ZE PAK

Reuters: ZEP.WA Bloomberg: ZEP PW

CEE Equity Research

Independent Utility, Poland

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Nuclear Shake-Up, Renewables' Build-Up

Recommendation Buy, TP upped to PLN25.1

Nuclear theme brought up by company's key shareholder will likely result in ZE PAK's corporate shake-up, potentially triggering blink-of-an-eye transformation from lignite towards renewables and nuclear. Not only are the company's lignite generation assets to be transferred to SPV, implying cancellation of ZE PAK's CO2 exposure (offering easy-wins at EBITDA and ESG), but also turning ZE PAK's liability into highly desired asset, leaving ZE PAK with a 50% stake in promising SMR nuclear venture (PLN7/sh). Moreover, company's renewable segment capacity build-up has accelerated in recent weeks (additional 218MW in potential and acquired projects), resulting in ZEP's 2023E renewable capacity at +400MW (32% of official 2030 strategy). We increased percentage of official strategy delivery (75% from 50% previously), which along with very supportive electricity price developments offered additional PLN8 per ZE PAK share. We are fully aware of number of risks ahead (nuclear project economics, carve-out details, NABE electricity pricing), but the hastiness and scale of changes likely taking place, warrant our revised TP at PLN25.1 and maintained Buy recommendation.

Shake-Up at Conventional. In late Aug2021 ZE PAK's key shareholder agreed with another wealthy Polish entrepreneur on cooperation in nuclear energy development. They plan to build 1.8GW in SMRs (Hitachi's 300MW units) at Patnow site, with six units' potentially turning operational in 2030-35E. Such venture turns ZE PAK's lignite-fired Patnow (access to water, central Poland location, and grid connection) from yesterday's loss-making liability into most-wanted asset, we believe. ZE PAK's lignite units would be transferred to SPV, which should sterilize lignite/CO2's impact on ZEP.

Build-Up at Renewables. This year company is finalizing 50MW biomass and 70MW PV projects. Recently, we saw positive developments at both PV (200MW project unlocked) and on-shore (18MW acquisition), which would increase ZEP's strategy delivery to 50% in PV and 32% in total capacity planned for 2030. In light of these (and waiting for much more on post-mining area held), we increase assumed company's strategy delivery to 75% vs 50% previously. Additionally, as rallying CO2 price should make Polish electricity very expensive for decades, higher electricity prices realized on future projects substantially expand future project's NPV per MW.

Risks vs Upsides. Lack of final agreement between SMR-focused entrepreneurs, detailed conditions of ZEP lignite assets' carve-out or future economics of SMR all pose substantial risks to ongoing ZEP's transformation and its valuation impact. Polish on-shore distance restrictions upheld would trim ZE PAK's wind capacity. Pricing policy of the future NABE represents a risk, as hypothetical high public support could imply low electricity prices, negative for ZE PAK's projects' NPV. Corporate actions (equity issues) cannot be excluded, we believe.

Forecasts, Valuation, Recommendation. Likely operating model's shake-up (lignite assets' carve-out to SPV) should neutralize lignite impact on EBITDA as of 2022E, we believe. We see CO2 pressure to halve 2021E EBITDA, but we assume CO2 will become irrelevant to ZE PAK's profits as of 2022E. At core business (renewables), increased delivery of official 2030 strategy to 75% from 50% supports valuation by PLN4/sh, and improving projects' economics (due to high electricity price) adds another PLN4/sh. Additionally, we value nuclear project contribution at PLN7/sh, totaling new SoTP valuation at PLN21.8, tripling vs previous approach. As new pure-renewable approach to ZE PAK's comparative value offers 80% upside to the latter, our blended TP grows 136% to PLN25.1. Despite recent share price rally it still offers double-digit upside, hence we maintain Buy for the stock.

ZE PAK: Financial summary

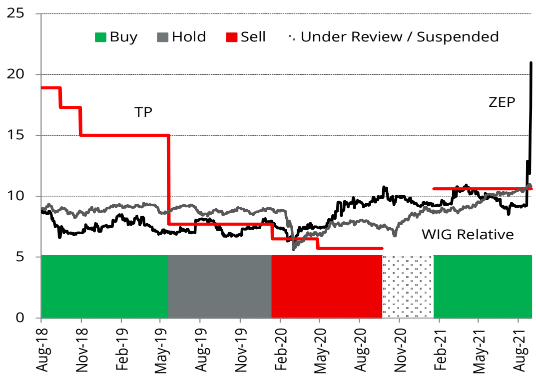
PLNmn	2018	2019	2020	2021E	2022E	2023E
Sales	2,305	2,878	2,207	2,476	2,681	2,588
EBITDA	90	394	148	86	116	201
EBIT	-477	-424	-291	-39	41	75
Net profit	-460	-442	-227	-1	-9	-22
P/E (x)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EV/EBITDA (x)	11.0	1.1	2.5	18.6	20.9	13.5
DY	12.1%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Company data, Santander Brokerage Poland estimates

Recommendation	Buy
Price (PLN, 09 Sept 2021)	18.0
Target price (PLN, 12M)	25.1
Market cap. (PLNmn)	914
Free float (%)	34
Number of shares (mn)	50.8

What has changed

- TP upped to PLN25.1, recommendation Buy maintained
- New-born SMR concept is a shake-up to ZE PAK, simultaneously erasing negative lignite impact and bringing in nuclear upside
- We assume lignite generation is carved out to SPV (no EBITDA impact), and mining will remain in ZEP with costs covered by SPV (EBITDA equaling capex)
- Renewable segment expands quickly, with two investments finalized and two expansions announced, to some +400MW capacity and PLN168mn EBITDA in late 2023E
- High CO2 prices support new renewable projects' economics
- Nuclear project adds PLN7/sh, delivery of official renewable capacity guidance upped to 75% adds PLN4/sh, better projects' economics add PLN4/sh
- CO2 burden halves our 2021E forecasts, minor cuts to all-green ZEP forecasts in 2022-23E
- Key risks include: entrepreneurs' lack of consent on nuclear project, SME's economics and regulations, lignite carve-out details, NABE electricity pricing, equity issues



The chart measures performance against the WIG index.

