

EQUITY NOTE: PANNERGY NYRT.

Recommendation: BUY

Target price (12M): HUF 1,090

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We updated the target price of Pannergy from HUF 1,072 to HUF 1,090, to match our updated model. The main factors behind the target price increase were the decline in net debt (from 2018 to 2019) and the effect of the share repurchase program. Part of the positive effects was offset by a drop in the share price based on the relative valuation model, which drop reflected the higher risk aversion on global markets.

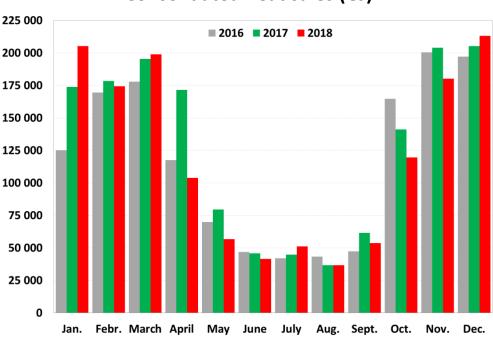
The production report revealed that heat sales in Q4 fell by 6.8% compared to the previous year as average temperatures were higher. 2018 EBITDA could be about the same as in 2017. In the company's own estimate, production was around 100,000 GJ lower, due to the high average temperature in the winter months.

Main takeaways from the production report:

- Overall geothermal heat production was 513,182 GJ in the last quarter of 2018, 6.8% lower than a year earlier. The reduction is due to the higher than average temperature in October and November.
- In 2018, heat sales amounted to 1,435,653 GJ, which is 6.8% lower than a year earlier. In Pannergy's initial estimation, EBITDA could be around the same as it was in 2017. This is because lower heat production was partly compensated by the higher heat production was partly compensated by the higher heat sales prices and the more efficient operation. Pannergy also estimates that the effect of weather on heat sales amounted to 100,000 GJ annually.

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Consolidated heat sales (GJ)





- At the Miskolc operation 242,367 GJ heat energy was sold, which is equivalent to a 12% drop compared to the same period of the previous year. The decrease is due to the higher-than-average temperature in the winter months (as mentioned above) and some technical issues, which led to lower heat sales. The production report does not contain any more detail on the issue so it cannot be established whether this is a temporary issue or its effect may be long-lasting in the form of higher maintenance costs, for example.
- In Győr, heat sales were 14% higher in Q4 than a year earlier, thanks to the completed third well. This well could boost production at the Győr location by 20-25% annually, Pannergy said. This jump in Q4 sales can primarily be attributed to the fact that boiler heating virtually decreased to zero thanks to the increased yield in district heating and the form of operations developed accordingly, to be less sensitive to reduced environmental temperatures.
- In Szentlőrinc, heat sales fell by 7% compared to 2017Q4 but energy consumption costs halved due to the more efficient operation of the replaced heat pump.

Share repurchases program:

- On 21 December 2018 Pannergy announced that it would activate its share repurchases program. Purchases will be 8,000 shares per day until the end of the program (April 27, 2019). Under the share repurchase program, shares can be bought as long as the share price is below HUF 950.
- The start of the share repurchasing program is very reassuring news. This strengthens our view that after the completion of a major investments, the distribution of the profit could start. The activation of this program is the first step in that direction. Looking ahead, if there is no major project in the pipeline, then in our view dividend payout could be the next step. In our initiation report, we stated that dividend payment could start this year or in 2020, depending on future projects and opportunities.

Target price update

- We updated our model for two reasons: (1) As time went by, we rolled forward the model by one year, (2) we took into account the announced share repurchases.
- In the model update, the forecasting period changed from 2018-2027 to 2019-2028. Additionally, as time progresses the company's net debt shrinks, which boosts enterprise value and share price. Moreover, we also updated the relative valuation model as new data came out for the peer companies. Based on the relative valuation, the target price decreased somewhat. Pannergy's net debt decreased and its EBITDA will be higher in 2019 than in 2018, but these positive effects were surpassed by the lower median EV/EBITDA ratios by the peers. The main driver behind it is the fall in share prices across markets over the past few months.
- Finally, the effect of share repurchases was also incorporated. As the company buys back its shares, the number of shares outstanding will decline, which increases the



target price. However, this effect is partly offset by the drop in cash (increase in net debt). Our model assumed that Pannergy would buy 8,000 shares every day until the end of the program. We assumed that the share price would linearly grow from HUF 802 to HUF 950.

Overall, the relative valuation model gave a target price of HUF 906, and the FCFF model gave a target price of HUF 1,275. Therefore we updated our target price for the next 12 months from HUF 1,072 to HUF 1,090, which is 37% higher than yesterday's closing price.

Risks surrounding Pannergy's economic activity

1. **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, costumers who do not have mandatory purchase agreement with Pannergy may switch to other sources of heat. But if natural gas prices stay at high levels, than administered prices could be increased in the future, which could improve the profitability of the company further.

