WOOD & COMPANY

Photon Energy

Buy

Maintained

Price: CZK 67
Price target: CZK 105
(From: CZK 90)

Expanding beyond physical assets

We reiterate our BUY on Photon Energy and increase our 12M price target (PT) to CZK 105/share (from CZK 90/share), yielding 56% upside. While we expect power prices to continue falling in Europe and we have also become more conservative on the company's capacity rollout, mainly in Poland, the hike in our PT is driven by Photon's recent acquisition of Lerta, a Polish power-tech company. Moreover, we assess the impact of recent regulatory changes in the region (caps and windfall taxes) as in line or even better than we expected previously. With double-digit EBITDA growth in the coming years, a healthy balance sheet and exposure to all of the segments of PV downstream, Photon remains one of our utilities top picks. Photon is trading at our 2022-24E EV/EBITDAs of 7.4-9.7x, 37% below its peer group, at attractive multiples, partly on the very low liquidity of its shares.

Lerta acquisition is a good fit. In December, Photon increased its stake in Lerta to 100%. Lerta, whose two co-founders are joining Photon, represents a strategically sound investment, with Photon increasing its knowhow and options in grid balancing, demand-side response/capacity and other fields. Lerta operates a virtual power plant and holds six energy trading licences in the region, while being the third-largest real-time asset aggregator in Poland.

Romania to drive generation growth. In Romania, Photon has already spent capex on its new 32MW merchant portfolio, which should contribute strongly to this year's EBITDA growth, offsetting the falling power prices, on our estimates. In Poland, which has imposed a very strict tax regime on generators, we become more conservative on the capacity rollout, but we still see new additions in Hungary this year. We expect Photon to build only merchant power plants from now on.

Windfall taxes and caps impact limited. With power prices falling below the EU's EUR 180/MWh cap already, tariffs not being taxed and no windfall taxation expected on net profit, Photon is one of the winners of the volatile market. Effectively, Photon faces only a modest negative impact in the Czech Republic and Hungary, and no impact in Slovakia and Romania. We are not aware of any new tax scheme being prepared in the region.

Model update. Our power price estimates remain relatively unchanged vs. our July update. We now see stronger 2022E EBITDA, in line with Photon's guidance and supported by last year's power price rally. Our capacity rollout forecasts have been cut – by 60MW in 2023E and 15MW in 2024E – lowering our generation EBITDA by 19% and 22%, respectively, over the next two years. However, with more clarity likely to be provided in next month's guidance release, we may update our conservative assumptions. On the flipside, our 2023-24E revenue expectations have increased by 35%, on average, driven by Lerta (with limited margins for now) and stronger technology sales.

Valuation and risks. Our 70:30 weighted DCF and peers valuation generate a 12M PT of CZK 105/share, or 56% upside. We add Lerta to our model, which brings additional upside, more than offsetting our higher WACC. The main risks for our forecasts are: CEE power price levels; government interventions; execution risks; and the supply chain issue in the PV industry, among others. Upside risk comes from a higher-than-modelled Romania load factor, or stronger revenues and margins than reflected in our model for Lerta.

Year	Sales (EUR m)	EBITDA (EUR m)	Net profit (EUR m)	EPS (EUR)	EPS growth	P/E (x)	P/CE (x)	EV/ EBITDA	DPS (EUR)	Dividend yield (%)
2019	30.4	7.9	-0.7	-0.01	n.m.	n.m.	14.4	19.6	0.00	0.0%
2020	28.6	8.4	-8.7	-0.15	n.m.	n.m.	30.1	31.4	0.00	0.0%
2021	36.8	9.6	-6.4	-0.11	n.m.	n.m.	14.0	18.4	0.00	0.0%
2022E	85.9	25.4	6.3	0.10	n.m.	24.2	5.9	9.7	0.00	0.0%
2023E	113.2	30.8	12.5	0.20	97%	12.3	5.4	9.3	0.00	0.0%
2024E	136.1	43.5	15.8	0.26	26%	9.7	3.3	7.4	0.00	0.0%

Expected events

4Q22 results	10 February (TBC)

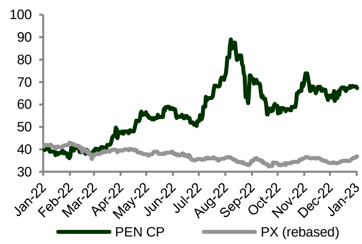
Key data

Market Cap	EUR 152m
Free float	28%
3M ADTV	EUR 0.1m
Shares outstanding	60m
Major Shareholder	Mngt/cofounders (71%)
Bloomberg Code	PEN CP
PX Index	1,285