Main shareholders	% of votes
Zygmunt Solorz	66.0
PZU Pension Fund	7.6
NN Pension Fund	5.0

Source: Company

Company description

ZE PAK is the largest non-Treasury controlled conventional electricity producer in Poland. Its lignite assets are to be transferred to SMR project-focused SPV. In renewables, company is planning to build 1.3GW capacity by 2030 (biomass, PV, on-shore wind). The company also invests into hydrogen units.

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SoTP valuation drivers

Fig. 1. ZE PAK: SoTP valuation foundations

Segment	Valuation PLNmn	Valuation PLN per share	Rationale
Conventional Generation *	0	0.0	Segment transferred to SPV, losses until 2030 to be covered with assumed positive value of Patnow site
Lignite Mining *	0	0.0	Assumed neutral at FCF until 2030, financed by SPV
Nuclear alternative	354	7.0	1.8GW at Patnow site, capex EUR6bn, opex EUR20/MWh, flat ee price PLN350/MWh, ZE PAK's stake diluted to 5%; adjusted for 15% likelihood of failure (implying neg. PLN1bn NPV)
Trading	21	0.4	NPV of FCFs
On-shore	383	7.5	Target capacity 323MW, NPV at PLN0.7mn/MW for early projects and PLN1.7mn/MW for late projects
PV	413	8.1	Target capacity 465MW, NPV at PLN0.4mn/MW for early projects and PLN0.5mn/MW for late projects
Biomass	288	5.7	150MW target capacity, NPV of FCFs
Net Debt	-350	-6.9	
Total	**1,109**	**21.8**	

Source: Santander Brokerage Poland estimates

Abovementioned Figure presents drivers of our SoTP valuation approach. For more details and for sensitivity analysis, please see pages 8-11 of this report.

Key Stories: (1) Nuclear sterilizes Lignite

[+] ZE PAK swaps lignite for nuclear, company's pollution factor at nil in several months?

[published as a flash note on 31 August, 2021]

Today company informed that it signed agreement on cooperation in nuclear energy development with MS Innovation Impulse. Agreement has been signed in presence of Argumenol Investment and Synthos Green Energy.

- Parties intend to initiate cooperation via creation of SPV focused on construction of nuclear Small Modular Reactors at Patnow site. ZE PAK's lignite-fired generation assets in Patnow are to be sold to SPV or treated as in kind contribution. Later onwards, new SPV would continue electricity production based on lignite till its termination in 2030, in the meantime building SMR unit there;

- ZE PAK and MS Innovation will jointly finance new SPV on every stage of its activity;
- Synthos Green Energy (SGE) has committed to provide SMR technology to new SPV. Earlier SGE signed agreement on SMR technology with GE Hitachi Nuclear Energy Americas, including SGE's exclusivity to apply Hitachi's nuclear technology in Poland;
- Parties will start working on final draft of agreement, no deadline was presented. Final agreement depends i.e. on regulatory approvals.

Comment: Strong Positive. The Polish first energy transformation takes real shape. Carve-out of ZE PAK's lignite assets to new SPV represents foundation of above-mentioned agreement. Moreover, two parties suggested that SPV will be co-financed at every stage of new entity, which includes 1) cooperation (and capex) on new SMRs and 2) co-financing of current lignite operations at Patnow site.

Patnow site has got access to water, it also enjoys almost 2GW grid connection, it is located in the centre of Poland, and environmental permitting process might be potentially incomparably easier to any nuclear green-field. In our view, **all these turn ZE PAK's generation site from liability into an asset.**

All in all, we believe it may take months to sign the final agreement, but once it is signed, **all lignite assets of ZE PAK would be transferred to SPV, turning ZE PAK into pure renewable player** (assets including two running biomass units 50MW each, 70MW in running PV project, 200MW PV project nearing ready-for-construction phase and 17.5MW ready-for-construction on-shore wind project).

In 2023 ZE PAK should have running 100MW in biomass, 300MW in PV (including likely Brudzew extension) and 18MW in on-shore (these are certain projects, more acquisitions and greenfield projects seem natural), totalling **418MW in renewable capacity, producing potentially 1.0TWh of renewable electricity and delivering potentially PLN170mn in pure-renewable EBITDA**. This renewable energy may easily fuel green hydrogen production, another company's ongoing project.

First SMR operational in 2030, total capex for 1.8GW at EUR4.8bn – SPV co-founders

[published in Santander's Daily on 07 September, 2021]

Key takeaways from joint press interview (Parkiet daily) of Zygmunt Solorz-Zak (ZE PAK) and Michal Solowow (Synthos), likely co-founders of SMR-focused SPV:

- Patnow represents prime location, there are plans to build up to six 300MW reactors;
- Canadian project based on Hitachi's 300MW units assumes start of construction in 2025. Polish SPV may be a bit delayed to the Canadian one, but the first Polish SMR in Patnow unit may be operational in 2030, and five next units may be built every year;

- Mr. Solowow estimates total capex related to six 300MW SMRs at EUR4.8bn. following some EUR1.1bn to be spent on the first unit, serial production and scale effects should result in capex per remaining five units falling to EUR0.7-0.8bn;
- Mr. Solowow still intends to continue his cooperation on SMRs with PKN Orlen, he sees total capacity of SMRs in Poland at 10GW.

