

BUY | TP : IDR1,830
PGEO Stock Price Data

Last Price	:	IDR1,250
52wk High	:	IDR1,680
52wk Low	:	IDR740
Share Out	:	41.40bn
Market Cap	:	IDR57.54tn

PGEO Stock Price Performance

1-Day	:	+0.80%
1-Week	:	+3.28%
1-Month	:	-6.67%
3-Month	:	+29.90%
Year-to-Date	:	N/A

Shareholders

PT Pertamina Power Indonesia (PPI)	:	69.01%
Masdar Indonesia Solar Holdings RSC Ltd.	:	15.00%
PT Pertamina Pedeve Indonesia	:	5.99%
Public (>5%)	:	10.00%

PT Pertamina Geothermal Energy Tbk (PGEO IJ) Untapping the Heat Beneath Our Feet

Indonesian geothermal proxy

With the Indonesian government's ambition on bolstering the domestic renewables ecosystem whilst PGEO being the main geothermal SOE, an uncontested access to government's support entails, and thus PGEO would be greatly benefitted. Expansionary pipelines within the domestic region comprises of development projects in their quick wins strategy that will yield a total of 340MW new self-operated capacity by 2027. Other development projects involves a JV agreement with Chevron (to hold 60% of ownership) in the Way Ratai powerplant development, with a longer timeframe of completion estimated to COD in 2031. The firm's ambition to widen their expansionary horizons have also brought them to set foot on the foreign soil of Kenya. As of 9M23 there have been two prospective pipelines the firm has established in Kenya, one that undertakes a 140 MW powerplant in Longonot with Africa Geothermal International No.1 Ltd (AGIL), with its COD planned in 2027, and another that has set in plan a 300MW power plant in Suswa with Geothermal Development Company (GDC).

This year's result bodes well from the superb 9M23 performance

PGEO performed exceptionally well in 9M23; their top line has improved 11.9% YoY to USD308.9mn. This was accompanied by a maintained cost efficiency, rendering only a mere 0.9% YoY uptick in COGS and hence an improved GPM of 59.1%. The OPM was higher at 69.9% due to the increase in finance income and foreign exchange gain by 2,519.4% YoY and 34.1% YoY, respectively. The EBIT jump (31.1% YoY) also hoisted the bottom line by 30.1% YoY to USD133.5mn, leaving the NPM at a staggering 43.2% (vs 38.8% in 9M22). We assume this to be a one-off for FY23E, and maintained our base estimate for the ensuing periods and hence an anticipated slight decline in FY24F. Nevertheless, the performance already achieved 95.3% of our FY23E forecast in 1H23, thus prompting us to up-revise this year's estimate by 8.7% to USD153.2mn.

Commendable operational track record; reflects well on future performance

PGEO has a well-established track record in the geothermal scene, proven to be able to achieve a relatively stable and optimal capacity factors in its geothermal operations. Throughout 2019 – 2022, they have achieved on average above c. 80% of capacity factor. In our view this is quite a commendable feat as their average is higher than that of USA's industry average (69%), which allegedly have well established infrastructures, technologies and experience in place to perform better. With stable income growth, driven by the growth in steam sales ASP, electricity sales ASP growth pegged to the US CPI trend and addition of geothermal plants, we project a growth in the firm's revenue by a CAGR of 11.5% during the 2022 – 2028F period. Accompanying this sizeable growth within the relatively short 5-years term will be the growth in the profitability margins, assuming the prudent cost and operational management is upheld. The OPM and NPM are both projected to grow at a CAGR of 3.1% and 3.7%, respectively in the same time period. That leaves PGEO with an impressive net profit CAGR of 15.6% within the same time frame.

Solid profitability and solvability profile to weather aggressive capex cycle

We expect the firm to inflate their gearing ratios in order to fund their pipeline capex, but once their development project commences COD, the firm can immediately resume deleveraging and tidy up their balance sheet. Having said that, even approaching their peak capex cycle, PGEO could potentially maintain superior solvability profile than its global peers on average. Their ICR from 2020 have been on average 10.6x, or 243% higher than its peers' 5-yr mean of 3.1x, and even during the gearing peak the ICR will remain above the peers' upper ICR SD band. Even so, along the expansionary cycle PGEO is still poised to deliver above-industry-average profitabilities; its average NPM/ROE/ROA/ROIC throughout 2023E-2028F are projected to outperform its global peers's historical average by 146%/26%/67%/4%. It is worth noting that compared to the its potentially capex-intensive peer from Philippines, Aboitiz Power, PGEO would incur a more premium capex rate of USD6.1mn/MW compared to Aboitiz's USD4.7mn/MW.

Recommendation: BUY with TP IDR1,830

We initiate coverage on PGEO with a BUY call with the target price of IDR1,830/share (+46.4%), implying FY23E/FY24F P/E of 32.1x/37.0x, PBV of 3.5x/3.3x, and EV/EBITDA of 17.2x/15.8x. The firm's EV/MW amounts to USD8.27mn/MW, which is actually at a 124% premium compared to its peers, but justifiably so as it is on a speedy mission towards growing its geothermal power capacity. Considerable risk factors that comes with our call includes delays in the expansionary phase of exploration and drilling, as well the potentiality of natural disasters to disrupt operations.


Research Analyst

Alif Ihsanario

alif.ihsanario@mncsgroup.com

Key Financial Highlights	FY20	FY21	FY22	FY23E	FY24F
Revenue (IDR bn)	353.96	368.82	386.07	404.64	418.62
EBIT (IDR bn)	188.47	181.78	201.06	218.94	217.42
Net Income (IDR bn)	72.87	85.08	127.34	152.23	132.14
ROA (%)	2.86%	3.55%	5.14%	6.30%	4.61%
ROE (%)	7.12%	6.92%	10.14%	11.05%	8.91%
PE (x)	46.00	39.40	26.32	32.11	36.99
PBV (x)	3.28	2.73	2.67	3.55	3.30
EPS (IDR)	27.28	31.85	47.68	56.99	49.47

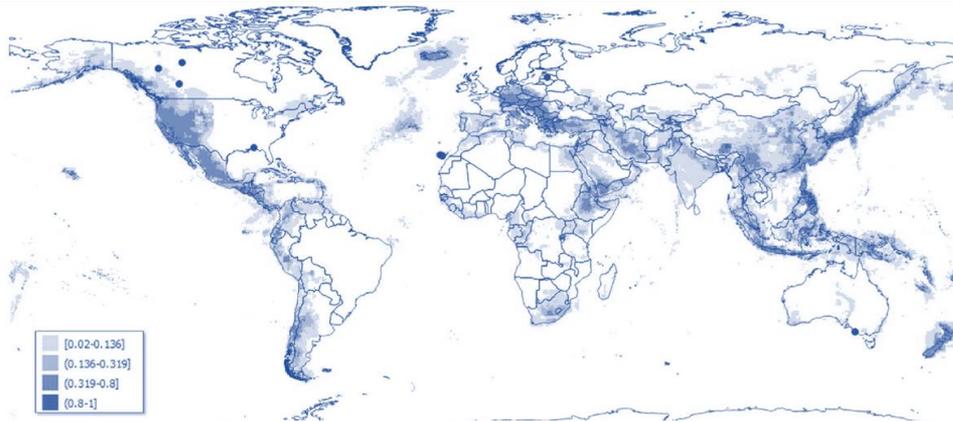
Sources : Bloomberg, MNCS Research

Geothermal: a largely untapped renewable potential

Global Geothermal Outlets

This type of power generation is one that capitalizes on the latent energy contained within the our planet Earth’s core. The Earth’s core, a well-contained, 5,200-5,500°C of raging inferno primarily composed of iron, derives its energy from radioactive decay of heavier elements such as Uranium, Potassium and Thorium, as well as heat leftovers since planetary formation. This energy is categorized as renewable due to its longevity – even with a moderate estimate of 4.3×10^{30} J as the total heat energy contained within the core, that amount of energy will last approx. 17bn years if entire households within Earth only derives electricity from geothermal sources, outliving the Sun which is projected to burn out in 5bn years. So it’s safe to say, we are looking at massive untapped energy source sitting right beneath our feet. According to the 2nd Law of Thermodynamics, heat flows spontaneously from a hotter region to a cooler region, and in this case heat from Earth’s core moves outwards, finding its way towards the cooler Earth’s surface. A naturally occurring example of this phenomenon would be in the form of hot springs, geysers and fumaroles.

Exhibit 01. Prevalent geothermal energy sources geographically based on entropy model (darker regions indicate richer resources)

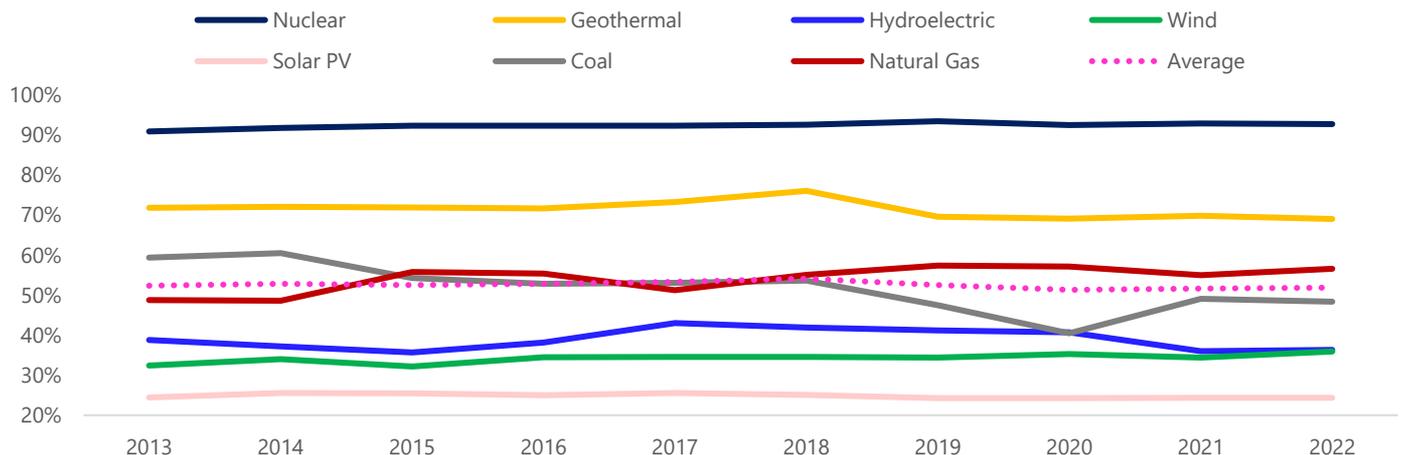


Source : Coro & Trumpy (2020)*, MNCS

Edge against other power sources

Geothermal energy as a source of power generation has an uncontested advantage aside from its virtually infinite quantity, which is that it is available 24 hours a day and 7 days a week. Theoretically, this should provide a basis for geothermal plants to be able to operate near 100% capacity factor (defined as the ratio of actual power generated divided by the full nameplate capacity of the plant) in an ideal system. Practically, the capacity factor varies from one plant to another in terms of its installation, design, the amount of parasitic load to completely self-sustain without additional fuel source and maintenance frequency. Overall, they are able to perform at least above c. 70% capacity factor year-round, far higher than the blended mean of c. 52% of non-renewables and renewables energy mix. Though still below the efficiency of a nuclear reactor, the hazard risk it’s relieved off is probably one of the biggest advantage it holds.

