



Electric Utilities 12m target upgrade Polenergia

Unlocking sustainable FCF generation potential

Poland

Buy

Price 10/11/15	PLN26.4
12m target	PLN44.8
Upside to TP	69.7%
12m f'cast div	0
12m TSR	69.7%
@ Go to SG web	osite

Sector stance

Underweight (Europe) **Preferred stock** PGE, Energa, Polenergia **Least preferred stock** Tauron

Investment trigge Undervalued Growth



Volu	me			
(t 225 -				
	-			1
150 -				
75 -				
0 -	[<u>م الم</u>	المحديقية وحطائليه
	2014		2015	

Source: SG Cross Asset Research/Equity

RIC PEPP.WA, Bloom PEP PW

1m

1.3 -2.2

-2.8

Share data

52-week range EV 15 (PLNm)

Mkt cap. (PLNm)

Performance (%)

Ordinary shares

Rel. Eurofirst 300

Free float (%)

Update In light of its Q1, Q2, and Q3 figures, Polenergia has already achieved 80% of its FY15 guidance (unchanged so far) in terms of EBITDA and 88% in terms of adjusted net income. We now expect guidance to be exceeded by 12% and 23% respectively. We have fine-tuned our model to incorporate a lower electricity price and marginally lower green certificate price projections for the coming quarters and to adjust the amount of farm capacity ready for the first auction to 279MW. Consequently, we inch up our TP for Polenergia to PLN44.8 (from PLN42.4) which also captures better cash flow generation (and hence lower net debt) than we had initially anticipated for 2015.

SG view The market seems very doubtful about a rebound in green certificate prices, which we expect to take place following the introduction of the new RES law in January 2016 (already up by 20% from this year's lows), and does not in our view take into account the company's potential for FCF generation. After completion of 62MW in new capacity in Q4 15, Polenergia should be poised to unlock impressive FCF generation potential. Assuming the business will be run for cash (no further development capex, very low maintenance capex), the company would be able to produce sustainable FCF of more than PLN100m per annum (after debt repayment outflows) for its shareholders, translating into a yield of >9%. We also expect an end-2015 cash balance exceeding PLN400m (33% of the current market cap). Should the company continue investing in new wind farms (a much more likely scenario), we calculate that sustainable FCF to equity generation and required equity input for new wind projects would still allow the company to pay a hefty DPS per annum exceeding PLN1.7 in FY17e-FY20e. Additionally, when the first dividend is due (assuming at FY17), Polenergia should have more than PLN450m of cash available to distribute after adjusting for capex needs (SGe).

How we value the stock Our PLN44.8 target price (was PLN42.4) is SOTP based, with wind farms constituting the bulk of our valuation (under the old RES regime of PLN39.1 per share (EV) and the new RES regime at PLN8.4). We input a 5.5% WACC for wind farms under the old regime, 4.2% WACC for the new regime, and 5.8% for the other operations. The cost of equity amounts to 8.0%.

Events, catalysts & risks Implementation of the new RES regime in 2016. **Risks to TP**: no recovery in green certificate prices; intensified competition in feed-in tariff auctions; falling CO2 and electricity prices; inability to deliver wind farm projects; subdued load factors.

	Financial data	12/14	12/15e	12/16e	12/17e	Ratios	12/14	12/15e	12/16e	12/17e
P PW	Revenues (PLNbn)	2.66	2.72	2.87	2.93	P/E (x)	25.2	15.8	15.3	10.3
34.2-23.6	EBIT margin (%)	3.3	5.1	5.2	5.9	FCF yield (/EV) (%)	-10.5	-26.7	14.1	-30.0
2,035	Rep. net inc. (PLNm)	49.6	75.8	78.1	116	Dividend yield (%)	0.0	0.0	0.0	0.0
1,198	EPS (adj.) (PLN)	1.09	1.67	1.72	2.55	Price/book value (x)	0.94	0.85	0.81	0.75
14.9	Dividend/share (PLN)	0.00	0.00	0.00	0.00	EV/revenues (x)	0.57	0.75	0.64	0.91
3m 12m	Payout (%)	0	0	0	0	EV/EBIT (x)	17.2	14.7	12.2	15.4
-2.2 -4.0	Interest cover (x)	2.01	2.98	2.44	4.67	EV/IC (x)	0.9	0.8	0.8	0.8
2.1 -12.7	Net debt/equity (%)	19	59	43	91	ROIC/WACC (x)	1.0	0.9	0.9	0.9
	Prev. EPS (changed as of 1	2/11/15)	1.89	2.00	2.48	EPS CAGR 14-17e: +32.8%				
	E su de seu strat						On a stalled			





Societe Generale ("SG") does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that SG may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. PLEASE SEE APPENDIX AT THE END OF THIS REPORT FOR THE ANALYST(S) CERTIFICATION(S), IMPORTANT DISCLOSURES AND DISCLAIMERS AND THE STATUS OF NON-US RESEARCH ANALYSTS. This document is being provided for the exclusive use of JAN REKOWSKI (SGCIB)

SOCIETE GENERALE Cross Asset Research

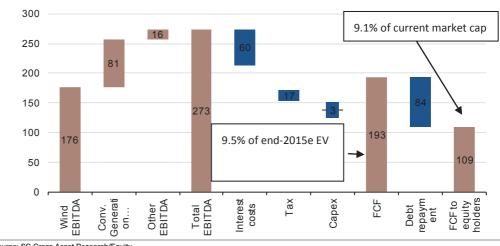


Unlocking sustainable FCF generation potential

Polenergia's portfolio of wind farms in operation at the end of Q3 15 reached an installed capacity of 183.5MW and is scheduled to rise by another 61.8MW in Q4 15, totalling 245MW by the end of this year. We expect these assets to generate about PLN176m of EBITDA next year (8.7% of end-2015e EV) with only minor maintenance capex (expensed and included in our opex calculations). Additionally, we estimate Polenergia will generate almost PLN100m of EBITDA from non-wind operations (predominantly from its quasi-regulated CHP CCGT plant in Nowa Sarzyna) which in total require very little capex as well (SGe c.PLN3m). Tax and interest should amount to c.PLN82.5.