Comment: It's too early to judge on final capex on six 300MW SMRs, but total cost at EUR4.8bn (vs minimum EUR6.3bn for large nuclear reactors) would grant very strong competitive cost advantage to SMR project. Total capex as low as that would represent very strong driver to SMRs EBITDAs, FCFs and implied valuation, we believe.

Moreover, if six units were to be built in Patnow in years 2030-35, high financing requirement would come true much sooner than we originally anticipated, with almost four units built at the same time. Such assumption would imply much higher early capex, however if capex guidance of Mr Solowow is delivered (as we highlighted above), ZE PAK's SPV could enjoy exceptionally high IRR, we believe.

IP3 becomes company's advisor in nuclear project

[published in Santander's Daily on 07 September, 2021]

Company informed that IP3 become key advisor of ZE PAK in the field of nuclear technology implementation in Poland. The cooperation is to focus on granting all necessary approvals and consents, both from Poland and from the US. The same communique says that Georgette Mosbacher, the former US ambassador in Poland, has joined IP3's management board.

Comment: We have no doubt that lobbying is absolutely necessary in such delicate matter like nuclear reactors' construction. It will certainly come at a cost (expensed by SPV, we assume), though this announcement confirms key shareholder of ZE PAK is thinking seriously about this venture.

Key Stories: (2) Renewable capacity build-up

[+] Permit for 180-200MW PV project, essential step towards zero-pollution future

[published as a flash note on 24 August, 2021]

Yesterday Przykona municipality approved local spatial plan, allowing for construction of 180-200MW PV project on area belonging to ZE PAK. Company informed that it is planning to build this PV project in special-purpose fully-controlled entity. ZE PAK expects construction of this project would take 15 months once all approvals are completed, company estimates project's capex at PLN500mn.

Comment: Strong Positive. Long-awaited large-scale photovoltaic project seem turning real, representing substantial booster to ZE PAK's renewable re-profiling. Valuation-wise, PLN500mn capex implies EUR0.55mn/MW, a notch above average and potentially higher-than-expected due to greenflation. Still, we assume this project will produce some 180-200GWh renewable electricity per annum, delivering some PLN74mn EBITDA p.a., and **we see new project's valuation impact at PLN180-200mn.**

Summarizing, in 2023 ZE PAK will have running 100MW in biomass, 300MW in PV (including Brudzew extension) and 18MW in on-shore (these are certain projects, more acquisitions and greenfield projects seem natural), totaling 418MW in renewable capacity, producing 1TWh of renewable electricity and potentially delivering PLN170mn in pure-renewable EBITDA. This renewable energy may easily fuel green hydrogen production, another company's ongoing project, further supporting company's EBITDA and coming in very supportive to its new renewable-hydro (-nuclear?) profile.

Guidance delivery. So far ZE PAK has been delivering on its strategic promises, in two years guaranteeing 50% of 2030 biomass guidance (200MW), and 50% of 2030 PV guidance (600MW), taking also first steps in on-shore wind and hydrogen.

Acquisition target? We are quite certain that company's key shareholder would be unwilling to dispose of ZE PAK's long-accumulated renewable assets, thus we admit this calculation is purely hypothetical. If ZE PAK was an acquisition target, please keep in mind that in mid-June 2021 Spanish SolarPack was acquired at third year's EV/EBITDA ratio of 10.9x. Should we apply this ratio to ZE PAK, **its renewable segment priced today could be worth some PLN0.9-1.0bn, we believe.**

NABE and SMR – unexpected upsides? Several days ago ZE PAK suggested it might be interested in Small Modular Reactors (hypothetically kicking off in late 2020s or early 2030s), and we believe this idea of scalable pollution-free generation unit, with all grid connections in place, could be supportive of ZE PAK valuation. Moreover, yesterday ZE PAK become a party in NABE-related social agreement, and while it might not imply any asset carve-out upside, refinancing of some personnel costs could represent company's valuation booster as well.

First SMR operational in 2030, total capex for 1.8GW at EUR4.8bn – SPV co-founders

[published as a flash note on 19 August, 2021]

Yesterday company informed it acquired 17.5MW on-shore project adjacent to ZE PAK's Patnow generation units. Total cost of project, including capex and acquisition cost, settles at PLN150mn, project has got all necessary administrative and grid connection approvals. Windfarm is to start producing electricity in 3Q2023.

ZE PAK claims this acquisition marks next step in delivery of company's renewable-oriented strategy. Acc. to ZE PAK, favourable wind conditions should result in project's annual electricity production at 60GWh.

Comment: Positive. Acquisition seems a bit pricey, implying capex per MW at EUR1.9mn vs market average at EUR1.5mn/MW, but this amount includes costs of transaction and likely premium paid. Official guidance for annual production at 60GWh would imply very exceptionally high load factor at 39%, which would justify premium paid in full.

Acquired project won Polish renewable auction in 2019, with reference price at PLN214/MWh and total 0.55TWh electricity contracted for 15 years. While wind projects never secure 100% electricity through auction, ZE PAK's new wind project share of auction-secured production settles at only 61%. This is positive, as uncontracted electricity will be sold at tomorrow's market prices, likely substantially higher than auction support. All in all, new project's year-one EBITDA may settle at +PLN9mn, expanding to some PLN16mn beyond 2037E. We calculate that assumption of 60GWh of annual production priced at inflation-indexed electricity price until 2037 (and at PLN350/MWh thereafter) could imply **acquisition's potential positive NPV at PLN35mn** (7% of yesterday's Market Cap).