Exhibit 02. Geothermal plants capacity factor comes in the 2nd place in the US’s power generation mix



Source : EIA, MNCS

*Coro G. & Trumpy E. (2020). Predicting geographical suitability of geothermal power plants, Elsevier, Italy. doi.org/10.1016/j.jclepro.2020.121874

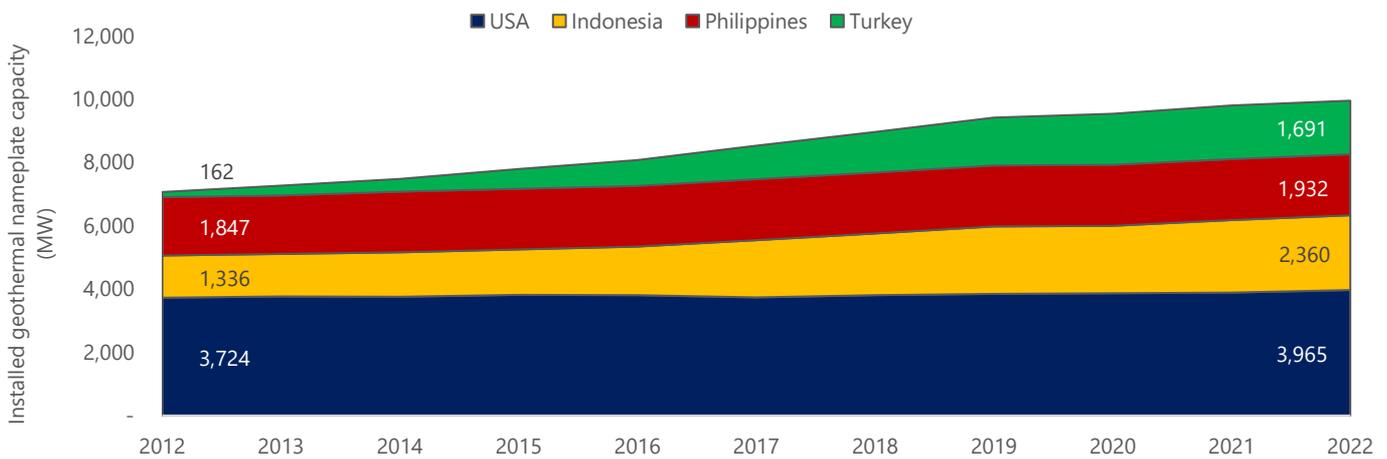
Industrial Outlook

Making the case for Indonesia as the world's main geothermal player

Leading the geothermal development on the global stage

Several findings support the case for Indonesia to become a global front-runner in the race towards capitalizing geothermal energy as a source of sustainable energy source. Globally, Indonesia ranks 2nd in terms of geothermal nameplate capacity, amounting to 2,360MW by the end of 2022, just after the USA which harbors 3,965MW of generational capacity, followed by Philippines (1,932 MW) and Turkey (1,691 MW). Indonesia has had a great run in their new geothermal capacity buildup during this period, growing by 5.9% annually, overtaking Philippines' capacity that only grew 0.5% annually, though development was still behind Turkey's pace at a magnanimous 26.4% annually.

Exhibit 03. In the race against nations, Indonesia has shown significant growth of geothermal resource utilization; set to overtake USA

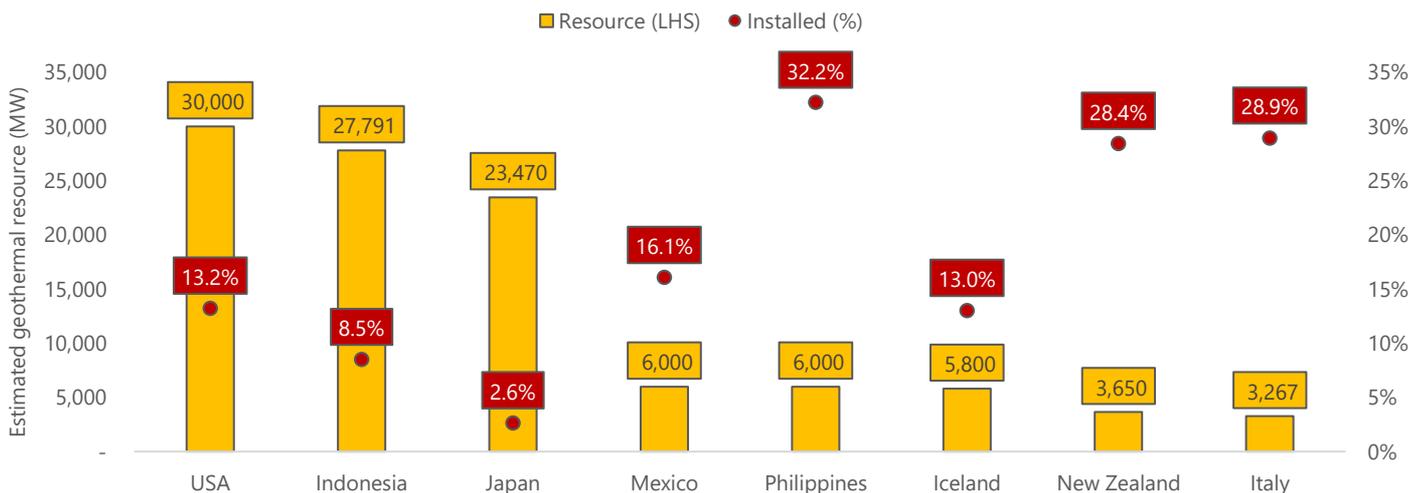


Source : PLN, MNCS

Ample geothermal reserves waiting to be untapped

Despite the expedient growth rate, the domestic geothermal resource still has ample room to be exploited. The nation also stands at the 2nd position worldwide in terms of total estimated geothermal resource, just after USA. The current installed capacity have only reached 8.5% of the total national resource estimated to be at c. 27 GW according to Japan's Organization for Metal and Energy Security (JOGMEC). To even reach an assumed economically-viable nameplate capacity half of the estimated resource at the current pace of 5.9% CAGR would take up roughly another c. 27 years, roughly coinciding with 2060's net-zero emission target, whereby coal-fired power plants (CFPP) are to be entirely decommissioned by the government's decree.

Exhibit 04. Ranking among the top geothermal resource holder globally, Indonesia is still looking at plenty of room to grow

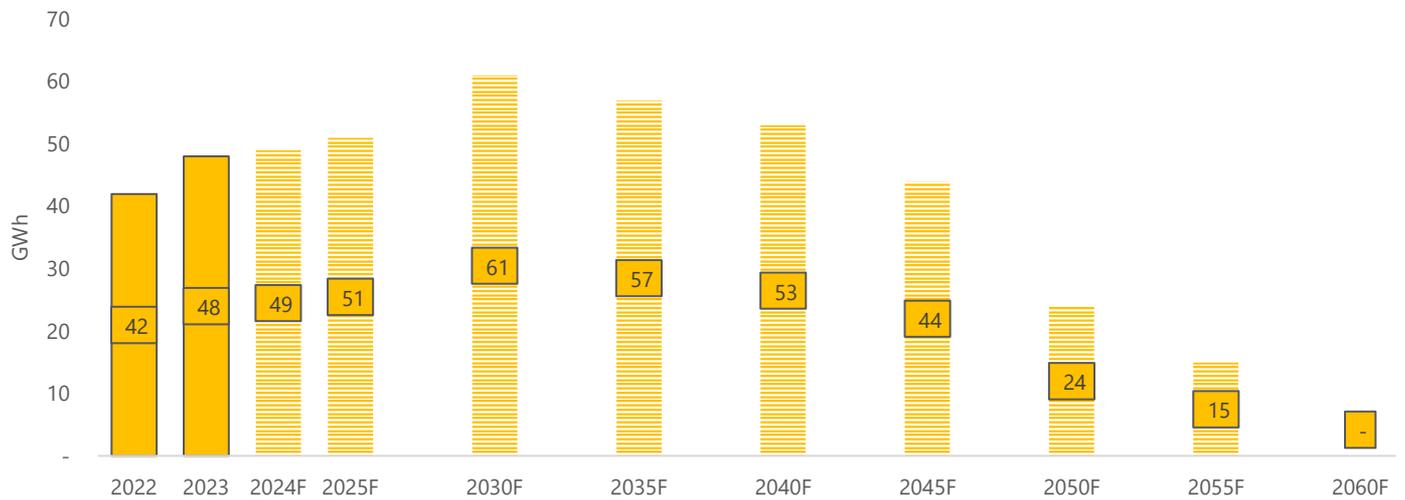


Source : Geothink, Japan Organization for Metals and Energy Security (JOGMEC), MNCS

Empowering regulatory environment

Achieving the aforementioned growth, however, would only be achieved through stern and intricate governing. The government has set in place policies that are aimed towards meeting Indonesia’s NDC target of subduing emissions by 29%/41% of the business-as through unconditional/conditional scenario, or 834mn CO₂e tons/1,185mn CO₂e tons. In order to achieve that goal, there has been major policy reforms set in order within the national scope, including: 1) CFPP Early Retirement Program as the main program, with 2) carbon tax and carbon trading, 3) Just Energy Transition Partnership (JETP) and 4) Energy Transition Mechanism (ETM) as the peripheral, supporting programs.