In sum, we expect around PLN193m of FCF (without adjusting for working capital, which should be insignificant anyway) i.e. c.9.5% of end-2015e EV. Furthermore, taking into account debt-repayment outflows (for simplicity, we take end-2015e gross debt and divide it by 15 years) of c.PLN80m per annum, we derive free cash flow available to equity holders of PLN109m, i.e. 9% of the current market cap.

We believe Polenergia will be able to generate this kind of free cash flow without any significant capex requirements, and the company should be able to distribute this to its shareholders without impacting the business if there are no additional investments. This would be the level of FCF if the business were run for cash following the completion of this year's wind farm investments.



FCF generation potential from 2016e on without additional wind farm capex

Source: SG Cross Asset Research/Equity

Nonetheless, Polenergia does not aim to run the business for cash but plans to grow given its impressive portfolio of wind farms (totalling 279MW) that can participate in the first auction (SGe Q2 16) and another 514MW for auctions in 2017-2019e. We assume a >50% probability of winning the first auction, which would imply Polenergia building 152MW by the end of 2017, which would require roughly PLN1bn of capex spending; of that, 20% should be equity (according to the company). We assume that in the new auctioning system, given the fact that a wind farm operator will not be subject to a market risk premium anymore and the counterparty will be the government, the cost of financing should drop and potential leverage on the projects should rise from 70% currently to 80%.

We estimate that given Polenergia's end-2015e cash (SGe PLN430m) and FCF generation post debt service expenditures in 2016 (excluding any additional capex needed to fund wind farms to be potentially won in the auctioning system), Polenergia's cash balance will exceed PLN560m, of which PLN210m will probably be needed to co-finance wind farms to be auctioned in 2016 (SGe).

Furthermore, we project that in the years 2017-2020, in order to commission 536MW of wind farms (our base case, i.e. 68% of the current wind farm portfolio designed to participate in the auction system in FY16-FY20), Polenergia will need PLN3.75bn, of which (20%) PLN750m should constitute equity. We also estimate that most of this equity (PLN500m, i.e. c.70%) will be covered with FCF to equity (i.e. after debt repayment) generated in FY17e-FY20e.

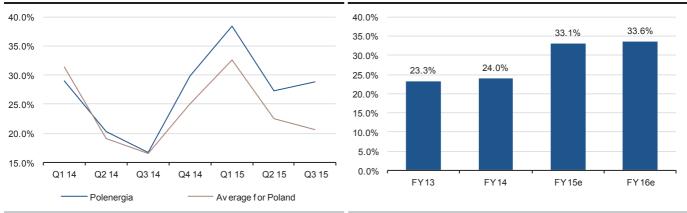
In conclusion, we believe that Polenergia could be able to distribute around PLN300m in FY17e-FY20e (25% of the current market cap) to its shareholders and still be able to cofinance its ambitious capex program). After the completion of 536MW of wind farms in FY20e (SGe), Polenergia should be generating c.PLN150m of annual FCF to equity, i.e. 12.5% of the current market cap. With no further developments (for instance offshore wind farms), these cash flows could be fully used to remunerate investors. Should the company decide to run the business for cash now (less likely) and decide not to develop any more wind farms beyond FY15e, more than PLN100m of FCF to equity (>9% of the current market-cap) would be generated annually, which could easily be deployed as dividend to Polenergia's shareholders; running the business for cash means at least a 9% dividend yield from FY17e (not to mention the outstanding cash balance estimates at PLN550m at the end of 2015).

However, in our base-case scenario including further wind farm development until the end of 2020, we believe Polenergia will be able to pay out around PLN81m annually to its shareholders (6.7% dividend yield, DPS of PLN1.77) in order to have its cash inflows and outflows balanced at the end of the decade. We simply take the expected end of FY20e cash balance and divide it by four dividend payouts in 2017, 2018, 2019 and 2020 (assuming Polenergia will start paying dividend in 2017). The predictability of the business will also increase upon completion of the first wind farms under the auction system. (As Polenergia does not have a clear dividend policy yet, we currently do not include any dividend payments in our model).

Clearly, all of the aforementioned depends on the capacity of wind farms to be constructed in the new auction system, cash flow to be potentially generated from the disposal of core and non-core assets, as well as decisions on developing/building offshore farms.

Average load factor on the rise

Thanks to new technologies and better locations for the wind farms Polenergia is currently building, the company has managed to improve its average load factor gradually. After the commissioning of the Gawlowice (41MW) and Rajgrod (25MW) farms, Polenergia began significantly outpacing average load factors estimated for all wind farms in Poland (approximately, based on PSE data). Moreover, we believe the company will be able to lift its FY14e average load factor across the whole portfolio from 24% to more than 33% in FY16e. Obviously, wind conditions matter as well as we see the old factors to have been producing significantly more electricity this year than in the last one; nonetheless access to more efficient technology as well as greater expertise also matter.



Polenergia's and Poland's average wind farm load factors Polenergia's load factors have been improving

Source: SG Cross Asset Research/Equity, Polenergia, PSE

Changes to estimates

We make a few changes to our estimates due to the company's excellent performance so far this year (see our note <u>Good figures supported by wind project completion, strong CFO</u>) and to the fact that the company has already achieved 80% and 88% respectively of its adjusted EBITDA and net income guidance (PLN204m and PLN72.4m) indicating potential upside to management's FY15 guidance as well as our previous estimates.

