the usual way of market-making, with the financial instruments distributed by the issuer(s) specified in this document, as well as to provide other investment activities or ancillary (investment) services, and/or other financial or ancillary financial services to the issuer and other persons.
9. This document shall not be a basis for any further analysis in relation to the financial instruments contained therein. Any reference in this document to the future distribution of a financial instrument shall be construed as indicative, preliminary and informative, and any analysis of such financial instrument is exclusively based on publicly available information listed in the respective prospectus or announcement. The content of this document shall not imply that OTP Bank acts as an agent, a fiduciary, or an advisor to, or on behalf of, any prospective purchaser of the financial instruments discussed herein.
10. For certain persons, access to the products and/or services discussed in this document may not be granted, or it may be limited. The act of preparing this document by OTP Bank, its uploading to the website, its publication may under no circumstances be considered as OTP Bank's intention to make available product and/or service information in the prospectus to persons whom any country or state prohibits from having or obtaining the given product and/or service, including the promotion and the advertisement thereof. This communication and any of the financial instruments and information contained herein are not intended for the use of private investors in the UK and US. OTP Bank is not allowed to provide direct investment services to US investors. Any individual decision or investment made based on this publication is made solely at the risk of the client and OTP Bank shall not be held responsible for the success of the investment decisions or for attaining the Client's target.
11. This publication contains generic presentation of information and knowledge, thus it does not take into account the individual clients' unique and special interests, financial condition, or their ability and willingness to take risks. Therefore please contact our staff or contact your banking consultant for advice before you make an investment decision. The assessment and the consideration of the individual circumstances is provided by the suitability and compliance tests that assess clients' financial knowledge, experience, risk-taking abilities, as well as the examination of the target market.
12. Before making an informed decision to invest and to use the services, please carefully read through all documents, including the documentation, prospectus, regulations, terms and conditions, announcements and key information documents for that product/service, and carefully consider the subject, the risk, the fees and costs of your investment, the possibility of any loss, and seek information about the tax regulations regarding the product and the investment. The prices of financial instruments and securities are changing, outright sales are realized at then current market prices, which may involve losses. The information and opinions in this document do not substitute or take the place of the issuance documentation for the given financial assets (e.g. prospectus, fund management rules), or their brochures or announcements.
13. You assume total responsibility and risk for any specific decision or investment; OTP Bank shall not be held responsible for the effectiveness of investment decisions or for reaching your purpose, nor for the individual investment decision made based on this document or any part thereof, or for their consequences. Investments in financial instruments carry a certain degree of risk, which may affect the effectiveness of the investment decision, and investors may not receive the whole amount they had expected the investment to yield in their investment targets; they may not preserve even the invested amount, therefore the invested capital might even decrease, be wholly lost, or even lead to additional payment obligation.
14. Trading with leveraged products (such as foreign exchange contracts, or shares and indices that have underlying products) carries a considerable amount of risk, and these products are not suitable for all investors. Trading with leveraged products carries the risk of losing all capital, and it may incur losses that exceed the amount invested.
15. **The figures and information described herein refer to the past, and past performance is not a reliable indicator of future yields, changes, or performance.** The changes on money and capital markets, the fluctuation of prices, the development of investments and their yields are influenced by the combined effect of multiple

factors; one important factor of them is the change in investors' expectations. **The development of prices, the future yield of financial assets, indices or indicators, the examination of their changes, trends, and future performance is based on estimations and forecasts, which forecasts do not allow reliable conclusions to be drawn about the future moves of prices, real future yields, changes, or performance.** For each product and service, please assess their tax accounting implications, and other tax consequences, taking into account that they cannot be precisely assessed without knowing the effective tax regulations of the client's individual circumstances; and these legislative provisions as well as the circumstances may change over time.

16. OTP Bank reserves the right to modify this document in the future, without prior notice. The planned frequency of updates to the recommendation is quarterly. The initiation report preceding this research was published on 18 December 2017.
17. OTP Bank (business registration number: 01-10-041-585; registered seat: Nádor utca 16., Budapest H-1051, Hungary; authorised by Magyar Nemzeti Bank (former supervisory authority: Hungarian Financial Supervisory Authority, 'PSZÁF'). Supervisory authority: Magyar Nemzeti Bank (National Bank of Hungary – H-1054 Budapest, Szabadság tér 9); financial customer services: H-1013 Budapest, Krisztina krt. 39. The terms and conditions of this equity research and disclaimer shall be governed by and construed in accordance with Hungarian law.
18. Please note that the Internet is not a secure environment and OTP Bank does not accept any liability for any loss caused by the result of using this report in a form altered or delayed by the wilful or accidental interception, corruption or virus infection.
19. OTP Bank, in compliance with the applicable law, assumes no responsibility, obligation, warranty or guarantee whatsoever for any direct or indirect damage (including losses arising from investments), or for the costs or expenses, detrimental legal consequences or other sanctions (including punitive and consequential damage) sustained by any natural or legal person as a result of the purchase or sale of financial instruments or engaging investment services described herein, even if OTP Bank was warned of the possibility of such occurrences.
20. If you received this document from OTP Bank Plc, then it was sent to you with your previous consent. You may withdraw this permission by sending an e-mail to research@otpbank.hu or writing a letter addressed to 'Research Center', Hungary H-1051, Budapest, Nádor utca 21. Please refer to your name and e-mail address in both cases.
21. The personal data in this investment research are processed by OTP Bank. The legal basis for processing the data is the legitimate interest of OTP Bank. The detailed information about the processing of personal data and the related rights of data subjects is available [here](#).

This document was prepared by:

Dániel Módos
Senior Equity Analyst
OTP Research

This document was finalized at 4:27:44 PM on 30 April 2019