So far ZE PAK's renewable assets have included two biomass-fired units (one under construction, total future annual EBTDA at PLN50mn) and 70MW photovoltaic project (under construction, annual EBITDA at some PLN15mn), and above-mentioned on-shore wind project is too small to make any substantial EBITDA uplift. However, it is the first on-shore wind project of ZE PAK, upping total future renewable EBITDA of company to PLN73mn p.a., and **likely pending new PV and on-shore projects should 1) boost its renewable EBITDA and 2) make company's EV/EBITDA ratio expand from today's ~6x towards double-digit ratio, applicable to renewable players.**

Key assumptions

Fig. 2. ZE PAK – Key Assumptions [increase in red, decline in green]

	2014	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E
Electricity black price [PLN/MWh]	164	175	163	163	175	247	285	**247**	**315**	**350**
Realized CO_2 price [EUR/t]*	6.0	8.0	6.5	5.5	9.0	20.7	25.6	**30.0**	**47.3**	**55.0**
Electricity – CO2 spread [PLN/MWh]	141	146	137	141	141	154	170	**112**	**102**	**103**

Source: Company, Santander Brokerage Poland estimates

Overall, we expect 2021E to remain under severe pressure of very expensive CO2, which we expect to halve 2021E EBITDA vs previous assumption. As of 2022E we expect lignite contribution at low tens (nil at generation, EBITDA covering modernization capex in lignite), which also trims our 2022-23E forecasts (vs our previous assumptions of profitable lignite operations).

Key drivers of forecasts' changes:

- Exclusion of conventional generation segment's results as of January 2022E (assumingly transferred to SPV);
- Mining segment's EBIT trimmed to nil as of January 2022E, based on expected agreement with SPV to cover costs of fuel for lignite generation units;
- No changes at renewables' key assumptions, except for minor upside resulting from increase in electricity prices vs report as of January 2021.

Fig. 3. ZE PAK: Forecasts changes

PLNmn	2021E			2022E			2023E		
	New	Previous	*Change*	New	Previous	*Change*	New	Previous	*Change*
Sales	2,476	2,439	*1%*	2,681	2,427	*10%*	2,588	2,231	*16%*
EBITDA	86	158	*-46%*	116	170	*-32%*	201	208	*-4%*
EBIT	-39	38	*n.m.*	41	25	*n.m.*	75	13	*494%*
Net profit	-1	16	*n.m.*	-9	-15	*n.m.*	-22	-43	*n.m.*

Source: Santander Brokerage Poland estimates

Fig. 4. ZE PAK: Santander vs consensus

PLNmn	2021E			2022E			2023E		
	San	Cons.	*Diff.*	San	Cons.	*Diff.*	San	Cons.	*Diff.*
Sales	2,476	2,116	*17%*	2,681	2,374	*13%*	2,588	2,231	*16%*
EBITDA	86	119	*-28%*	116	139	*-16%*	201	208	*-3%*
EBIT	-39	-6	*n.m.*	41	3	*1250%*	75	13	*475%*
Net profit	-1	-18	*n.m.*	-9	-18	*n.m.*	-22	-43	*n.m.*

Source: Bloomberg, Santander Brokerage Poland estimates

Valuation

DCF valuation

In light of anticipated changes to ZE PAK's corporate structure, and likely inclusion of nuclear project into valuation, we have remodeled our valuation approach to renewable-skewed one, the same we are using in Polenergia, another WSE-listed renewable-skewed company controlled by wealthy entrepreneur.

ZE PAK's key shareholder is planning to build 1.8GW in SMRs. As ZE PAK is to control 50% of this venture, valuation approach to SMR remains of key importance. Below we present our valuation approach and comments:

- If total capex for 1.8GW settles at EUR4.8bn, electricity price settles terminally flat at PLN350/MWh, with 85% load factor and total opex (fuel, provisions, maintenance, personnel) at EUR16/MWh, we believe total NPV of venture could settle at PLN17.6bn (IRR at 10.9%);
- Our conservative approach (capex upped to EUR6.0bn, opex upped to EUR20/MWh) implies project's NPV at PLN8.5bn (IRR at 8.1%);
- We see 15% probability of project's failure (technical malfunction, voided permit or any other rationale), and we assume total sunk costs at PLN1bn (see Ostroleka C case, with sunk costs at PLN1.5bn);
- ZE PAK should hold a 50% stake in new venture at the onset, in our view. However, PLN22bn worth-of-capex will require heavy equity inflows (we expect no further contribution from ZE PAK, only external equity), which should dilute ZE PAK's original 50% stake to final 5% stake;
- **Presented calculations imply nuclear venture's PLN354mn positive impact on ZE PAK valuation, or PLN7.0 per share;**

Fig. 5. ZE PAK: 1.8GW nuclear venture modelling approach

		Valuation PLNmn	IRR
1,800MW SMRs: Best-case assumptions		Capex EUR4.8bn, load factor 85%, electricity price flat PLN350/MWh, opex EUR16/MWh	
Implied project's metrics		**17,624**	**10.9%**
1,800MW SMRs: SANe assumptions		**Capex EUR6.0bn**, load factor 85%, electricity price flat PLN350/MWh, **opex EUR20/MWh**	
Implied project's metrics		**8,504**	**8.1%**
A	**Project's NPV**	**8,504**	
B	**Project's NPV assuming failure**	**-1,000**	
C	*Failure probability*	*15%*	
D = A x (1 - C) + B x C	**Adjusted project's NPV**	**7,078**	
E	*Assumed SPV's equity dilution*	*90%*	
F = D x E	**SPV founders' NPV**	**708**	
G	*ZE PAK stake*	*50%*	
H = F x G	**Project's NPV for ZE PAK**	**354**	
ZE PAK's per share valuation		**7.0**	

Source: Santander Brokerage Poland estimates

Sensitivity analysis (see Figs. 6-11 below) suggests project's NPV and ZE PAK's per share impact are most vulnerable to nuclear capex (capex above EUR7.3bn nullifies positive impact, capex at EUR4.8bn implies ZE PAK's per share impact at PLN12.0) and realized electricity price.