- 2. **Environmental risks:** Extreme weather conditions during the heating season could harm the company's profit target. If the winter season is too short or too cold because of global warming or other extreme weather conditions— the costs are higher, as the output from the drilling wells drops. Moreover, if due to global warming or other long-lasting weather phenomena, the winter season becomes shorter, then Pannergy cannot utilize its full capacity.
- 3. **Operational risks:** Usually the main source of risk in valuing a utility company is forecasting the maintenance costs, as it could be highly unpredictable. For example, maintenance costs increased significantly at the Győr Project in 2016 due to scaling issues concerning the tubing and pumps, and this has reduced production. If maintenance costs keep rising in the subsequent periods, then the valuation may change accordingly.
- 4. **Improving energy efficiency risk:** It is not necessarily a Pannergy-specific risk, but in the long term, the building of passive houses and any future investment to boost the energy efficiency of houses and flats, could reduce demand for heat.



Appendix:

P/L Table consolidated (million HUF)	2015	2016	2017	2018F	2019F	2020F
Revenue	2 726	4 529	4 699	5 150	5 591	5 781
Revenue from other operations	540	897	675	675	675	675
Revenue from geothermal-heat	2 186	3 632	4 024	4 336	4 783	4 973
Other revenue	871	101	537	139	132	133
OPEX	1 983	2 914	3 012	2 862	3 246	3 367
from which: Depreciation	1 241	1 435	1 300	1 259	1 249	1 258
EBITDA	1 614	1 715	2 241	2 288	2 345	2 414
EBIT	373	281	923	1 030	1 096	1 155
EBT	217	-131	626	565	884	935
Income Taxes	183	28	121	68	106	112
Non-controlling interest	-44	-8	17	15	24	25
Net income	78	-151	488	482	754	798
EPS (HUF)	-30	4	28	27	42	45

Balance sheet - consolidated (million HUF)	2013	2014	2015	2016	2017	2018F	2019F	2020F
Non-current assets	14 707	17 299	22 502	22 282	21 633	21 352	20 130	18 946
Current assets	2 034	2 419	4 313	2 978	3 389	3 146	3 495	4 298
Total assets	16 741	19 718	26 815	25 259	25 022	24 498	23 625	23 244
Total equity	9 777	9 259	9 331	8 889	9 025	9 500	9 674	10 472
Non-current liabilities	4 918	7 091	14 028	13 479	13 066	12 489	11 312	10 132
Current liabilities	2 044	3 368	3 459	2 887	2 931	2 509	2 639	2 639
Total equity and liabilities	16 739	19 718	26 819	25 256	25 022	24 498	23 625	23 244

Cash flow statement - consolidated (million HUF)	2015	2016	2017	2018F	2019F	2020F
Profit before taxes	217	-131	626	565	884	935
Cash flow from operations	-173	775	1 895	1 736	1 967	2 037
Cash flow from investment	-4 153	-1 632	-1 142	-1 797	-342	-344
Cash flow from financing activities	5 089	473	-201	-241	-854	-928
Change in cash and cash equivalents	763	-384	552	-302	770	765



Valuation summary (million HUF)	2018 last year	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	Terminal year
Revenue from geothermal heat	4 336	4 783	4 973	5 072	5 174	5 277	5 383	5 490	5 600	5 712	5 826	5 943
EBITDA	2 288	2 345	2 414	2 432	2 450	2 390	2 407	2 423	2 389	2 402	2 413	2 462
Depreciation	1 259	1 249	1 258	1 267	1 276	981	990	999	717	722	722	722
Working capital sales	90	150	0	0	0	0	0	0	0	0	0	0
Сарех	1 043	93	93	93	93	93	93	93	93	93	40	40
FCFF	1 033	1 971	2 182	2 200	2 217	2 129	2 144	2 160	2 095	2 108	2 171	2 214
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)		1 833	1 887	1 769	1 658	1 480	1 387	1 299	1 172	1 096	1 050	13 245

Share price estimation	
Enterprise value	27 874
Net debt (-)	7 714
Equity value	20 161
Number of shares	17 762
Required return on equity	12,3
Target price for the next 12 M (HUF)	1275
Current price (HUF)	794
Upside /Downnside (%)	61

Relative valuation					
Company name	Country	Market capitalization (billion HUF)	EV/EBITDA		
Polaris Infrastructure	Canada	34,1	4,3		
Ormat Technologies	USA	774,4	13,6		
China Geothermal Industry DG	China	12,7	9,4		
ARISE	Germany	18,1	8,3		
ABO Invest	Germany	23,3	10,7		
Northland Power	Canada	854,2	10,0		
Falck	Denmark	232,5	8,4		
		Average	9,2		
		Median	9,4		



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.

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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

Period	Recommendations	Percent of recommendation
	BUY	100%
2017Q4	HOLD	0%
	SELL	0%
	BUY	100%
2018Q1	HOLD	0%
	SELL	0%
	BUY	100%
2018Q2	HOLD	0%
	SELL	0%
	BUY	100%
2018Q3	HOLD	0%
	SELL	0%
	BUY	100%
2018Q4	HOLD	0%
	SELL	0%



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