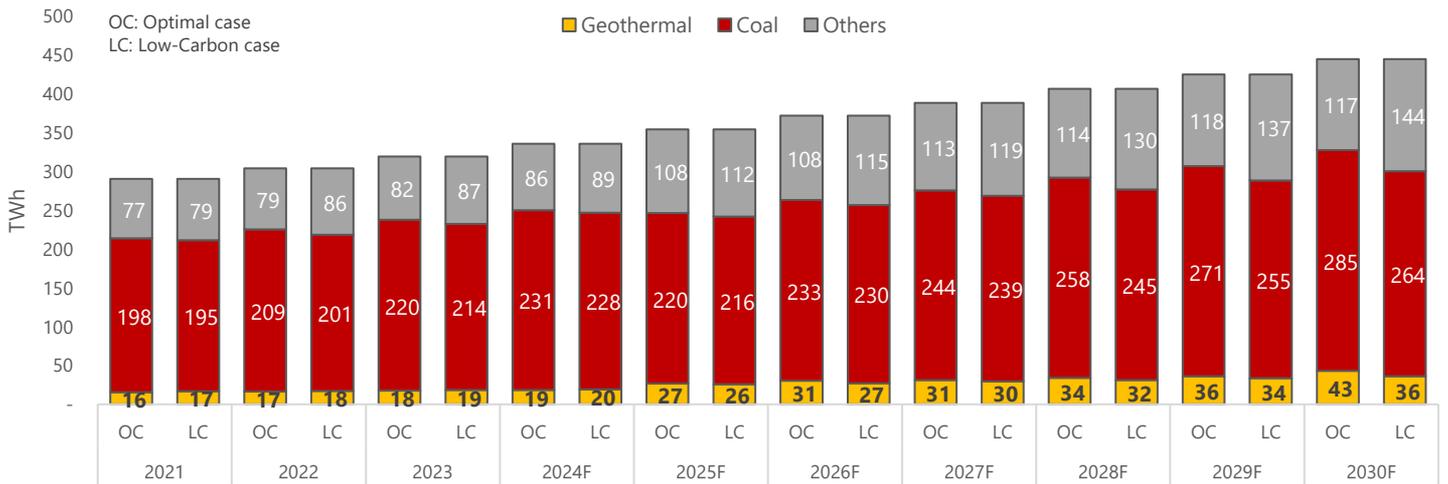
Exhibit 05. Indonesia’s CFPP Early Retirement Program should be one of the impetus for renewables to grow in the nation



Source : MoEMR, MNCS

The CFPP Early Retirement Program entails the gradual decommissioning of CFPPs and the prohibition of additional CFPP projects to be undertaken, limiting the pipeline’s scope to only CFPP projects that have already entered the construction phase and/or have secured a financial close. The nation’s CFPP generational capacity is expected to peak in 2030 before gradual decommissionings will cut the CFPP capacities, until a complete wipeout which is targeted in 2060 in the baseline projection. Till now the exercised CFPP retirement has reached a capacity of 16.8 GW, 80% of which is under PLN’s wing, and the remaining 20% operated by IPPs. Concurrently, the government has raised the renewables energy mix target to 34% by 2030 with more expected to come beyond that point to make up for the lost capacity and growing demand.

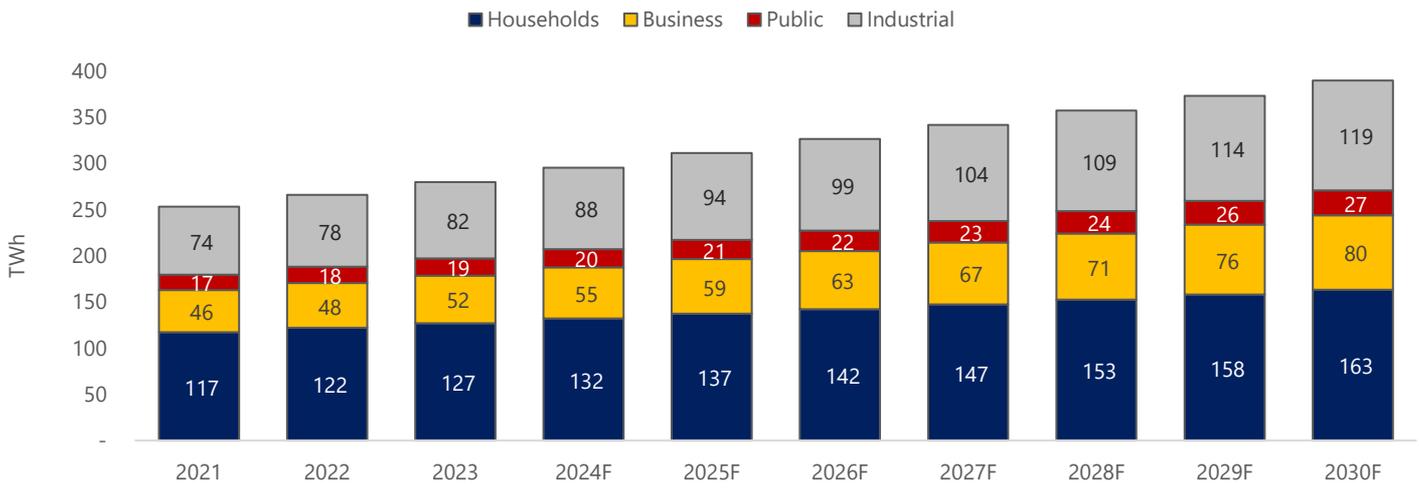
Exhibit 06. PLN’s power plant capacity growth projection in the next 7 years as planned in the recent RUPTL



Source : PLN, MNCS

PLN’s most recent RUPTL (Rencana Usaha Penyediaan Tenaga Listrik) of the 2021-2030 period has ramped up the renewables capacity target from the previous 2018-2029 RUPTL. In their projection, PLN applied two scenarios for the development, namely the optimal case scenario whereby geothermal capacity development runs optimally and the low-carbon case scenario where a more conservative estimate is used. In the optimal case, the geothermal electricity production is projected to grow at a CAGR of 11.8%, as opposed to the low-carbon’s moderate 8.9% growth. By 2030F, the optimal case dictates a geothermal electricity generation of 43 TWh or implies the domestic capacity (assuming operating at 100%) would have reached c. 4.9 MW (or grew 109% from the current capacity). The low-carbon estimate entails a more tuned-down 36 TWh electricity generation or implies a 4.2 MW nameplate capacity.

Exhibit 07. The demand side is also projected to catch up; government’s support will be required as oversupply remains to be the theme



Source : PLN, MNCS

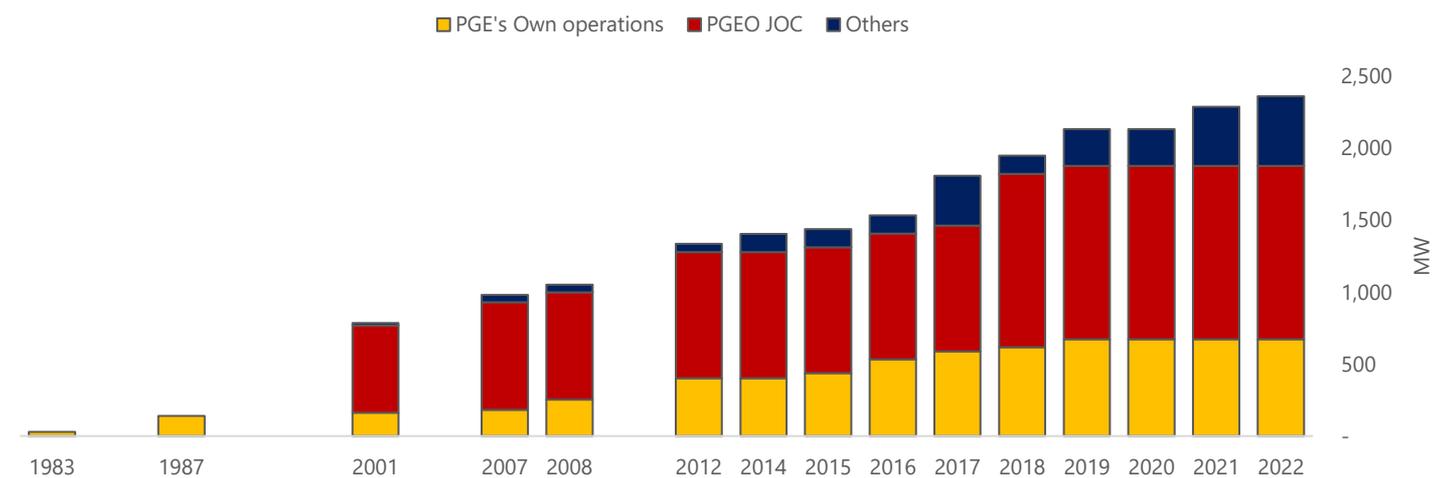
From the demand’s perspective, PLN estimated the electricity demand to proliferate at a CAGR of 4.9%, reaching 390 TWh in 2030F. The growth in demand will still be met by the supply side’s growth of equally 4.9% annually to reach 445 TWh, implying an oversupply by 12%, or by 8% in a optimistic scenario. We showcased the data to indicate that the resources and demand are readily available. However, this oversupply situation, if not met with accommodative regulatory mandates like the renewable energy bill that has yet find resolve in legislation, might potentially hamper the development progress and discourage investors from partaking in funding the projects.

Company in brief

Pertamina Geothermal Energy as the domestic geothermal proxy

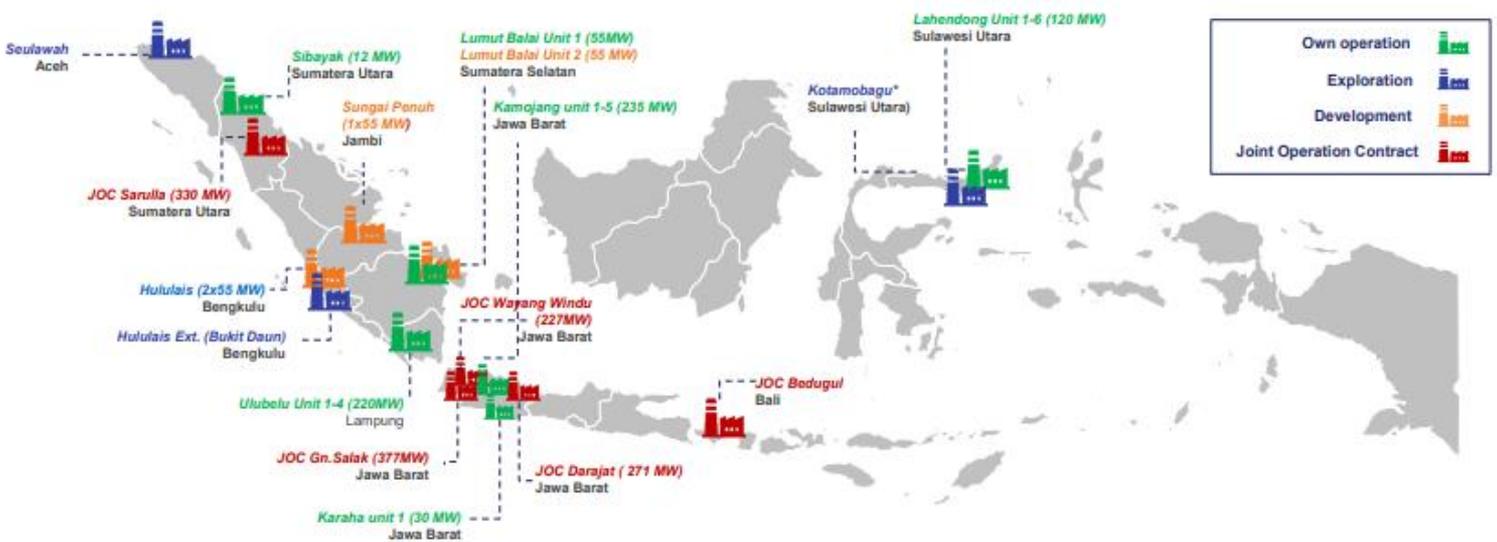
Given the industrial overview, Pertamina Geothermal Energy Tbk (PGEO) is one of the two players listed in the Indonesian Stock Exchange to capitalize on the geothermal industry's budding phase. PGEO has come a long way as a pioneer in the national geothermal scene, with its first breakthrough of steam sales back in 1983 to the nation's first 30 MW geothermal plant in Kamojang. Now, the company has 1,877 MW of total nameplate geothermal generative capacity to its name, 672 MW of which are directly under PGEO's wing in 6 working areas, whereas the remaining 1,205 MW constitutes the shared capacity from the established JV contracts in 5 working areas, whereas 3 additional working areas are under development. They are 100% under the ownership of their parent company, PT Pertamina (Persero), and accounts for c. 3% of their parent company's revenue.