Fig. 6. ZE PAK sensitivity vs nuclear capex in EURmn

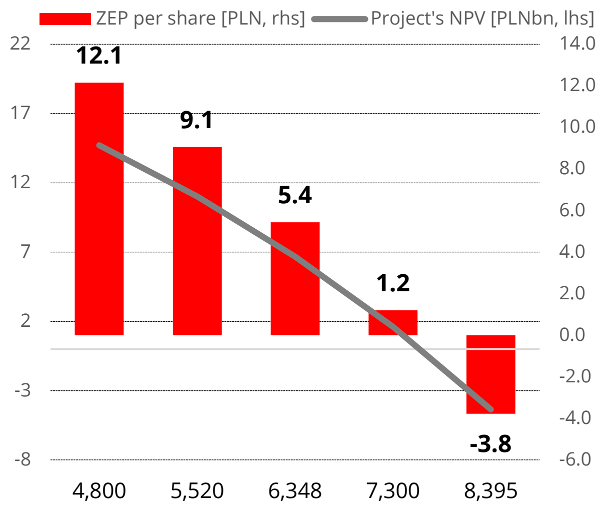


Fig. 7. ZE PAK sensitivity vs nuclear opex in EUR/MWh

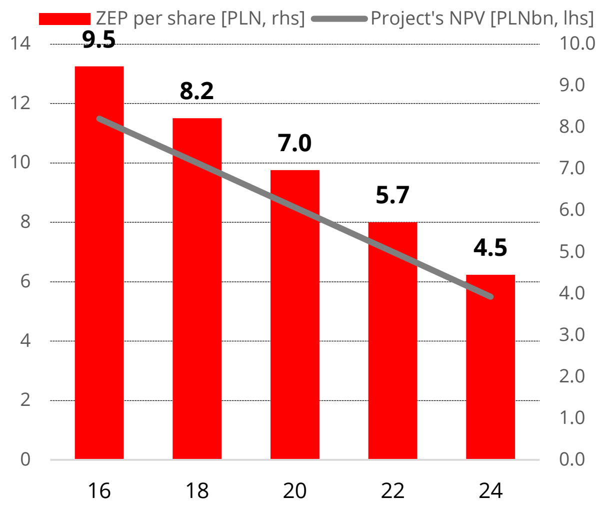


Fig. 8. ZE PAK sensitivity vs nuclear ee price in PLN/MWh

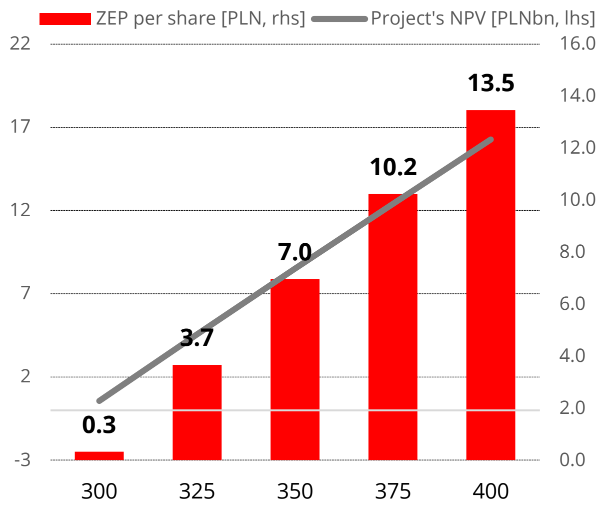


Fig. 9. ZE PAK sensitivity vs nuclear WACC

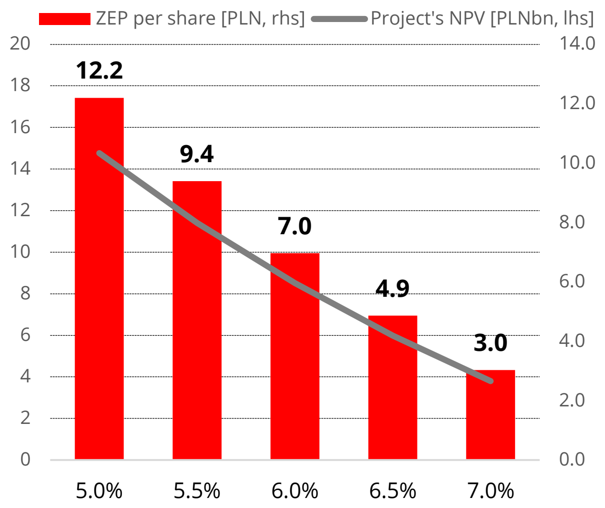


Fig. 10. ZE PAK sensitivity vs % delivery of renewable capacity

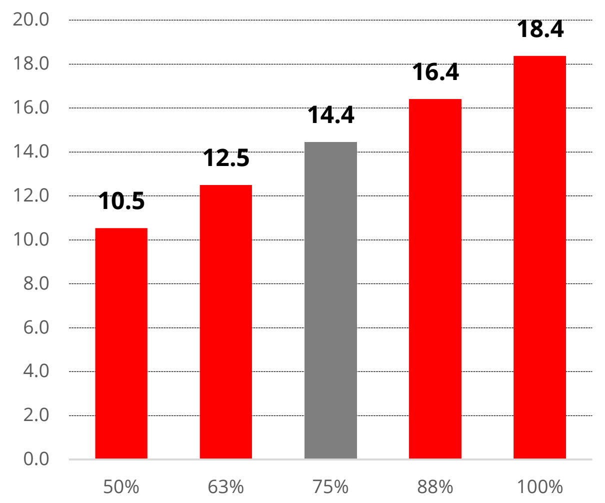
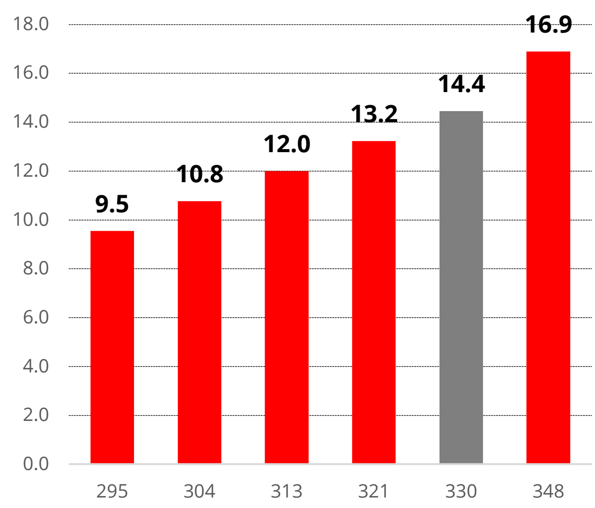


Fig. 11. ZE PAK sensitivity vs ee price [PLN/MWh] in future projects



Source for graphs 5-10: Santander Brokerage Poland estimates

Fig. 12. ZE PAK: SoTP valuation – (sum of NPV valuations by segments)

Segment	Valuation	Valuation	*Share in valuation***	*Previous valuation [Jan 2021]*	*Change vs. previous valuation*
	PLNmn	PLN per share		*PLNmn*	
Conventional Generation *	0	0.0	0%	-8	-100%
Lignite Mining *	0	0.0	0%	70	-100%
Nuclear alternative	354	7.0	41%	0	n.m.
Trading	21	0.4	2%	19	12%
On-shore	383	7.5	35%	123	212%
PV	413	8.1	19%	120	77%
Biomass	288	5.7	12%	143	-3%
Net Debt	350	6.9		159	
Total	**1,109**	**21.8**		**308**	**260%**

*Source: Santander Brokerage Poland estimates, * conventional generation neutralized due to inclusion into SPV, lignite mining's net cash generation nullified via long-term contract with SPV (own assumptions), ** under assumption of proportionate allocation of Net Debt to on-shore / biomass / PV sub-segments*

Fig. 13. ZE PAK: Comparable valuation

	Mkt Cap		P/E			EV/EBITDA			P/CE	
Company	EURmn	2021E	2022E	2023E	2021E	2022E	2023E	2021E	2022E	2023E
Polenergia	**730**	**11.7**	**27.9**	**33.0**	**12.7**	**14.4**	**19.2**	**8.9**	**14.6**	**16.8**
Diversified										