We also incorporate new power price assumptions as presented in <u>Polish Utilities: de-rating</u> <u>seems to price in most of the risks – look for good value</u>. However, we marginally cut our FY16e assumption for green certificate prices (from PLN180/MWh to PLN170/MWh) given Polenergia's higher exposure to current green certificate spot prices after Tauron cancelled off-take contracts with two of Polenergia's farms. In addition to that, we also cut our long-term green certificate prices assumptions (beyond FY20e) from PLN270/MWh to PLN250/MWh to be closer to Polenergia's long-term expectations (and hence more conservative).

Polenergia: macro assumptions

2015e	2016e	2017e	2018e	2019e	2020e
7.70	8.20	8.30	8.40	8.50	8.80
4.16	4.12	4.03	4.00	3.91	3.90
9.50	9.50	9.73	9.98	10.23	10.48
20.0	20.0	20.0	20.0	20.0	20.0
161.4	163.2	165.5	168.3	170.6	174.5
150	170	200	220	250	250
	7.70 4.16 9.50 20.0 161.4	7.70 8.20 4.16 4.12 9.50 9.50 20.0 20.0 161.4 163.2	7.70 8.20 8.30 4.16 4.12 4.03 9.50 9.50 9.73 20.0 20.0 20.0 161.4 163.2 165.5	7.70 8.20 8.30 8.40 4.16 4.12 4.03 4.00 9.50 9.50 9.73 9.98 20.0 20.0 20.0 20.0 161.4 163.2 165.5 168.3	7.70 8.20 8.30 8.40 8.50 4.16 4.12 4.03 4.00 3.91 9.50 9.50 9.73 9.98 10.23 20.0 20.0 20.0 20.0 20.0 161.4 163.2 165.5 168.3 170.6

Source: SG Cross Asset Research/Equity

Furthermore, based on Polenergia's new guidance for wind farms ready to take part in the auctioning system, we assume 279MW of capacity will take part in the first auction in 2016e, 338MW in 2017e and 176MW in 2018e. Moreover, in line with CEO Prokopowicz's remarks, wind farms to be constructed in the new RES regime (auctions) will have 80% of debt in the group's financing structure (as opposed to 70% now) and a lower cost of debt (SGe -1pp) vs current funding. We have adjusted our auction system model to reflect this (details of the calculations are available upon request).

We have upped our EBITDA assumptions slightly for FY15e-20e on the back of better load factors and the capacity to be auctioned (the 53MW Szymankowo wind farm is not for sale anymore). This is partially offset by lower power prices and green certificate price assumptions. We have cut our FY15e net income forecast due to the high effective tax rate in H1 (>27%) and worse-than-previously-expected financial result. Our estimates for FY16e are mostly affected by lower projections for power and green certificate prices.

Revenues	2015e	2016e	2017e	2018e	2019e	2020e
New	2,723	2,873	2,932	3,150	3,389	3,338
Old	2,665	2,804	2,855	3,098	3,317	3,289
%	2.2%	2.4%	2.7%	1.7%	2.2%	1.5%
EBITDA (reported)	2015e	2016e	2017e	2018e	2019e	2020e
New	226	273	295	400	528	573
Old	200	281	280	411	523	564
%	13.1%	-2.8%	5.5%	-2.8%	1.0%	1.7%
Net income (reported)	2015 0	2016e	2017e	2018 0	2019e	2020e
New	76	78	116	129	145	123
Old	86	91	113	126	150	127
%	-12.0%	-14.2%	2.7%	2.5%	-3.0%	-3.5%

Polenergia: new and old estimates

Source: SG Cross Asset Research/Equity

The aforementioned figures are as reported. We estimate that adjusted EBITDA could amount to PLN229m in FY15 (112% of the company's official guidance) with adjusted net income of PLN89m (122.5% of the company's official guidance).

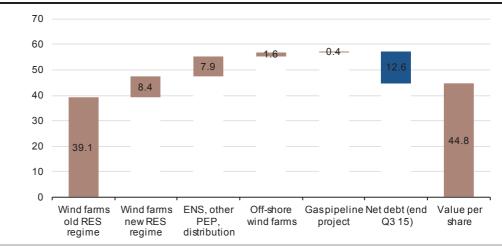
Valuation

We apply a sum-of-the-parts methodology to value Polenergia (for details please refer to: <u>Market is pricing in no regulatory change and the worst case (and unlikely) scenario</u>). We value the wind farms until the year when their operations are assumed to end, i.e. 25 years after commissioning and 15 years of being subsidised. Other business segments (distribution, trade, biomass, management costs and others) are valued separately. The Hand project (gas pipeline) and the offshore plants we value at a 50% discount to book value (per share impact of PLN0.44 and PLN1.61, respectively). We will not take the Polnoc Power Plant into account in our valuation until a capacity market has been established in Poland.

Contrary to our previous valuations, we have changed our approach (in terms of WACC estimates) for wind farms to be developed under the auction system regime. We now apply an 80% debt share in the financing structure (as opposed to 70% for farms under the old RES regime) and a lower risk premium for the cost of debt which falls by 1pp to 2pp.

Consequently, we apply a WACC of 5.5% for wind farms to be constructed until the end of this year, after which the RES regime will change from being based on green certificates to auctions (and thus guaranteed prices). We apply a WACC of 4.2% (after tax) for wind farms commissioned in the auction system (higher debt share and lower cost of debt) and a WACC of 5.8% for the remaining business. We assume a cost of equity of 8% based on 1.1x beta, a 2.5% risk-free rate, and a 5% market risk premium.

As a result we derive a target price of PLN44.8 per share (vs PLN42.4). The 5.7% TP increase comes from the higher valuation of the wind farms under the auction regime (PLN8.4 per share vs PLN5), lower-than-previously-expected capex in FY15e (and thus net debt) as well as the roll forward of our model (discount factor) by three quarters.