Exhibit 08. Indonesia's geothermal nameplate capacity over the years, with PGEO to hold a substantial size direct and indirectly



Source : Company, MNCS

Exhibit 09. The company's operational working areas

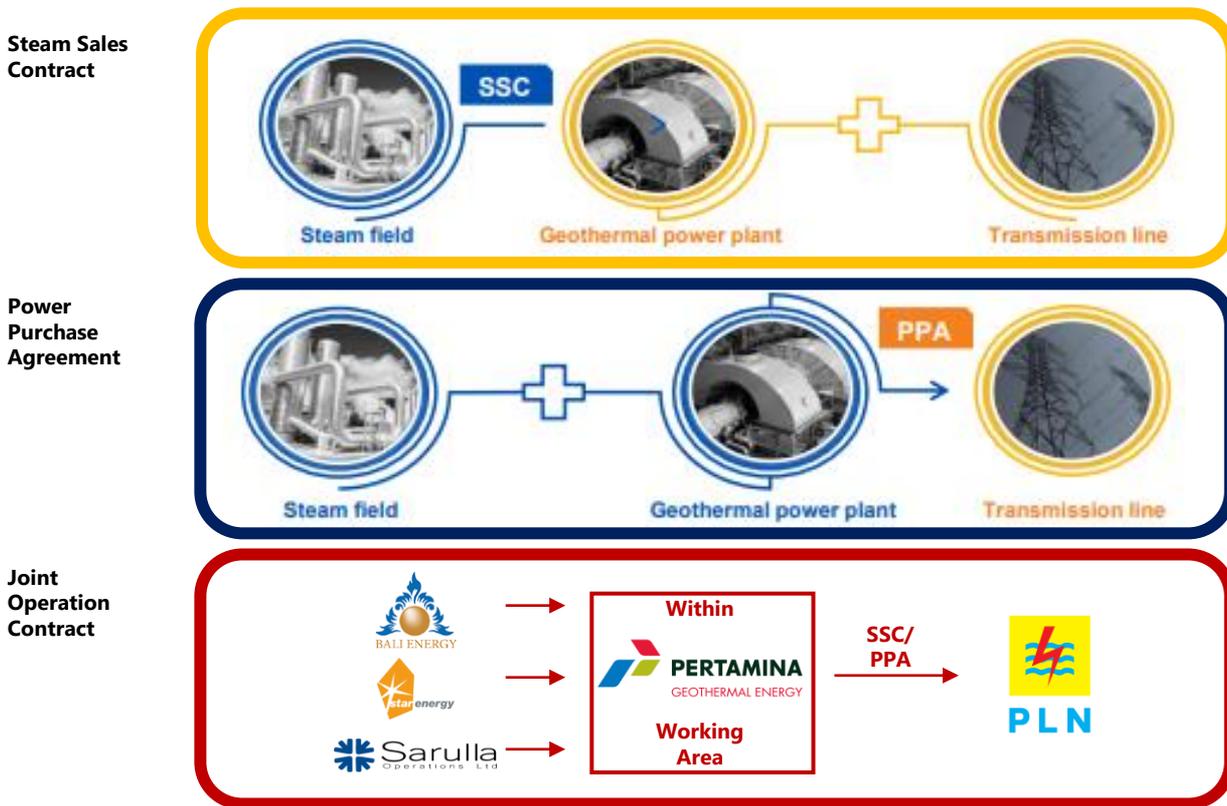


Source : Company, MNCS

Contract schemes

The company generates revenue through three key contractual schemes, steam sales contract, power purchase agreement and joint operation contract. Under the **steam sales contract**, PGEO, as the owner of the working area and steam resource, appoints an IPP to develop and operate the power generators, as well as offtake PGEO's steam at a predetermined rate, which is adjusted on an annual basis by c. 2%. Under the **power purchase agreement (PPA)**, PGEO owns and acts as the power generator operator with PLN as their electricity offtaker at a predetermined wattage, with the rates pegged to the movement of US inflation rates. Contracts established with PLN are binded with the take-or-pay mechanism, whereby PLN has to absorb the agreed upon wattage and under the condition where they are unable to do so, they would still be obliged to pay the full amount regardless. The last contract is in the form of a **Joint Operation Contract (JOC)**, whereby PGEO, as the owner of the working area, conspire with JOC contractors, who operates power plants and delivers steam/electricity to be offtaken by PLN. PGEO will receive production allowances at a fixed rate of c. 4% from the operating profits of each contractor.

Exhibit 10. PGEO's main contractual schemes



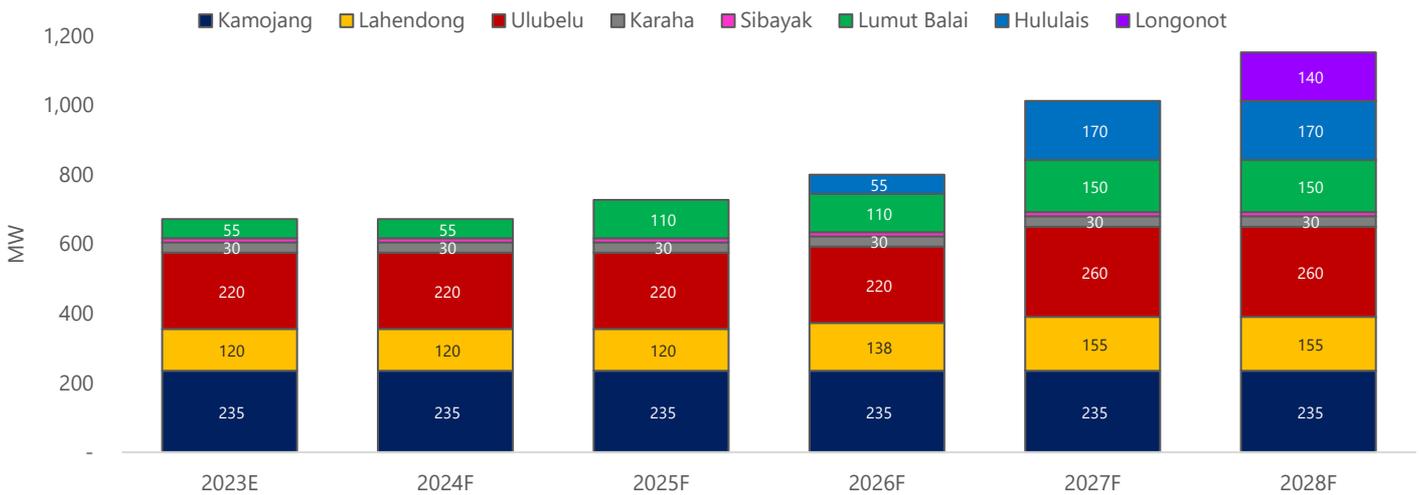
Source : Company, MNCS

Investment Thesis

Accommodative growth projects in the works

With the Indonesian government's ambition on bolstering the domestic renewables ecosystem and PGEO being an SOE, an uncontested access to government's support entails, hence PGEO would be greatly benefitted from this momentum. Expansionary pipelines within the domestic region comprises of development projects in their quick wins strategy that will yield a total of 340MW new self-operated capacity by 2027. Other development projects involves a JV agreement with Chevron (to hold 60% of ownership) in the Way Ratai powerplant development, with a longer timeframe of completion estimated to COD in 2031. The firm's ambition to widen their expansionary horizons have also brought them to set foot on the foreign soil of Kenya. As of 9M23 there have been two prospective pipelines the firm has established in Kenya, one that undertakes a 140 MW powerplant in Longonot with Africa Geothermal International No.1 Ltd (AGIL), with its COD planned in 2027, and another that has set in plan a 300MW power plant in Suswa with Geothermal Development Company (GDC).

Exhibit 11. PGEO's estimated self-operated geothermal plant capacity growth trend

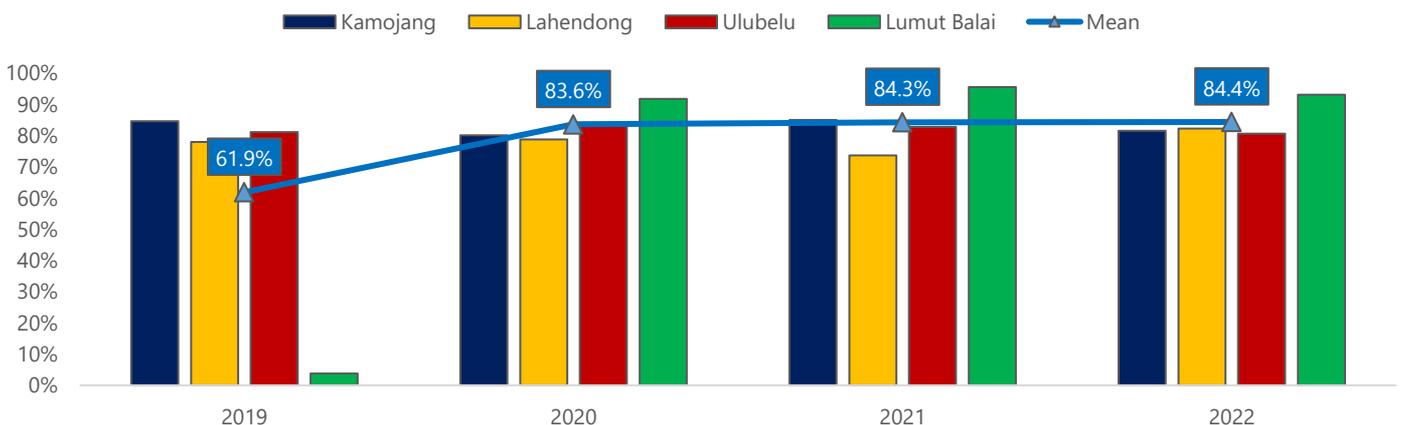


Source : Company, MNCS

Stable energy generation; therefore, a stable income

PGEO has a well-established track record in the geothermal scene, proven to be able to achieve a relatively stable and optimal capacity factors in its geothermal operations. This renders the firm to be able to maximize the materialization of their revenues. Throughout 2019 – 2022, they have achieved on average above c. 80% of capacity factor; Lumut Balai's full operability practically commenced in 2020 as they had just finished development in 2H19. In our view this is quite a commendable feat as their average is higher than that of USA's (69%), which allegedly have well established infrastructures, technologies and experience in place to perform better.