Innergex Renewable Energy	2,501	n.a.	62.2	73.9	15.4	13.8	13.7	18.8	8.9	10.5
Orsted	54,696	43.0	43.8	42.8	18.3	17.9	17.1	23.2	21.4	20.3
China Datang Corp Renewable Power	1,592	7.5	6.5	5.8	9.4	8.4	7.5	2.1	1.8	1.7
Terna Energy	1,342	62.6	23.2	15.5	12.0	12.0	8.1	12.2	12.4	7.5
Median		***43.0***	***33.5***	***29.2***	***13.7***	***12.9***	***10.9***	***15.5***	***10.7***	***9.0***
Wind										
China Longyuan Power Group Corp	12,611	15.4	13.8	12.0	10.3	9.1	8.1	6.4	5.7	5.2
Concord New Energy Group	650	5.9	4.7	4.1	10.4	8.3	6.8	5.6	4.3	n.a.
PNE	545	n.a.	474.0	85.7	28.6	18.7	13.5	33.3	19.5	13.5
EDP Renovaveis	19,615	39.0	35.1	30.8	16.9	15.7	14.3	18.5	16.9	15.2
Falck Renewables	1,718	44.3	31.4	27.7	14.4	12.8	12.0	13.9	11.5	10.7
Median		***27.2***	***31.4***	***27.7***	***14.4***	***12.8***	***12.0***	***13.9***	***11.5***	***12.1***
Solar										
SunPower	3,523	73.2	42.4	30.6	33.1	22.9	18.3	33.1	27.8	22.7
LONGi Green Energy Technology	62,563	38.9	29.5	24.3	30.4	23.4	19.3	34.4	27.5	22.5
Canadian Solar	2,087	20.1	13.5	11.9	9.9	7.6	6.3	7.3	7.2	5.0
JinkoSolar Holding	2,323	18.4	12.4	10.2	15.3	11.5	10.6	9.5	7.7	6.9
GCL-Poly Energy Holdings	5,430	39.3	26.2	n.a.	12.8	13.6	n.a.	6.9	7.1	n.a.
First Solar	8,576	22.9	36.1	29.7	11.4	13.6	10.5	15.1	19.7	14.4
Solarpack Corp Tecnologica	871	78.7	50.6	25.6	20.9	15.9	10.9	24.1	19.7	12.5
Median		***38.9***	***29.5***	***25.0***	***15.3***	***13.6***	***10.7***	***15.1***	***19.7***	***13.4***
Hydro&Nuclear										
Verbund	27,793	44.6	31.8	30.4	26.1	19.9	19.3	26.5	20.3	20.6
A2A	5,694	16.5	15.4	14.5	7.8	7.2	6.8	5.5	5.1	4.8
Median		***30.6***	***23.6***	***22.5***	***16.9***	***13.6***	***13.0***	***16.0***	***12.7***	***12.7***
Total Median		**38.9**	**30.4**	**25.6**	**14.9**	**13.6**	**10.9**	**14.5**	**12.0**	**11.6**