Polenergia's valuation (PLN)

Source: SG Cross Asset Research/Equity



Polenergia

			Polelielyla								
Sales/divisio	on 16		Valuation (PLNm)	12/10	12/11	12/12	12/13	12/14	12/15e	12/16e	12/17e
			Nb. of shares basic year end/outstanding	na	na	na	45.4	45.4	45.4	45.4	45.4
			Share price (average)	34.9	27.0	26.3	28.0	27.5	26.4	26.4	26.4
			Average market cap. (SG adjusted) (1)	0	0	0	1,270	1,250	1,198	1,198	1,198
			Restated net debt (-)/cash (+) (2)	na	na	na	-167	-253	-837	-632	-1,458
-	 Electricity sales 72% 						-107	-200	-007	-002	-1,400
			Value of minorities (3)	na	na	na					
			Value of financial investments (4)	na	na	na					
	0170 400%		Other adjustment (5)	na	na	na					
-	- CHP 12% - Wind 8%		EV = (1) - (2) + (3) - (4) + (5)	na	na	na	1,438	1,503	2,035	1,830	2,656
	Distribution 6%		P/E (x)	na	na	na	33.1	25.2	15.8	15.3	10.3
	Others 2%		Price/cash flow (x)	na	na	na	9.7	4.1	16.2	5.8	5.0
			Price/free cash flow (x)	na	na	na	41.4	nm	nm	5.86	nm
BIT/divisior	n 16		Price/book value (x)	na	na	na	1.42	0.94	0.85	0.81	0.75
			EV/revenues (x)	na	na	na	1.29	0.57	0.75	0.64	0.91
			EV/EBITDA (x)	na	na	na	10.4	8.7	9.0	6.7	9.0
			Dividend yield (%)	na	na	na	0.0	0.0	0.0	0.0	0.0
			Per share data (PLN)						l i	<u> </u>	
			SG EPS (adj.)	na	na	na	0.84	1.09	1.67	1.72	2.55
	Distribution 42%		Cash flow	na	na	na	2.88	6.67	1.62	4.56	5.32
	- CHP 7%		Book value	na	na	na	19.6	29.3	31.0	32.7	35.3
	Electricity sales 5%		Dividend	na	na	na	0.00	0.00	0.00	0.00	0.00
_	Others - 14%		Income statement (PLNm)				2.00	5.00	5.00		0.00
	-		Revenues		22	22	1,118	2,659	2,723	2,873	2,932
les/region	n 16			na	na	na					
			Gross income	na	na	na	138	173	226	273	295
			EBITDA	na	na	na	138	173	226	273	295
			Depreciation and amortisation	na	na	na	-72	-86	-88	-123	-123
			EBIT	na	na	na	66	87	139	150	172
		Impairment losses	0	0	0	0	0	0	0	C	
_	Poland 100%		Net interest income	na	na	na	-20	-30	-40	-54	-29
	Polaliu 10076		Exceptional & non-operating items	0	0	0	0	0	0	0	C
			Taxation	na	na	na	-8	-8	-23	-18	-27
							0	0	0	0	
			Minority interests	na	na	na					0
			Reported net income	na	na	na	38	50	76	78	116
			SG adjusted net income	na	na	na	38	50	76	78	116
ajor shareh	holders (%)		Cash flow statement (PLNm)						i i		
lczyk Investi	tments	50.2	EBITDA	na	na	na	138	173	226	273	295
E Equity		16.0	Change in working capital	na	na	na	32	136	-170	-4	-2
		6.7	Other operating cash movements	0	0	0	-39	-7	17	-61	-52
iva OFE		0.7	Cash flow from operating activities	na	na	na	131	303	74	207	242
			Net capital expenditure	na	na	na	-100	-481	-657	-3	-1,067
									-584		-1,007
			Free cash flow	na	na	na	31	-178			000
			Cash flow from investing activities							204	
			-	na	na	na	0	0	0	0	C
			Cash flow from financing activities	na na	na na	na na	0 -46	0 644			0
			-						0	0	C 784
			Cash flow from financing activities	na	na	na	-46	644	0 480	0 -68	0 784
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm)	na	na	na	-46	644	0 480	0 -68	0 784 -42
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets	na na na	na na na	na na na	-46 -15 1,253	644 465 1,968	0 480 -104 2,538	0 -68 136 2,418	0 784 -42 3,362
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible	na na na 0	na na na 0	na na na 0	-46 -15 1,253 7	644 465 1,968 242	0 480 -104 2,538 242	0 -68 136 2,418 242	(784 -42 3,362 242
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital	na na na 0 0	na na na 0 0	na na na 0 0	-46 -15 1,253 7 -75	644 465 1,968 242 -212	0 480 -104 2,538 242 -42	0 -68 136 2,418 242 -37	(784 -42 3,362 242 -36
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations	na na na 0 0 na	na na na 0 0 na	na na na 0 0 na	-46 -15 1,253 7 -75 0	644 465 1,968 242 -212 0	0 480 -104 2,538 242 -42 0	0 -68 136 2,418 242 -37 0	(784 -42 3,362 242 -36
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity	na na na 0 0 na na	na na 0 0 na na	na na 0 0 na na	-46 -15 1,253 7 -75	644 465 1,968 242 -212 0 1,333	0 480 -104 2,538 242 -42 0 1,409	0 -68 136 2,418 242 -37 0 1,487	(784 -42 3,362 242 -36 (
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations	na na na 0 0 na	na na na 0 0 na	na na na 0 0 na	-46 -15 1,253 7 -75 0	644 465 1,968 242 -212 0 1,333 1	0 480 -104 2,538 242 -42 0 1,409 1	0 -68 136 2,418 242 -37 0 1,487 1	(784 -42 3,362 242 -36 (1,603
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity	na na na 0 0 na na	na na 0 0 na na	na na 0 0 na na	-46 -15 1,253 7 -75 0	644 465 1,968 242 -212 0 1,333	0 480 -104 2,538 242 -42 0 1,409	0 -68 136 2,418 242 -37 0 1,487	(784 -42 3,362 242 -36 (1,603
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests	na na 0 0 na na na	na na 0 0 na na na na	na na 0 0 na na na	-46 -15 1,253 7 -75 0 892 1	644 465 1,968 242 -212 0 1,333 1	0 480 -104 2,538 242 -42 0 1,409 1	0 -68 136 2,418 242 -37 0 1,487 1	() 784 -42 3,362 242 -36 () 1,600 - 2
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+)	na na 0 0 na na na na	na na 0 0 na na na na na	na na 0 0 na na na na na	-46 -15 1,253 7 -75 0 892 1 1	644 465 1,968 242 -212 0 1,333 1 2	0 480 -104 2,538 242 -42 0 1,409 1 2	0 -68 136 2,418 242 -37 0 1,487 1 2	() 784 -42 3,362 242 -36 () 1,600 - 2
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios	na na 0 0 na na na na na na	na na 0 na na na na na	na na 0 na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167	644 465 242 -212 0 1,333 1 2 -253	0 480 -104 2,538 242 -42 0 1,409 1 2 -837	0 -68 136 2,418 242 -37 0 1,487 1 2 -632	(784 -42 3,362 242 -36 (1,603 1 2 -1,458
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%)	na na 0 0 na na na na na na	na na 0 0 na na na na na na na	na na 0 0 na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 -167 na	644 465 1,968 242 -212 0 1,333 1 2 -253 5.4	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 5.0	() 784 -42 3,362 242 -36 () 1,603 1 2 -1,458 4.5
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%)	na na 0 0 na na na na na na na na na na	na na 0 0 na na na na na na na na na	na na 0 0 na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 -167 na na	644 465 1,968 242 -212 0 1,333 1 2 -253 5.4 4.5	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 5.0 5.4	0 784 -42 3,362 242 -36 0 1,603 1 2 -1,458 -1,458 -1,458
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%)	na na 0 0 na na na na na na na na na na na na	na na 0 0 na na na na na na na na na	na na 0 0 na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 -167 na na na 12.3	644 465 1,968 242 -212 0 1,333 1 2 -253 5,4 4,5 6,5	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 5.0 5.4 9.5	0 784 -42 3,362 242 -36 0 1,603 1 2 2 -1,458 4.9 7.5 10.1
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%)	na na 0 0 na na na na na na na na na na	na na 0 0 na na na na na na na na na	na na 0 0 na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 -167 na na na 12.3 12.3	644 465 1,968 242 -212 0 1,333 1 2 -253 7 5.4 4.5 6.5 6.5	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 5.5 8.3 8.3	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 5.0 5.4 9.5 9.5	-1,458 -42 -3,362 -36 -0 1,603 -1,603 -1,458