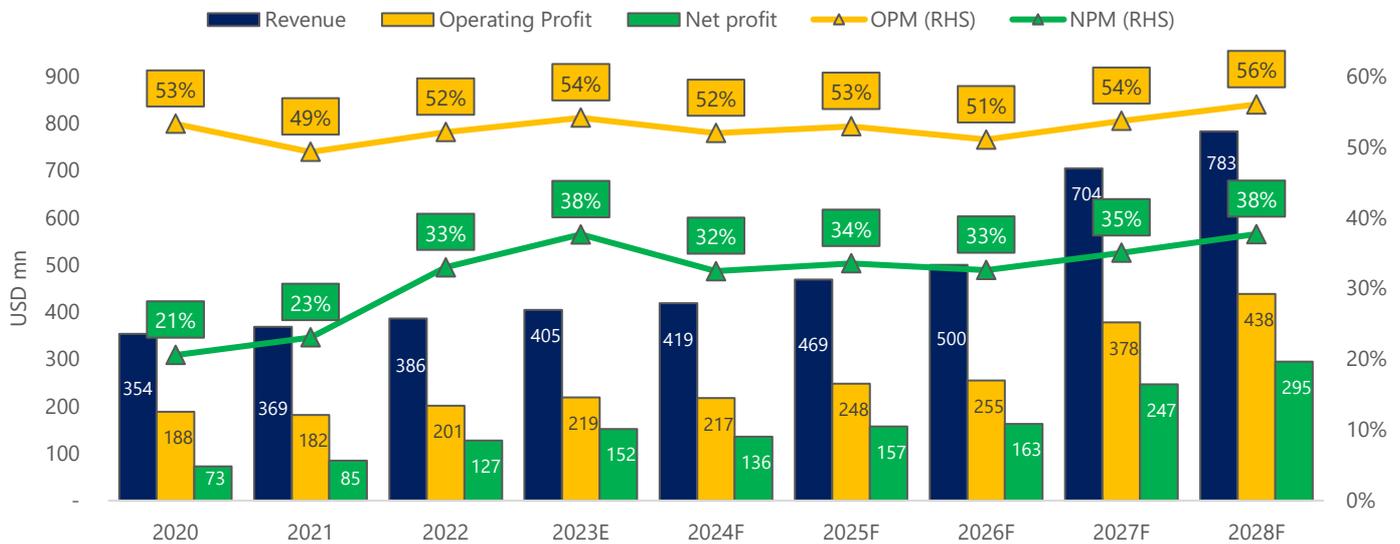
Exhibit 12. PGEO has outperformed USA's geothermal industry in terms of capacity factor optimization during the 2019 – 2022 period



Source : Company, MNCS

With stable income growth, driven by the growth in steam sales ASP, electricity sales ASP growth pegged to the US CPI trend and addition of geothermal plants, we project a growth in the firm's revenue by a CAGR of 11.5% during the 2022 – 2028F period. Accompanying this sizeable growth within the relatively short 5-years term will be the growth in the profitability margins, assuming the prudent cost and operational management is upheld. The OPM and NPM are both projected to grow at a CAGR of 3.1% and 3.7%, respectively in the same time period. That leaves PGEO with an impressive net profit CAGR of 15.6% within the same time frame.

Exhibit 13. Our projection of PGEO's profitability performance; bolstered mainly by development pipelines



Source : Company, MNCS

9M23 performance was a beat, deeming estimate revisions

PGEO performed exceptionally well in 9M23; their top line has improved 11.9% YoY to USD308.9mn. This was accompanied by a maintained cost efficiency, rendering only a mere 0.9% YoY uptick in COGS and hence an improved GPM of 59.1%. The OPM was higher at 69.9% due to the increase in finance income and foreign exchange gain by 2,519.4% YoY and 34.1% YoY, respectively. The EBIT jump (31.1% YoY) also hoisted the bottom line by 30.1% YoY to USD133.5mn, leaving the NPM at a staggering 43.2% (vs 38.8% in 9M22). We assume this to be a one-off for FY23E, and maintained our base estimate for the ensuing periods and hence an anticipated slight decline in FY24F.

Exhibit 14. PGEO's 9M23 bottom line had beat 95.3% of our base estimate

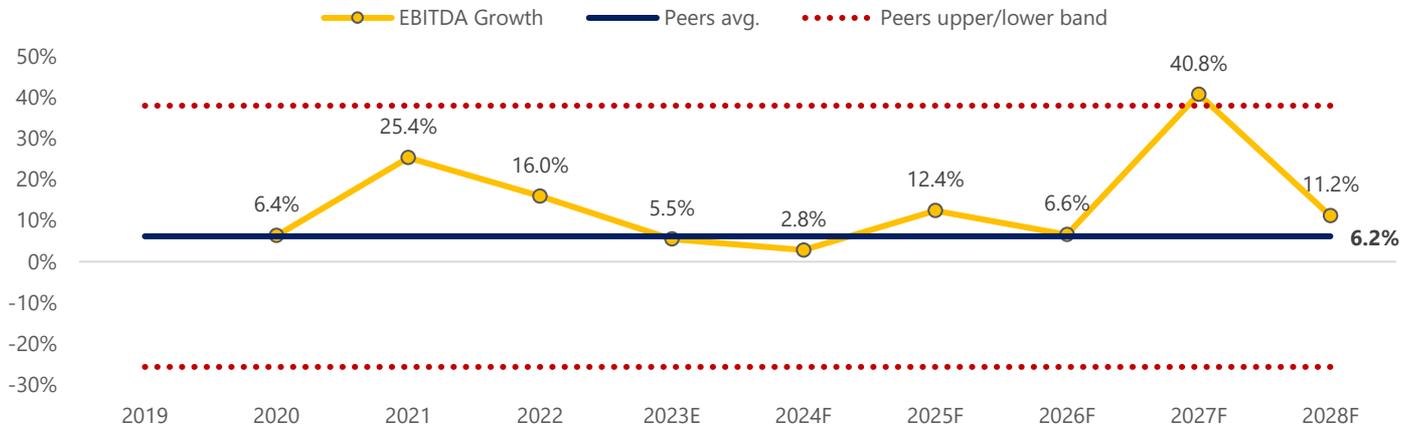
in Million USD	3Q23	2Q23	% QoQ	9M23	9M22	% YoY	FY23E	% FY23E
Revenue	102.2	104.1	1.5%	308.9	287.4	11.9%	404.6	76.3%
COGS	43.3	41.8	1.6%	126.2	122.4	0.9%		
Gross Profit	58.9	62.3	1.3%	182.7	165.0	20.7%	229.6	79.6%
Gross Margin	57.7%	59.9%		59.1%	57.4%			
EBIT	65.5	73.9	-3.5%	216.0	179.9	31.1%	223.9	96.5%
EBIT Margin	64.1%	71.0%		69.9%	62.6%			
Pre-Tax Profit	59.7	67.8	-3.3%	197.7	170.9	25.7%	213.5	92.6%
Net Profit	40.7	45.8	-2.5%	133.5	111.4	30.1%	140.1	95.3%
Net Margin	39.9%	44.0%		43.2%	38.8%			

Source : Company, MNCS

Financial Analysis

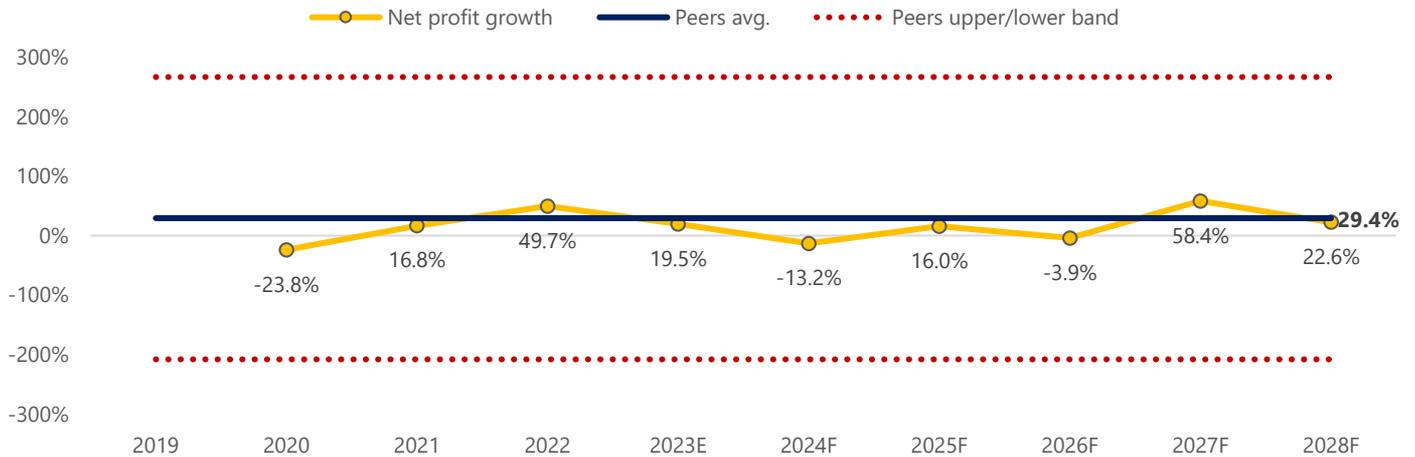
Compared to the established global geothermal players, PGEO has delivered sound profitability performance in respect to the EBITDA growth, net profit growth, and NPM. The global peers average was calculated using the 5-yr historical data leading up to 2022. PGEO's NPM has outperformed the global peer's average since our accessible dataset of 2019. The NPM in 2022 marks a strong turning point in profitability as the firm had been relieved of its impairment of fixed assets burdens. NPM in FY23Es also bodes well due to a boost in foreign exchange gains and finance income.