Source: Bloomberg, Santander Brokerage Poland estimates, prices as of 08 September, 2021

Fig. 14. ZE PAK – Updated approach to comparative valuation

	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Renewable EBITDA [PLNmn]	**25.0**	**80.3**	**167.8**	**200.4**	**209.8**	**244.2**	**275.4**	**309.7**	**341.0**	**400.3**
Net debt [PLNmn]	349	1,116	1,279	1,633	2,005	2,286	2,562	2,816	2,681	2,383
Assumed EV/EBITDA * [x]	***14.3***	***14.3***	***14.3***	***14.3***	***14.3***	***14.3***	***14.3***	***14.3***	***14.3***	***13.7***
Implied equity value [PLNmn]	600	800	1,284	1,587	1,367	1,486	1,652	1,867	2,060	2,815
Implied share price [PLN]	**11.8**	**15.7**	**25.3**	**31.2**	**26.9**	**29.3**	**32.5**	**36.8**	**40.6**	**55.4**
Average 2021-2030E share price [PLN]										**32.6**

*Source: Bloomberg, Santander Brokerage Poland estimates, * flat ratio at 14.3x (average of European total median and Polenergia ratios in years 2021-23E) applied for years 2021-29E, declining at 4% rate as of 2030E, when we assume ZE PAK's renewable capacity growth ceases*

DDM valuation

We expect ZE PAK to entirely change its profile to renewable-skewed company. Hence, as dividends are not important in renewable companies' valuation, we decided not to include DDM valuation into our blended valuation approach.

Valuation summary

Fig. 15. ZE PAK: Valuation changes*

PLN per share	New	Previous	Change
SoTP valuation	21.8	7.4	*195%*
Comparable valuation (based on 2021-2030E)	32.6	18.1	*80%*
Weighted valuation **	**25.1**	**10.6**	*136%*

*Source: Company data, Santander Brokerage Poland estimates, * rounded figures, ** 70% DCF / 30% comparable*

DCF and SoTP remain our preferred valuation tools, as these rely more on the company's long-term outlook. As changes in financial results or changes in investors' preferences drive the comparable valuation, we see it as supportive to the DCF/SoTP. Hence, we apply 70% weigh to the former, with comparable valuation having 30% weight.

Financials

Fig. 16. ZE PAK: Income statement forecasts

PLNmn	2017	2018	2019	2020	2021E	2022E	2023E
Revenues	2,443	2,305	2,878	2,207	2,476	2,681	2,588
Consolidated EBITDA, o/w:	**518**	**90**	**394**	**148**	**86**	**116**	**201**
Conventional generation	388	109	330	94	13	0	0
Coal extraction	100	-26	63	8	42	31	28
Sales & Other	30	7	1	21	5	5	5
Renewables				25	25	80	168
Consolidated EBIT, incl.	**296**	**-477**	**-424**	**-291**	**-39**	**41**	**75**
Conventional generation	265	-238	-388	-165	-62	0	0
Coal extraction	9	-239	-24	-163	6	0	2
Sales & Other	22	0	-12	24	3	3	3
Renewables				13	13	38	70
Net financial income (costs)	-32	-28	-14	-12	-19	-52	-102
Profit before tax	**265**	**-516**	**-437**	**-303**	**-59**	**-11**	**-27**
Income tax	75	-52	6	-77	-58	-2	-5
Net profit	**189**	**-460**	**-442**	**-227**	**-1**	**-9**	**-22**
EPS	3.7	-9.1	-8.7	-4.5	-0.0	-0.2	-0.4
CEPS	8.1	-5.3	-5.1	4.2	2.4	1.3	2.0
BVPS	43.5	33.2	23.1	18.7	18.7	-11.0	-11.5
DPS	1.2	1.2	-	-	-	-	-
P/E	4.1	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
P/CE	1.9	Neg.	Neg.	2.1	7.4	13.7	8.8
EV/EBITDA	3.6	11.1	1.1	2.5	18.6	20.9	13.5
EV/EBIT	6.3	Neg.	Neg.	Neg.	Neg.	60.0	36.3
DY	7.8%	12.1%	nm	nm	nm	nm	nm

Source: Company data, Santander Brokerage Poland estimates

Fig. 17. ZE PAK: Balance sheet forecasts

PLNmn	2017	2018	2019	2020	2021E	2022E	2023E
Current assets	**1,008**	**903**	**936**	**1,021**	**673**	**515**	**419**
cash and equivalents	324	307	415	498	94	161	76
other short term investment	262	67	93	4	4	4	4
accounts receivable	253	354	229	385	432	200	193
inventories	98	109	104	68	76	82	80
prepaid expenses	71	66	96	67	67	67	67
Fixed assets	**3,451**	**2,968**	**2,182**	**1,857**	**2,181**	**1,441**	**1,598**
PPE	3,285	2,791	2,016	1,710	2,023	1,275	1,436
long-term investments	87	91	79	60	60	60	60
intangibles	7	4	3	3	3	3	3
long-term receivables	0	0	0	0	0	0	0
long-term deferred charges	73	82	85	85	95	103	100
Total assets	**4,459**	**3,871**	**3,118**	**2,879**	**2,854**	**1,956**	**2,018**
Current liabilities	**999**	**1,210**	**954**	**1,068**	**811**	**830**	**758**
bank debt	354	361	47	55	100	100	100
accounts payable	146	155	109	188	211	229	221
other current liabilities	121	102	109	96	108	117	113
short-term provisions	378	592	689	728	392	384	324
Long-term liabilities	**1,249**	**974**	**988**	**861**	**1,094**	**1,687**	**1,842**
bank debt	302	59	30	0	300	1,200	1,400
deferred charges	0	0	0	0	0	0	0
other long-term liabilities	484	419	533	447	390	122	118
provisions	463	496	425	415	405	365	325
Equity	**2,211**	**1,687**	**1,176**	**949**	**949**	**-561**	**-583**
share capital	102	102	102	102	102	102	102
capital reserves	1,920	2,042	1,515	1,076	850	-651	-661
net income	189	-460	-442	-227	-1	-9	-22
Minority Interest	**0**	**3**	**2**	**-2**	**-2**	**-2**	**-2**
Total liabilities and equity	**4,459**	**3,871**	**3,118**	**2,879**	**2,854**	**1,956**	**2,018**
Net debt	331	114	-338	-443	306	1,139	1,424