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%)	na na 0 0 na na na na na na na na na na na na	na na 0 0 na na na na na na na na na	na na 0 0 na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 -167 na na na 12.3	644 465 1,968 242 -212 0 1,333 1 2 -253 5,4 4,5 6,5	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 5.0 5.4 9.5	-1,458 7,84 -42 3,362 242 -36 0 1,603 1 2 -1,458 7,5 7,5 10,1 10,1
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-//cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%)	na na 0 0 na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na	na na 0 0 na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 -167 na na na 12.3 12.3	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 3.3	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 5.5 8.3 8.3	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 5.0 5.4 9.5 9.5	-42 784 -42 3,362 242 -36 0 1,603 1 2 2 -1,458 -1,458 -1,458 -1,10,1 -1,5,8
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 na na 12.3 12.3 5.9 na	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 6.5 3.3 7 nm	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 8.3 5.1 2.4	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 5.0 5.4 9.5 9.5 9.5 5.2 5.5	() 784 -42 3,362 242 -36 () 1,600 1,600 1 2 -1,458 4.5 7.5 7.5 7.5 2.1
			Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) Rev. organic growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 ma na 12.3 12.3 5.9 na 0.0	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 6.5 3.3 3 nm 129.9	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 5.5 8.3 8.3 8.3 5.1 2.4 5.9	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 5.0 5.4 9.5 9.5 5.2 5.5 5.5	() 784 -42 3,362 242 -36 () 1,600 1,600 1 2 -1,458 4.5 7.5 7.5 10.1 10.1 10.1 10.1 5.5 2.1 2.1
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) Rev. organic growth (%) EBITDA yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 12.3 12.3 12.3 5.9 na 0.0 na	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 6.5 6.5 3.3 3 nm 129.9 25.7	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 8.3 5.1 5.5 8.3 8.3 8.3 8.3 9.5.1 2.4 5.9 30.4	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 -532 5.0 5.4 9.5 5.2 5.5 5.5 5.5 20.8	() 784 -42 3,362 244 -34 () 1,603 -1,458 -1,458 -1,458 -1,458 -1,458 -1,458 -2,-2,-2,-2,-2,-2,-2,-2,-2,-2,-2,-2,-2,-
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 7 12.3 12.3 12.3 5.9 0.0 na 0.0 na na	644 465 1,968 242 -212 0 1,333 1 2 -253 7 5,4 4,5 6,5 6,5 6,5 6,5 6,5 3,3 7 m 129,9 25,7 32,1	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 8.3 5.1 5.5 8.3 8.3 5.1 2.4 5.9 30.4 58.8	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 5.0 5.4 9.5 9.5 5.2 5.5 5.5 20.8 8.2	() 784 -42 3,362 244 -36 () 1,600 - 2 -1,458 - 10 10 10 10 10 10 10 10
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBIT margin (%) Revenue yoy growth (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBIT yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 12.3 12.3 12.3 5.9 na 0.0 na	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 6.5 6.5 3.3 3 nm 129.9 25.7	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 8.3 5.1 5.5 8.3 8.3 8.3 8.3 9.5.1 2.4 5.9 30.4	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 -532 5.0 5.4 9.5 5.2 5.5 5.5 5.5 20.8	() 784 -42 3,362 242 -36 () 1,603 1 2 -1,458 7.5 7.5 7.5 7.5 10.1 10.1 10.1 10.1 10.1 10.1 10.1 10
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 7 12.3 12.3 12.3 5.9 0.0 na 0.0 na na	644 465 1,968 242 -212 0 1,333 1 2 -253 7 5,4 4,5 6,5 6,5 6,5 6,5 6,5 3,3 7 m 129,9 25,7 32,1	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 8.3 5.1 5.5 8.3 8.3 5.1 2.4 5.9 30.4 58.8	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 5.0 5.4 9.5 9.5 5.2 5.5 5.5 20.8 8.2	2.1 2.1 4.5 2.1 4.5 7.5 10.1
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-)/cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBIT margin (%) Revenue yoy growth (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBIT yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 na na 12.3 12.3 5.9 na 0.0 na na na na na na	644 465 -212 0 1,333 1 2 -253 -253 -253 -253 -253 -253 -253 -2	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 8.3 5.1 2.4 5.9 30.4 5.8.8 5.3.0	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 5.0 5.4 9.5 5.2 9.5 5.5 5.5 5.5 5.5 20.8 8.2 3.0	0 784 -42 3,362 242 -366 0 1,603 1 2 -1,458 7.5 7.5 7.5 10.1 10.1 10.1 10.1 10.1 10.1 10.1 8.1 8.1 14.6 8.7 7 2.1 8.1 1 4.6 7 7 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-//cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBIT yoy growth (%) EBIT yoy growth (%) EDFS (adj.) yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 7 7 7 892 1 2 3 9 7 892 1 1 2 3 5.9 7 8 9 7 8 9 7 7 5.9 7 7 7 7 5 7 7 7 7 7 5 7 7 7 7 7 7 7 7	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 3.3 nm 129.9 25.7 32.1 29.1 na nm	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 5.1 5.5 8.3 8.3 5.1 2.4 5.9 3.0.4 5.8.8 5.8.8 5.3.0 na nm	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 - 5.0 5.4 9.5 9.5 5.2 5.5 5.5 5.5 20.8 8.2 3.0 na nm	0 784 -42 3,362 242 -36 0 1,603 1 2 -1,4588 -1,4588 -1,4588 -1,4588 -1,4
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-//cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBIT yoy growth (%) EDIT yoy growth (%) Dividend growth (%) Cash conversion (%) Net debt/equity (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 7 na 12.3 12.3 5.9 na 12.3 5.9 na 0.0 na na na na a na 88.3 19	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 3.3 nm 129.9 25.7 32.1 29.1 29.1 29.1 29.1 29.1 29.7 32.1 29.1 29.1 29.7	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.5 5.5 5.5 5.5 5.5 8.3 8.3 5.1 2.4 5.9 30.4 5.9 30.4 5.9 30.4 5.8.8 5.3.0 na nm 59	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 - 5.0 5.4 9.5 9.5 5.2 5.5 5.5 5.5 5.5 5.5 20.8 8.2 3.0 na nm 43	0 784 -42 3,362 242 -36 0 1,603 1 2 -1,458 4.9 7.55 10.1 10.1 10.1 5.9 2.1 2.1 8.1 14.8 8.1 14.8 48.7 na 91
	-		Cash flow from financing activities Net change in cash resulting from CF Balance sheet (PLNm) Total long-term assets of which intangible Working capital Employee benefit obligations Shareholders' equity Minority interests Provisions Net debt (-//cash (+) Accounting ratios ROIC (%) ROE (%) Gross income/revenues (%) EBITDA margin (%) EBITDA margin (%) Revenue yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBITDA yoy growth (%) EBIT yoy growth (%) EBIT yoy growth (%) EDFS (adj.) yoy growth (%)	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	na na 0 0 na na na na na na na na na na na na na	-46 -15 1,253 7 -75 0 892 1 1 1 -167 7 7 7 892 1 2 3 9 7 892 1 1 2 3 5.9 7 8 9 7 8 9 7 7 5.9 7 7 7 7 5 7 7 7 7 7 5 7 7 7 7 7 7 7 7	644 465 242 -212 0 1,333 1 2 -253 5.4 4.5 6.5 6.5 3.3 nm 129.9 25.7 32.1 29.1 na nm	0 480 -104 2,538 242 -42 0 1,409 1 2 -837 5.1 5.5 8.3 8.3 5.1 5.5 8.3 8.3 5.1 2.4 5.9 3.0.4 5.8.8 5.8.8 5.3.0 na nm	0 -68 136 2,418 242 -37 0 1,487 1 2 -632 -632 - 5.0 5.4 9.5 9.5 5.2 5.5 5.5 5.5 20.8 8.2 3.0 na nm	-826 0 784 -42 3,362 242 -36 0 1,603 1 2 -1,458 4.9 7.5 10.1 10.1 10.1 5.9 2.1 2.1 2.1 8.1 14.8 48.7 na 91 16.4 nm