Exhibit 15. PGEO's EBITDA growth has performed relatively well compared to the historical peers average



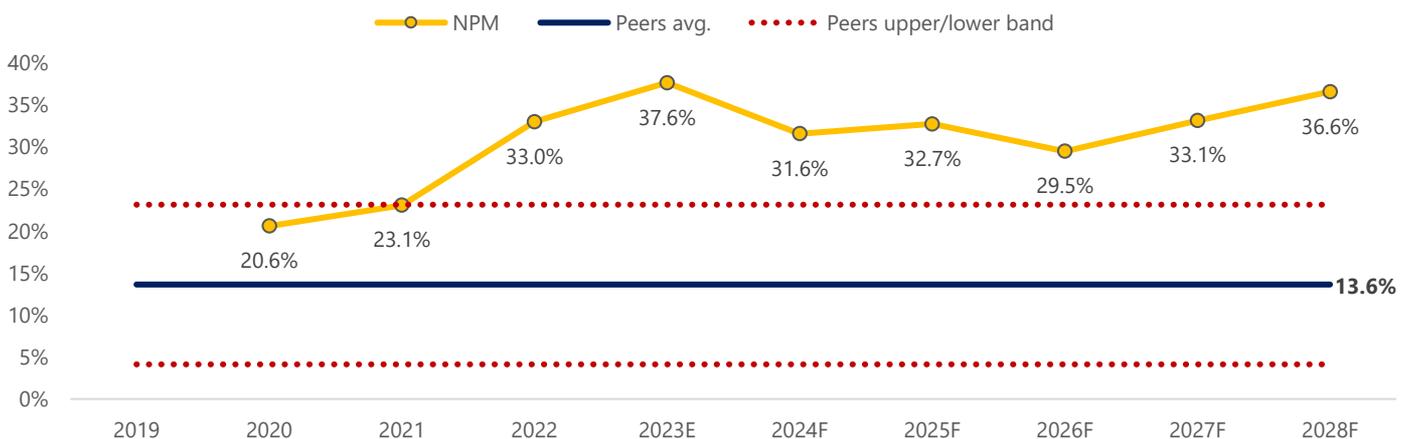
Source : Bloomberg, MNCS

Exhibit 16. Net profit growth is relatively stable compared to the peers' volatile range, incentivized by new plant comissionings



Source : Bloomberg, MNCS

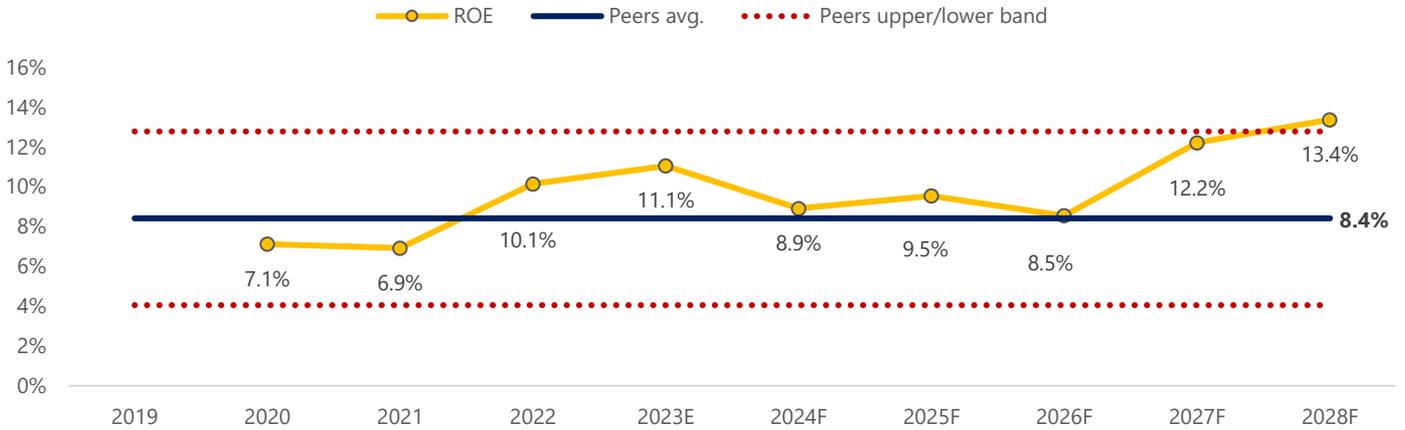
Exhibit 17. PGEO's NPM has performed above the peers' average historically, and still has potential to expand



Source : Bloomberg, MNCS

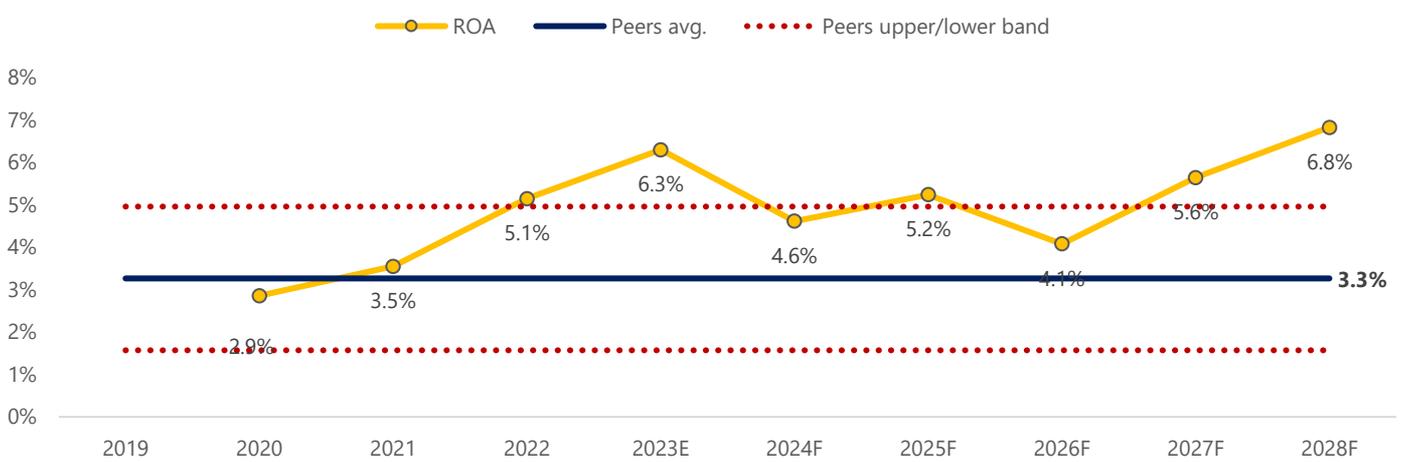
In terms of the firm’s prowess in generating value for the shareholders, capitalizing on its assets and the total invested capital, PGEO is at the top of the game globally. PGEO’s stark ROA outperformance against its peers would be accredited to not only the firm’s strong earnings, but the relatively low gearing (FY23E DER to be at 0.5x), even imminently projected to supercede the peers upper historical band by FY23E. The firm’s ROIC shows to have grown on a solid stable trend, further bolstered by development pipelines.

Exhibit 18. The firm’s ROE has surpassed the global average in 2022



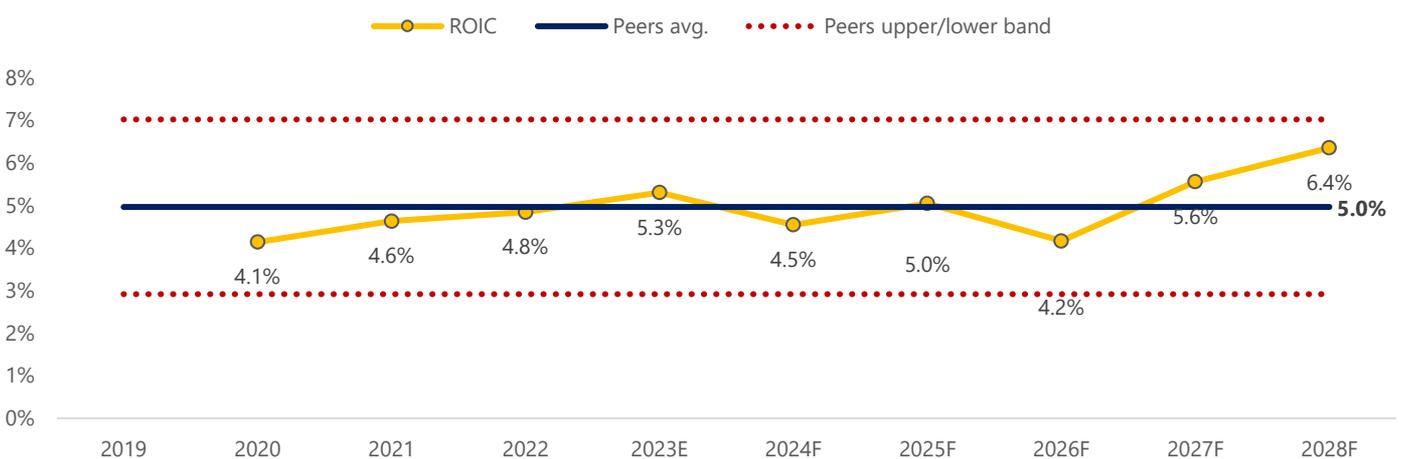
Source : Bloomberg, MNCS

Exhibit 19. ROA has peers’ average beat by far, credits to the relatively conservative gearing



Source : Bloomberg, MNCS

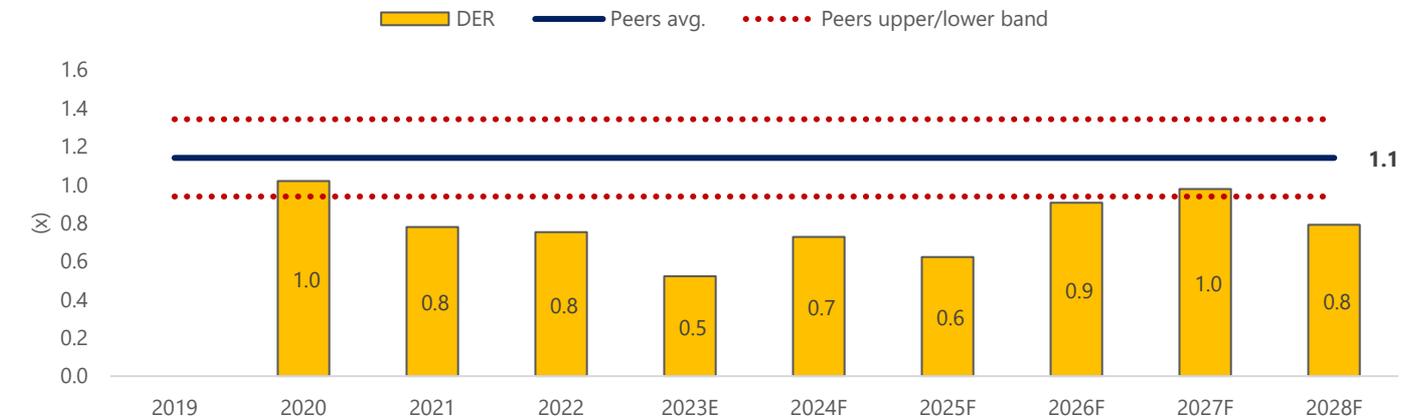
Exhibit 20. PGEO’s ROIC also posts steady growth into 2028F, set to outperform peers this year



Source : Bloomberg, MNCS

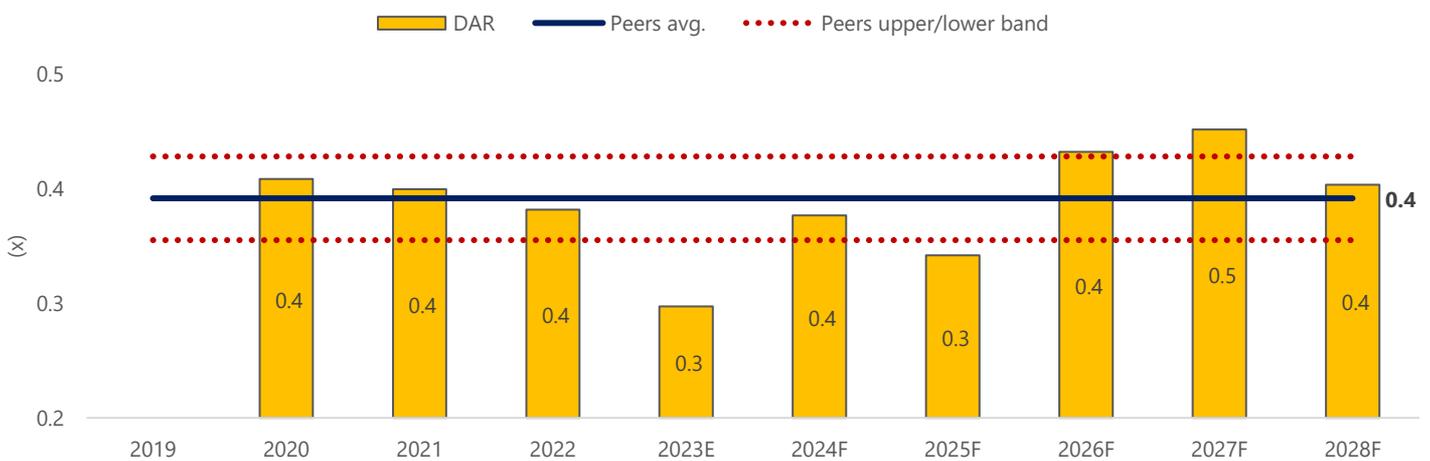
We expect the firm to inflate their gearing ratios in order to fund their pipeline capex, but once their development project commences COD, the firm can immediately recommence deleveraging and tidy up their balance sheet. Having said that, even approaching their peak capex cycle, PGEO will have a better solvability profile than its global peers on average. Their ICR from 2020 have been on average 10.6x, or 243% higher than its peers' 5-yr mean of 3.1x, and even during the gearing peak the ICR will remain above the peers' upper ICR SD band.