Price performance

52-w range	CZK 36-89
52-w performance	+68%
Relative performance	+79%

Photon 12M share price performance



EQUITY RESEARCH

Analysts: Ondrej Slama; Bram Buring, CFA
E-mail: ondrej.slama@wood.cz, bram.buring@wood.cz

Prague: +420 222 096 250
Website: www.wood.com

Contents

Closing Prices as of 13 January 2023

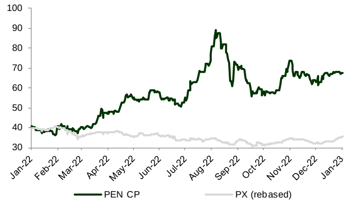
WOOD & Company Financial Services a.s.
Palladium, Namesti Republiky 1079/1a,
110 00 Prague 1 – Czech Republic
tel.: +420 222 096 111
fax: +420 222 096 222
http//:www.wood.cz

Company snapshot – BUY, PT CZK 105

Photon Energy

BUY

Bloomberg ticker	**PEN CP**
Closing price (CZK)	**67**
Price Target (CZK)	**105**
Upside to PT	**56%**
Shares outstanding (m)	**60**
MCAP (EUR m)	**152**
Free float	**28%**
ADTV (EUR m)	**0.1**
52 Week Range (CZK)	**36-89**
52 Week Performance	**68%**
52W Relative Performance	**79%**



COMPANY DESCRIPTION

Photon Energy Group, founded in 2008 and based in the Netherlands, is a vertically-integrated utility in the downstream segment of the photovoltaic industry. Its business model covers the whole life cycle of a power plant, from development through to electricity generation, to decommissioning. Currently, Photon operates more than 90MW of its own PV capacity, in CEE and Australia, and maintains around 300MW of solar plants, mainly in Europe. Photon is also active in the water treatment business, awaiting the results of its R&D currently, and it took full control of Lerta, a Polish power-tech company, recently. Moreover, Photon holds an equity state in an Australian developer of solar battery storage and generation – RayGen. The shareholder structure is composed of two main players, namely: Solar Future (Michael Gartner, CTO) and Solar Power to the People (Georg Hotar, CEO), which control 70% of the company's shares. Roughly 28% of shares will be in free float after the Lerta acquisition has been finalised.

RATIOS

PER SHARE RATIOS	2019	2020	2021	2022E	2023E	2024E
EPS	-0.01	-0.15	-0.11	0.10	0.20	0.26
CEPS	0.10	0.10	0.10	0.43	0.47	0.76
BVPS	0.63	0.67	0.86	0.96	1.15	1.41
DPS	0.00	0.00	0.00	0.00	0.00	0.00

FINANCIAL RATIOS	2019	2020	2021	2022E	2023E	2024E
Capex/depreciation	2.9x	2.2x	0.8x	1.4x	2.2x	4.5x
Capex/net fixed assets	0.19x	0.14x	0.07x	0.11x	0.19x	0.35x
Op. cash flow/capex	0.3x	0.5x	1.3x	2.1x	1.1x	0.7x
EBITDA margin	26.2%	29.5%	26.1%	29.6%	27.2%	32.0%
EBIT margin	3.8%	0.5%	-3.0%	17.4%	16.1%	20.5%
Net margin	-2.4%	-30.4%	-17.5%	7.3%	11.1%	11.6%
ROE	n.a.	-22.3%	-14.0%	11.4%	19.6%	20.2%
Net debt/(cash) to eqwity	1.8x	2.1x	1.7x	1.7x	1.9x	2.0x
Net debt/EBITDA	8.5x	10.0x	9.3x	3.8x	4.3x	3.9x

VALUATION RATIOS	2019	2020	2021	2022E	2023E	2024E
P/E	n.m.	n.m.	n.m.	24.2x	12.3x	9.7x
P/CF	14.4x	30.1x	14.0x	5.9x	5.4x	3.3x
P/B	2.3x	4.5x	1.7x	2.6x	2.2x	1.8x
EV/EBITDA	19.6x	31.4x	18.4x	9.7x	9.3x	7.4x
EV/Sales	5.1x	9.3x	4.8x	2.9x	2.5x	2.4x
EV/EBIT	135.8x	2,055.7x	n.m.	16.6x	15.8x	11.6x
Cash flow from ops, EUR m	6.2	6.0	6.2	25.8	28.8	46.6
EV, CZK m	4,063	7,009	4,690	6,607	7,649	8,621
FCF, EUR m	-8	-14	-8	1	5	-19
FCF yield	-0.4%	-0.3%	-0.3%	0.0%	0.1%	-0.5%
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