Source: SG Cross Asset Research/Equity

12 November 2015 7

APPENDIX

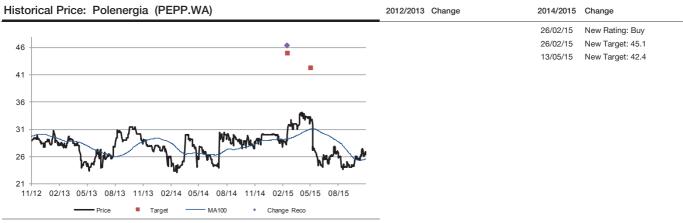
COMPANIES MENTIONED

Energa (ENGP.WA, Buy) Polenergia (PEPP.WA, Buy) Polska Grupa Energetyczna (PGE.WA, Buy) Tauron (TPE.WA, Hold)

ANALYST CERTIFICATION

The following named research analyst(s) hereby certifies or certify that (i) the views expressed in the research report accurately reflect his or her or their personal views about any and all of the subject securities or issuers and (ii) no part of his or her or their compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed in this report: **Bartlomiej Kubicki**

The analyst(s) who author research are employed by SG and its affiliates in locations, including but not limited to, Paris, London, New York, Dallas, Hong Kong, Tokyo, Bangalore, Mumbai, Frankfurt, Madrid, Milan, Seoul, Warsaw and Moscow.