Exhibit 21. The DER of PGEO has been kept at prudent levels; ever only hovering at its peers' lower historical DER SD band



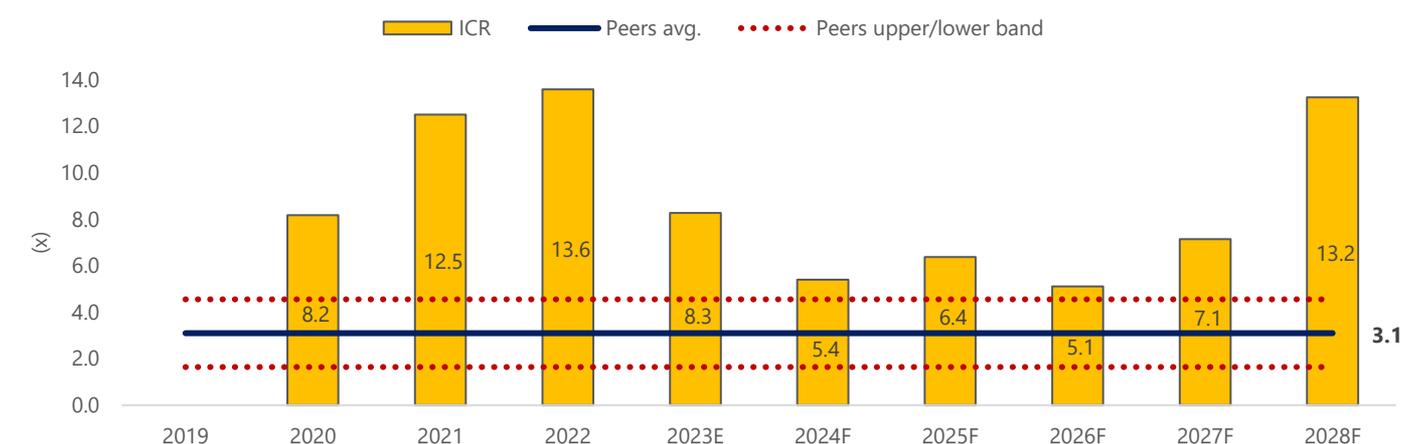
Source : Bloomberg, MNCS

Exhibit 22. DAR is expected to pick up in order to fund the asset creation in the form of more geothermal capacity



Source : Bloomberg, MNCS

Exhibit 23. The ICR is expected to dip during the rampant gearing and capex cycle to accomodate expansion pipelines, but should recover



Source : Bloomberg, MNCS

Valuation and Investment Thesis

In search of the appropriate beta assumption

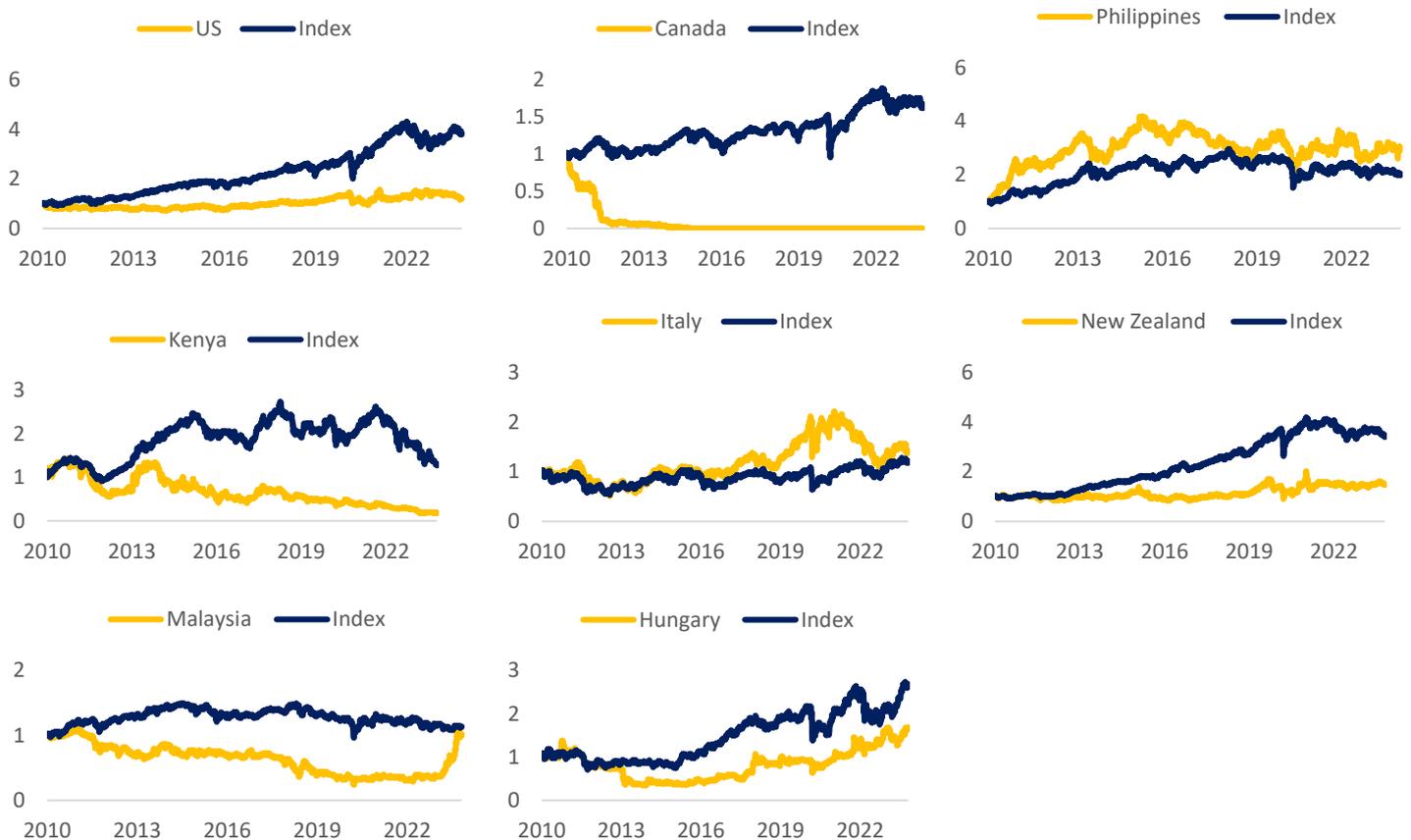
We compared several global companies with geothermal power generation as their only or main business model and gauged their returns with respect to the market index they are/have been listed on. The publicly listed geothermal companies hailed from the largest established industry, the US, the budding industry from Philippines, Kenya, Italy, and several other countries all the way to New Zealand. We decided to assume the blended beta of US and Philippines geothermal firms (0.73) to be used in our DCF valuation model for PGEO on the basis that the US's reflects the beta of an established geothermal industry, while the Philippines' reflects the beta of a rampantly growing industry whilst sharing a remotely similar growing EM market index. The geothermal players from US includes Exelon, Firstenergy, Clearway Energy, Ormat Technologies, and Calpine (delisted from stock exchange in 2018). On the other hand, companies from the Philippines include Aboitiz Power and First Gen Corporation.

Exhibit 24. Geothermal companies' beta average based on country

Country	Beta average
US	0.76
Canada	0.61
Philippines	0.69
Hungary	0.29
Italy	0.89
New Zealand	0.96
Kenya	0.43
Malaysia	0.80
Global average	0.75
US & Philippines Blended Beta	0.73

Source : Bloomberg, MNCS

Exhibit 25. The indexed geothermal player's share price trend in relation to the regional market index trend

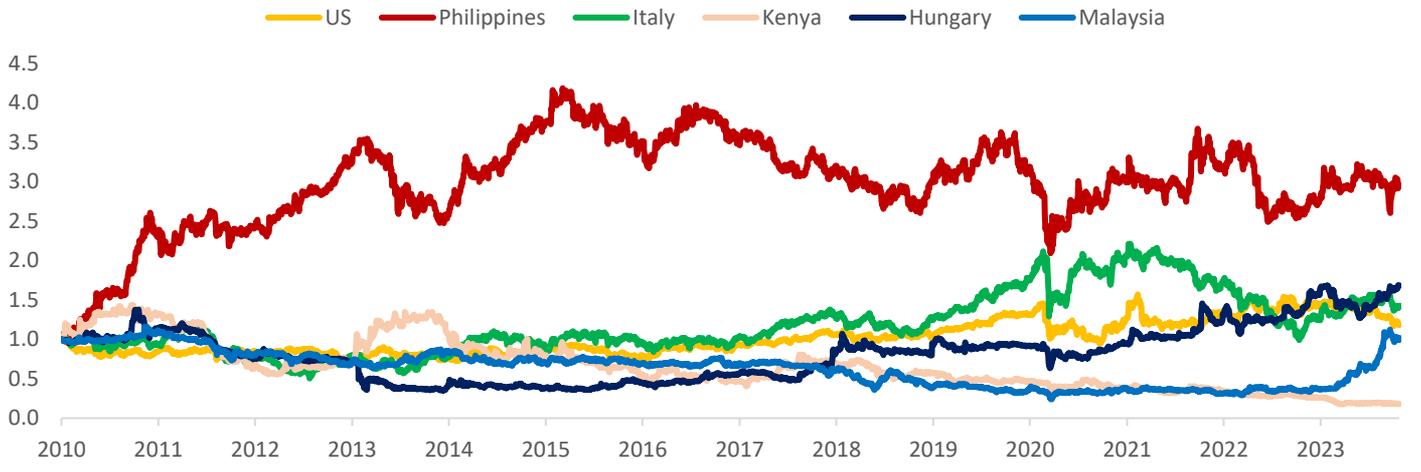


Source : Bloomberg, MNCS

Development holds the key to share price impetus

We do acknowledge that the geothermal industry, like any other utilities industry, is prone to share price stagnation over time. This is especially apparent in markets whereby the geothermal industry development have plateaued, like in the US, Italy and the likes. The Philippines' geothermal players share prices have enjoyed a more lively activity during the early 2010's; this was accompanied by significant growth in the nation's overall nameplate capacity addition, as has been shown earlier, and as development pace loosened, the share prices hovered at the last psychological fair value level.