Source: Company data, Santander Brokerage Poland estimates

Fig. 18. ZE PAK: Cash flow statement forecasts

PLNmn	2017	2018	2019	2020	2021E	2022E	2023E
Cash flow from operations	**479**	**445**	**420**	**242**	**-255**	**262**	**6**
Net profit	189	-460	-442	-227	-1	-9	-22
Provisions	75	33	-71	-11	-10	-40	-40
Depreciation and amortisation	222	193	185	439	125	76	126
Changes in WC, o/w	-156	-104	85	-41	-32	243	2
inventories	8	-11	5	36	-8	-6	3
receivables	-7	-101	126	-157	-47	232	7
payables	-156	9	-46	79	23	18	-8
Other, net	149	783	663	81	-337	-8	-60
Cash flow from investment	**-28**	**-170**	**100**	**-133**	**-494**	**-1,094**	**-292**
Additions to PPE and intangibles	-108	-73	-31	-52	-438	-828	-287
Change in long-term investments	13	-4	13	19	0	0	0
Other, net	66	-93	118	-100	-56	-267	-5
Cash flow from financing	**-476**	**-292**	**-412**	**-26**	**345**	**900**	**200**
Change in long-term borrowing	-286	-243	-30	-30	300	900	200
Change in short-term borrowing	-68	7	-314	8	45	0	0
Change in equity and profit distribution	-56	1	-67	0	0	0	0
Dividends paid	-66	-61	0	0	0	0	0
Other, net	0	3	-1	-4	0	0	0
Net change in cash and equivalents	**-26**	**-17**	**108**	**83**	**-404**	**68**	**-86**
Beginning cash and equivalents	350	324	307	415	498	94	161
Ending cash and equivalents	**324**	**307**	**415**	498	94	161	76

Source: Santander Brokerage Poland estimates

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The discounted cash flows (DCF) valuation method is based on expected future discounted cash flows. One advantage of the DCF valuation method is that it takes into account all cash streams reaching Issuer and the cost of money over time. Some disadvantages of the DCF valuation method are that a large number of parameters and assumptions need to be estimated; and the valuation is sensitive to changes in those parameters.
The comparative valuation method is based on the economic rule of "one price". Some advantages of the comparative valuation method are that the analyst need only estimate a small number of parameters; the valuation is based on current market conditions; the relatively large accessibility of indicators for companies being compared; and that there is an extensive knowledge of the comparative method among investors. Some disadvantages of valuation by the comparative method are the considerable sensitivity of the results of the valuation on the choice of companies to the comparative group; the method can lead to a simplification of the picture of the company which in turn can lead to omitting certain important factors (e.g. growth dynamics, extra-operational assets, corporate governance, the repeatability of results, differences in applied accounting standards); and the uncertainty of the effectiveness of a market valuation of companies being compared.
The mid-cycle multiple valuation is based on long-term average valuation multiples of a sector or a peer group. The methodology aims to calculate a fair, through the cycle value of the company. Among its shortfalls is that at peaks and/or troughs of the cycle, the implied fair value may deviate substantially from the market's value of an analysed stock as well as the methods' reliance on the quality of external data (we usually use Bloomberg or Damodaran databases). Simplicity and average through-cycle value allowing to capture over- as well as under-valuation of a given stock are the main advantages of this methodology.
The dividend discount model (DDM) valuation is based on the net present value of the future dividends that are expected to be paid out by the company. Some advantages of the DDM valuation method are that it takes into account real cash flows to equity-owners and that the methodology is used in respect to companies with long dividend payout history. Main disadvantage of the DDM valuation method is that dividend payouts are based on a large number of parameters and assumptions, including dividend payout ratio.
Residual income method is conceptually close to the discounted cash flows method (DCF) for non-financial stocks, the difference being that it is based on expected residual income (returns over COE) rather than expected future cash flows. One advantage of this valuation method is that it captures the excess of profit potentially available to shareholders and the cost of money over time. Main disadvantage of the valuation method is that a large number of parameters and assumptions need to be estimated; and the valuation is sensitive to changes in those parameters.
The warranted equity method (WEV) is based on the formula P/BV = (two year forward ROE less sustainable growth rate)/(Cost of equity less sustainable growth rate) which allows estimating a fair value (FV) of a given stock in two years' time. Subsequently the FV is discounted back to today. The main advantage of the WEV method is that it is a transparent one and based on relatively short term forecasts, hence substantially reducing the margin of forecasting error. The main disadvantage in our view is that the model is based on the principle that stock price should converge towards its fair value implied by company's ROE and COE.
SOTP valuation - different assets of a company are being valued according to different valuation methods, and the sum of these valuations represents the final valuation of the company. SOTP valuation advantages / disadvantages are identical to advantages and disadvantages of the specific valuation methods used.
Liquidation value method – liquidation value is the estimated amount of money that an asset or company could be quickly sold for, such as if it were to go out of business. Then, the estimated assets value is adjusted for liabilities and liquidation expenses. One advantage of this valuation method is its simplicity. This method does not account for intangible assets as goodwill, which is the main disadvantage.

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