Source: SG Cross Asset Research/Equity

SG EQUITY RESEARCH RATINGS on a 12 months period

 ${\ensuremath{\text{BUY}}}$: absolute total shareholder return forecast of 15% or more over a 12 month period.

HOLD: absolute total shareholder return forecast between 0% and +15% over a 12 month period.

SELL: absolute total shareholder return forecast below 0% over a 12 month period.

Total shareholder return means forecast share price appreciation plus all forecast cash dividend income, including income from special dividends, paid during the 12 month period. Ratings are determined by the ranges described above at the time of the initiation of coverage or a change in rating (subject to limited management discretion). At other times, ratings may fall outside of these ranges because of market price movements and/or other short term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by research management.

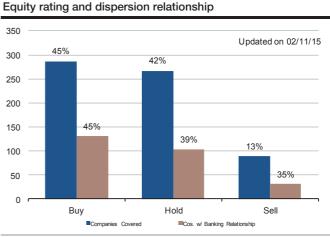
Sector Weighting Definition on a 12 months period:

The sector weightings are assigned by the SG Equity Research Strategist and are distinct and separate from SG equity research analyst ratings. They are based on the relevant MSCI.

OVERWEIGHT: sector expected to outperform the relevant broad market benchmark over the next 12 months.

NEUTRAL: sector expected to perform in-line with the relevant broad market benchmark over the next 12 months.

UNDERWEIGHT: sector expected to underperform the relevant



Source: SG Cross Asset Research/Equity



broad market benchmark over the next 12 months.

The Preferred and Least preferred stocks are selected by the covering analyst based on the individual analyst's coverage universe and not by the SG Equity Research Strategist.

All pricing information included in this report is as of market close, unless otherwise stated.

MSCI DISCLAIMER: The MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are service marks of MSCI and its affiliates or such similar language as may be provided by or approved in advance by MSCI.

IMPORTANT DISCLOSURES

Polenergia SG acted as global coordinator and joint bookrunner in the disposal of Polenergia's shares by Kulczyk Investments.

SG or its affiliates expect to receive or intend to seek compensation for investment banking services in the next 3 months from Polska Grupa Energetyczna, Tauron.

SG or its affiliates had an investment banking client relationship during the past 12 months with Polenergia.

SG or its affiliates have received compensation for investment banking services in the past 12 months from Polenergia.

SG or its affiliates managed or co-managed in the past 12 months a public offering of securities of Polenergia.

SG received compensation for products and services other than investment banking services in the past 12 months from Tauron.

FOR DISCLOSURES PERTAINING TO COMPENDIUM REPORTS OR RECOMMENDATIONS OR ESTIMATES MADE ON SECURITIES OTHER THAN THE PRIMARY SUBJECT OF THIS RESEARCH REPORT, PLEASE VISIT OUR GLOBAL RESEARCH DISCLOSURE WEBSITE AT http://www.sgresearch.com/compliance.rha or call +1 (212).278.6000 in the U.S.

European Specialty Sales

If a European specialist sales personnel is listed on the cover of research reports, these employees are in SG's Global Markets division responsible for the sales effort in their sector and are not part of SG's Cross-Asset Research Department. Specialist Sales do not contribute in any manner to the content of research reports in which their names appear.

The analyst(s) responsible for preparing this report receive compensation that is based on various factors including SG's total revenues, a portion of which are generated by investment banking activities.

Non-U.S. Analyst Disclosure: The name(s) of any non-U.S. analysts who contributed to this report and their SG legal entity are listed below. U.S. analysts are employed by SG Americas Securities LLC. The non-U.S. analysts are not registered/qualified with FINRA, may not be associated persons of SGAS and may not be subject to the FINRA restrictions on communications with a subject company, public appearances and trading securities held in the research analyst(s)' account(s): Bartlomiej Kubicki Société Générale Warsaw

IMPORTANT DISCLAIMER: The information herein is not intended to be an offer to buy or sell, or a solicitation of an offer to buy or sell, any securities and has been obtained from, or is based upon, sources believed to be reliable but is not guaranteed as to accuracy or completeness. Material contained in this report satisfies the regulatory provisions concerning independent investment research as defined in MiFID. Information concerning conflicts of interest and SG's management of such conflicts is contained in the SG's Policies for Managing Conflicts of Interests in Connection with Investment Research which is available at https://www.sgresearch.com/Content/Compliance/Compliance.aspx SG does, from time to time, deal, trade in, profit from, hold, act as market-makers or advisers, brokers or bankers in relation to the securities, or derivatives thereof, of persons, firms or entities mentioned in this document and may be represented on the board of such persons, firms or entities. SG does, from time to time, act as a principal trader in equities or debt securities that may be referred to in this report and may hold equity or debt securities positions. Employees of SG, or individuals connected to them, may from time to time have a position in or hold any of the investments or related investments mentioned in this document. SG is under no obligation to disclose or take account of this document when advising or dealing with or on behalf of customers. The views of SG reflected in this document may change without notice. In addition, SG may issue other reports that are inconsistent with, and reach different conclusions from, the information presented in this report and is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report. To the maximum extent possible at law, SG does not accept any liability whatsoever arising from the use of the material or information contained herein. This

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own informed decisions and seek their own advice regarding the appropriateness of investing in financial instruments or implementing strategies discussed herein.

