

EQUITY NOTE: PANNERGY NYRT.

Recommendation: Under revision

Target price (12M): Under revision

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Highlights

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As PannErgy's annual general meeting was inquorate because of the number of attendees on 12 April, the AGM will be held on 26 April. Therefore we keep our valuation under revision until then, as was stated in our previous report.

PannErgy's production report comes with very strong figures in 2019 Q1, due to the higher output in Győr, and because heat sales were not distorted by weather effects, as average temperatures remained mainly between 2-8°C. Overall production was 629,176 GJ in 2019 (slightly exceeding the management's expectation), which is 8.7% higher than a year ago. Additionally, heat sales may have been 30-40,000 GJ higher in Miskolc but this year the city's district heating system was supplied with a higher ratio of heat generated from fossil fuels. This effect will be mitigated by the parties concerned; therefore production in Miskolc could grow further next year.

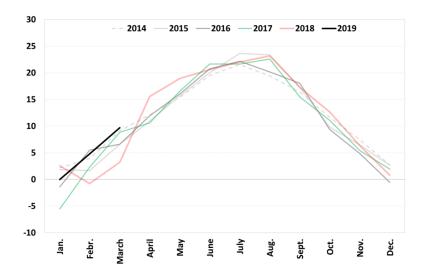
Main takeaways from the production report:

Overall, geothermal heat sales amounted to 629,176 GJ in 2019Q1, surging 8.7% year on year. This slightly exceeded the management's expectation (627,988 GJ for the first quarter). The increase in production was mainly due to the capacity increase in Győr, and partly because the weather was optimal for geothermal heat production. By optimal we mean that average daily temperatures remained largely between 2°C and 8°C.

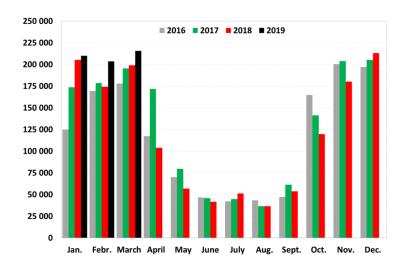
The production report also mentioned that in the case of Miskolc, output may have been 30-40,000 GJ higher in Q1 (see later). This also indicates that there is still room for improvement, which could boost heat sales and revenue further in 2020.



Combined average monthly temperatures (°C) in Miskolc and Győr



Consolidated heat sales (GJ)



- At the Győr location, heat sales jumped by 19% year on year (to 325,050 GJ vs 273,151 GJ), mainly due to the higher capacity and the improving production efficiency. This figure also broadly matches the expected 20-25% increase in capacity due to the installation of the third well, which was completed in 2018 Q4. We think that the optimization of production-related parameters may push this number a little higher.
- In Miskolc, heat sales amounted to 294,930 GJ, which is basically the same as last year. More importantly, PannErgy reported that heat sales could have been 30-40,000 GJ higher. But this did not happen, because the city's district heating system was supplied with a higher ratio of heat generated from fossil fuels during the months of January and February than in the corresponding periods of previous years. The report also stated that 'The parties concerned wish to optimize arrangements for increasing the input of green energy.' That would bring heat sales to 325,000-335,000 GJ, which corresponds to approximately 8.5% year-on-year increase.



- At the Szentlőrinc location, heat sales was 8,184 GJ, which is 11% less than it was in the previous year. But thanks to the pump replacement and the resulting optimized operating conditions the specific energy consumption of the system continued to be significantly (by about 54%) lower.
- In Berekfürdő, the production in January was meagre as it was negatively affected by the refurbishment of the larger gas engine. After that production levels were restored. Overall electricity production was 440,022 kWh, which is 7% lower than a year ago.
- Finally, the lower production levels in Szentlőrinc and Berekfürdő do not mean much as their share in overall revenue is very small.

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, then costumers who do not have mandatory purchase agreement with PannErgy could switch to other sources of heat.

- 2. **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.
- 3. **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.
- 4. **Győr concession project:** Although the geological quality of the area is well researched and known by PannErgy as it has two operating wells nearby, the expected yield on the new well could be a source of risk. Moreover, if the completion of the investment is delayed or it is subject to cost overrun, then this could lower our revenue forecast.
- 5. **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



Period	Recommendations	Percent of recommendation
2017Q4	BUY	100%
	HOLD	0%
	SELL	0%
2018Q1	BUY	100%
	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%
	BUY	93,5%
201001	HOLD	0%
2019Q1	SELL	0%
	Under revision	6,5%

The list of all recommendations made in the past 12 months is available here.

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