Exhibit 26. Indexed global geothermal share prices over time; relatively stable on development plateauing



Source : Bloomberg, MNCS

Valuation

We used the DCF method to derive the firm's fair share value with the following assumptions: 1) terminal growth rate of 2.0%, 2) risk-free of 6.8%, 3) equity risk premium of 3.5% and 4) WACC of 6.5%. The firm's fair FY24F equity value amounted to USD4.89bn, or IDR1,830/share (w/ assumption of USD/IDR of 15,500), implying an FY23E/FY24F P/E of 32.1x/37.0x, PBV of 3.5x/3.3x, and EV/EBITDA of 17.2x/15.8x. Given the total geothermal capacity directly under PGEO's control stands at 672MW, the firm's EV/MW would be USD8.27mn/MW, which is actually at a 124% premium compared to its peers, but justifiably so as it is on a speedy mission towards growing its geothermal power capacity. We conducted a sensitivity analysis on the fair equity value based on different growth rate assumptions under several WACC scenarios. The growth rate assumptions heavily influences the TV given the stagnant share price upside once pipelines have been fulfilled, as well as the considerable risk that comes during the expansionary phase of exploration and drilling, as well the potential natural disasters.

Exhibit 27. Sensitivity analysis of growth rate and WACC towards target price

		Growth rate					
Base TP		1,731	3.00%	2.50%	2.00%	1.50%	1.00%
WACC	6.65%		2,315	1,975	1,708	1,493	1,316
	6.55%		2,407	2,048	1,767	1,542	1,357
	6.45%		2,505	2,123	1,828	1,592	1,399
	6.35%		2,608	2,203	1,892	1,644	1,443
	6.25%		2,718	2,288	1,959	1,699	1,488

Source : Bloomberg, MNCS

Exhibit 28. Global geothermal peers

No.	Peers	Country	Market Cap (USD mn)	EV (USD mn)	PE (x)		PBV (x)		EV/EBITDA (x)		ROE (%)	ROA (%)	EV/MW (USD mn/MW)
					2023	2024	2023	2024	2023	2024			
1	Enel Spa	Italy	68,830.1	154,481.2	12.3	9.5	1.8	1.9	5.8	6.1	5.8	0.8	2.9
2	Exelon	United States	39,443.8	81,903.8	17.7	16.5	1.5	1.5	11.8	10.6	7.3	1.9	2.6
3	Aboitiz Power	Philippines	4,714.1	8,279.2	7.5	8.7	1.6	1.4	10.6	9.0	17.4	6.1	8.3
4	Clearway Energy	United States	4,513.6	14,223.6	26.2	23.1	2.0	1.2	15.0	11.7	28.6	4.6	4.3
5	Ormat Technologies	United States	3,927.8	5,759.3	33.2	33.0	1.7	1.6	17.4	12.0	3.5	1.5	1.8
6	Contact Energy	New zealand	3,659.6	7,534.7	48.3	25.3	2.2	2.2	15.2	11.7	6.3	3.6	20.4
7	Ytl Power International	Malaysia	3,990.9	8,552.4	8.0	7.6	1.0	0.9	6.4	6.1	8.8	2.3	1.8
8	Banpu Power	Thailand	1,258.7	2,247.8	7.9	11.7	0.9	0.9	35.7	27.7	12.2	7.5	0.7
9	First Gen Corporation	Philippines	1,167.6	2,413.2	2.9	3.5	0.5	0.4	3.3	2.7	11.0	4.8	0.7
10	Polaris Renewable Energy	Canada	206.3	344.6	18.6	14.4	0.7	N/A	8.6	5.6	0.9	0.5	5.3
11	Kenya Electricity Generating	Kenya	104.0	629.1	N/A	N/A	0.1	N/A	N/A	N/A	1.9	1.0	0.3
12	Pannergy	Hungary	73.5	101.7	12.1	N/A	2.0	N/A	8.7	N/A	12.8	4.8	1.1
13	Repower Energy Development	Philippines	79.7	113.0	N/A	N/A	N/A	N/A	N/A	N/A	19.1	4.3	0.1
14	Transgex Sa Oradea	Romania	10.2	15.8	N/A	N/A	1.4	N/A	12.2	N/A	N/A	N/A	1.6
	Mean		9,427.1	20,471.4	17.7	15.3	1.3	1.3	13.2	11.2	10.4	3.4	3.7
	Median		2,459.2	4,086.3	12.3	13.0	1.5	1.4	11.2	10.6	8.8	3.6	1.8

Source : Bloomberg, MNCS

Exhibit 29. Financial projections

Income Statement						Balance Sheet					
in USD mn	FY20	FY21	FY22	FY23E	FY24F	in USD mn	FY20	FY21	FY22	FY23E	FY24F
Revenue	354.0	368.8	386.1	404.6	418.6	Cash & C. Equivalents	154.9	125.3	262.3	143.9	407.1
COGS	(164.2)	(182.3)	(173.2)	(173.6)	(188.6)	Trade Receivables	138.4	124.6	123.2	141.4	140.4
Gross Profit	189.8	186.5	212.9	231.1	230.0	Inventory	14.6	16.5	20.1	17.1	19.2
G&A Expenses	(1.3)	(4.7)	(11.8)	(12.1)	(12.6)	Other Current Assets	11.9	13.4	27.7	28.8	29.6
Op. Profit	188.5	181.8	201.1	218.9	217.4	Total Current Assets	319.7	279.8	433.3	331.1	596.2
Interest income	1.1	0.8	1.2	16.7	3.2	Fixed Assets - net	2,078.0	1,957.3	1,901.7	1,941.4	2,122.0
Finance Income (Expense)	(23.1)	(14.6)	(14.8)	(26.5)	(40.4)	Other Non-Current Assets	153.6	160.4	140.1	145.5	145.6
Other Income (Expense)	(55.8)	(38.5)	7.3	22.9	21.3	Total Non-Current Assets	2,231.6	2,117.7	2,041.8	2,086.9	2,267.6
PBT	110.7	129.5	194.8	232.0	201.5	TOTAL ASSETS	2,551.4	2,397.5	2,475.1	2,418.0	2,863.8
Tax Income (Expense)	(37.9)	(44.5)	(67.4)	(79.8)	(69.4)	Trade Payables	68.6	72.6	65.6	69.1	73.9
Minority Interest	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	ST Debt	228.8	18.4	617.4	16.1	14.1
Net Income	72.9	85.1	127.3	152.2	132.1	Other Current Liabilities	377.2	108.9	174.8	223.9	199.3
EPS (USD)	0.0	0.0	0.0	0.0	0.0	Total Current Liabilities	674.5	199.9	857.8	309.1	287.3
EPS (IDR)	26.6	31.0	46.4	55.5	48.2	LT Debt	814.1	940.2	327.9	703.0	1,065.0
						Other LT Liabilities	39.9	28.4	34.0	28.5	28.5
						Total LT Liabilities	854.0	968.6	361.8	731.6	1,093.5
						Total Equity	1,022.8	1,229.1	1,255.5	1,377.3	1,483.0
						TOTAL LIABILITY & EQUITY	2,551.4	2,397.5	2,475.1	2,418.0	2,863.8
Cash Flow						Ratios					
in USD mn	FY20	FY21	FY22	FY23E	FY24F	FY20	FY21	FY22	FY23E	FY24F	
Net Income	72.9	85.1	127.3	152.2	132.1	Revenue Growth (%)	-46.9%	4.2%	4.7%	4.8%	3.5%
Depreciation	103.5	107.7	104.9	103.9	114.5	Operating Profit Growth (%)	8.0%	-3.6%	10.6%	8.9%	-0.7%
Changes in WC	(34.2)	16.0	(9.3)	(11.6)	3.6	Net Profit Growth (%)	-23.8%	16.8%	49.7%	19.5%	-13.2%
Others	84.1	(1,127.1)	52.2	48.0	(25.4)	Current Ratio (%)	0.5	1.4	0.5	1.1	2.1
Operating CF	226.3	(918.3)	275.1	292.6	224.9	Quick Ratio (%)	0.5	1.3	0.5	1.0	2.0
Capex	(61.1)	(34.2)	(49.3)	(143.6)	(295.1)	Receivable Days (x)	142.8	123.3	116.5	127.5	122.4
Others	(21.1)	(6.8)	20.3	(5.3)	(0.1)	Inventory Days (x)	32.4	33.0	42.3	35.9	37.1
Investing CF	(82.3)	(40.9)	(29.0)	(148.9)	(295.2)	Payable Days (x)	152.4	145.3	138.1	145.3	142.9
Dividend Paid	-	-	(100.0)	(30.4)	(26.4)	DER (x)	1.0	0.8	0.8	0.5	0.7
Net Change in Debt	(137.1)	(84.2)	(13.3)	(226.2)	359.9	DAR (x)	0.4	0.4	0.4	0.4	0.3
Equity Fund Raised	-	1,019.8	-	-	-	Gross Profit Margin (%)	53.6%	50.6%	55.1%	57.1%	54.9%
Others	22.0	(5.8)	4.2	(5.4)	-	Operating Profit Margin (%)	53.2%	49.3%	52.1%	54.1%	51.9%
Financing CF	(115.0)	929.7	(109.2)	(262.0)	333.5	EBITDA (IDR Bn)	292.0	289.5	305.9	322.8	331.9
Cash at Beginning	125.9	154.9	125.3	262.3	143.9	EBITDA Margin (%)	82.5%	78.5%	79.2%	79.8%	79.3%
Cash at Ending	154.9	125.3	262.3	143.9	407.1	Net Income Margin (%)	20.6%	23.1%	33.0%	37.6%	31.6%
						BVPS (IDR)	382.9	460.2	470.1	515.7	555.2

Sources : Company, MNCS Research

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- **OVERWEIGHT** : Stock's total return is estimated to be above the average total return of our industry coverage universe over next 6-12 months
- **NEUTRAL** : Stock's total return is estimated to be in line with the average total return of our industry coverage universe over next 6-12 months
- **UNDERWEIGHT** : Stock's total return is estimated to be below the average total return of our industry coverage universe over next 6-12 months

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PT MNC SEKURITAS

MNC Financial Center Lt. 14 – 16

Jl. Kebon Sirih No. 21 - 27, Jakarta Pusat 10340

Telp : (021) 2980 3111

Fax : (021) 3983 6899

Call Center : 1500 899

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