9

12 November 2015

The value of securities and financial instruments is subject to currency exchange rate fluctuation that may have a positive or negative effect on the price of such securities or financial instruments, and investors in securities such as ADRs effectively assume this risk. SG does not provide any tax advice. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. Investments in general, and derivatives in particular, involve numerous risks, including, among others, market, counterparty default and liquidity risk. Trading in options involves additional risks and is not suitable for all investors. An option may become worthless by its expiration date, as it is a depreciating asset. Option ownership could result in significant loss or gain, especially for options of unhedged positions. Prior to buying or selling an option, investors must review the "Characteristics and Risks of Standardized Options" at http://www.optionsclearing.com/about/publications/character-risks.jsp or from your SG representative. Analysis of option trading strategies does not consider the cost of commissions. Supporting documentation for options trading strategies is available upon request.

Notice to French Investors: This publication is issued in France by or through Société Générale ("SG") which is authorised and supervised by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the Autorité des Marchés Financiers (AMF).

Notice to U.K. Investors: Société Générale is a French credit institution (bank) authorised by the Autorité de Contrôle Prudentiel (the French Prudential Control Authority) and the Prudential Regulation Authority and subject to limited regulation by the Financial Conduct Authority and Prudential Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority, and regulation by the Financial Conduct Authority are available from us on request.

Notice to Swiss Investors: This document is provided in Switzerland by or through Société Générale Paris, Zürich Branch, and is provided only to qualified investors as defined in article 10 of the Swiss Collective Investment Scheme Act ("CISA") and related provisions of the Collective Investment Scheme Ordinance and in strict compliance with applicable Swiss law and regulations. The products mentioned in this document may not be suitable for all types of investors. This document is based on the Directives on the Independence of Financial Research issued by the Swiss Bankers Association (SBA) in January 2008.

Notice to Polish Investors: this document has been issued in Poland by Societe Generale S.A. Oddzial w Polsce ("the Branch") with its registered office in Warsaw (Poland) at 111 Marszałkowska St. The Branch is supervised by the Polish Financial Supervision Authority and the French "Autorité de Contrôle Prudentiel". This report is addressed to financial institutions only, as defined in the Act on trading in financial instruments. The Branch certifies that this document has been elaborated with due dilligence and care.

Notice to U.S. Investors: For purposes of SEC Rule 15a-6, SG Americas Securities LLC ("SGAS") takes responsibility for this research report. This report is intended for institutional investors only. Any U.S. person wishing to discuss this report or effect transactions in any security discussed herein should do so with or through SGAS, a U.S. registered broker-dealer, futures commission merchant (FCM) and swap dealer. SGAS is a member of FINRA, NYSE, NFA and SIPC and its registered address is at 245 Park Avenue, New York, NY, 10167. (212)-278-6000.

Notice to Canadian Investors: This document is for information purposes only and is intended for use by Permitted Clients, as defined under National Instrument 31-103, Accredited Investors, as defined under National Instrument 45-106, Accredited Counterparties as defined under the Derivatives Act (Québec) and "Qualified Parties" as defined under the ASC, BCSC, SFSC and NBSC Orders

Notice to Singapore Investors: This document is provided in Singapore by or through Société Générale ("SG"), Singapore Branch and is provided only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289. Recipients of this document are to contact Société Générale, Singapore Branch in respect of any matters arising from, or in connection with, the document. If you are an accredited investor or expert investor, please be informed that in SG's dealings with you, SG is relying on the following exemptions to the Financial Advisers Act, Cap. 110 ("FAA"): (1) the exemption in Regulation 33 of the Financial Advisers Regulations ("FAR"), which exempts SG from complying with Section 25 of the FAA on disclosure of product information to clients; (2) the exemption set out in Regulation 34 of the FAR, which exempts SG from complying with Section 27 of the FAA on recommendations; and (3) the exemption set out in Regulation 35 of the FAR, which exempts SG from complying with Section 36 of the FAA on disclosure of certain interests in securities.

Notice to Hong Kong Investors: This report is distributed in Hong Kong by Société Générale, Hong Kong Branch which is licensed by the Securities and Futures Commission of Hong Kong under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) ("SFO"). This document does not constitute a solicitation or an offer of securities or an invitation to the public within the meaning of the SFO. This report is to be circulated only to "professional investors" as defined in the SFO.

Notice to Japanese Investors: This publication is distributed in Japan by Societe Generale Securities (North Pacific) Ltd., Tokyo Branch, which is regulated by the Financial Services Agency of Japan. This document is intended only for the Specified Investors, as defined by the Financial Instruments and Exchange Law in Japan and only for those people to whom it is sent directly by Societe Generale Securities (North Pacific) Ltd., Tokyo Branch, and under no circumstances should it be forwarded to any third party. The products mentioned in this report may not be eligible for sale in Japan and they may not be suitable for all types of investors.

Notice to Korean Investors: This report is distributed in Korea by SG Securities Korea Co., Ltd which is regulated by the Financial Supervisory Service and the Financial Services Commission.

Notice to Australian Investors: Societe Generale is exempt from the requirement to hold an Australian financial services licence (AFSL) under the Corporations Act 2001 (Cth) in respect of financial services, in reliance on ASIC Class Order 03/824, a copy of which may be obtained at the web site of the Australian Securities and Investments Commission, http://www.asic.gov.au. The class order exempts financial services providers with a limited connection to Australia from the requirement to hold an AFSL where they provide financial services only to wholesale clients in Australia on certain conditions. Financial services provided by Societe Generale may be regulated under foreign laws and regulatory requirements, which are different from the laws applying in Australia.

http://www.sgcib.com. Copyright: The Société Générale Group 2015. All rights reserved.

This publication may not be reproduced or redistributed in whole in part without the prior consent of SG or its affiliates.