COMPANY FINANCIALS

INCOME STATEMENT, EUR m	2019	2020	2021	2022E	2023E	2024E
Revenues	30.4	28.6	36.8	85.9	113.2	136.1
COGS & opex	-22.4	-20.2	-27.2	-60.4	-82.4	-92.5
EBIT	1.1	0.1	-1.1	15.0	18.2	27.9
Depreciation	6.8	8.3	10.7	10.5	12.7	15.7
EBITDA	7.9	8.4	9.6	25.4	30.8	43.5
Generation	11.6	12.9	17.2	26.6	32.8	42.0
O&M	-0.6	-0.1	0.2	0.6	1.0	1.5
Solutions	6.6	9.1	-2.5	0.9	1.9	6.2
Technology	0.0	0.5	1.5	4.9	5.1	4.4
Other	-0.3	-1.6	-6.1	-7.0	-8.9	-8.9
Financial income/(expense) & other	-4.4	-5.9	-6.5	-7.7	-9.3	-11.0
Profit before Tax	1.0	-6.5	-5.9	7.5	9.1	17.1
Income tax due/deferred	-1.7	-2.2	-0.5	-1.0	-0.6	-5.6
Profit/loss	-0.7	-8.7	-6.4	6.3	12.5	15.8

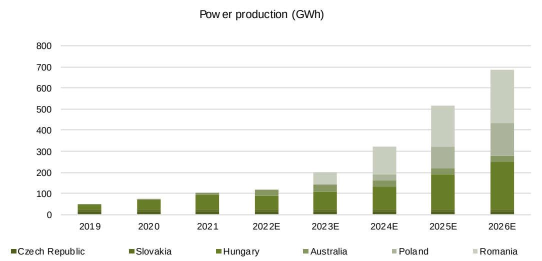
CASH FLOW, EUR m	2019	2020	2021	2022E	2023E	2024E
CF from Operations	6.2	6.0	6.2	25.8	28.8	46.6
Thereof depreciation	6.8	8.3	10.7	10.5	12.7	15.7
Thereof changes in w/c	0.7	-2.4	-5.0	-5.0	-2.8	-2.3
CF from Investments	-14.4	-20.2	-14.2	-24.3	-23.5	-65.3
Thereof CAPEX	-19.7	-18.3	-8.6	-14.3	-27.9	-69.8
CF from Financing	11.7	12.1	30.6	9.8	27.2	25.5
Dividends	0	0	0	0	0	0

BALANCE SHEET, EUR m	2019	2020	2021	2022E	2023E	2024E
Current assets	28.4	23.9	54.2	73.5	60.3	120.8
Cash & Equivalents	12.4	9.9	32.5	43.8	26.1	82.9
Trade receivables	10.4	6.1	9.1	14.2	17.0	19.3
Inventories	1.2	1.0	2.2	5.2	6.8	8.2
Other	4.3	6.8	10.4	10.4	10.4	10.4
Non-current assets	108.7	135.1	142.5	146.3	161.5	215.7
Tangible	102.0	126.3	127.5	131.4	146.6	200.7
Intangible	0.9	1.3	0.8	0.8	0.8	0.8
Other	5.7	7.5	14.1	14.1	14.1	14.1
Total assets	137.0	158.9	196.6	219.8	221.8	336.5
Current liabilities	12.3	15.2	34.0	24.9	26.6	28.1
ST debt	3.7	6.0	28.5	16.4	16.4	16.4
Trade payables	7.4	7.2	4.5	7.5	9.3	10.7
Other	1.2	1.9	1.0	1.0	1.0	1.0
Non-current liabilities	86.8	103.6	111.1	137.1	124.9	222.3
LT debt	76.4	90.9	98.3	124.3	112.1	209.5
Other	10.4	12.7	12.8	12.8	12.8	12.8
Total liabilities	99.2	118.8	145.1	162.0	151.5	250.4
Minority interest	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Shareholders' equity	37.8	40.1	51.5	57.8	70.3	86.1
Total liabilities and equity	137.0	158.9	196.6	219.8	221.8	336.5
Net Debt	67.3	84.5	89.1	96.6	133.1	169.6
Change in Net debt	14	17	5	8	36	36

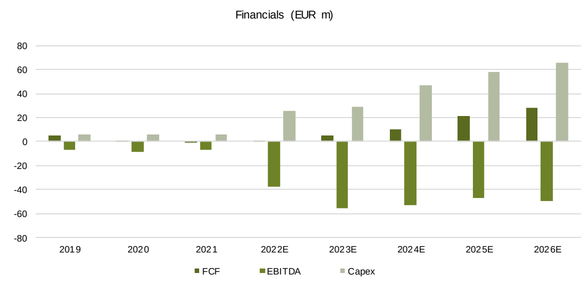
OPERATIONS	2019	2020	2021	2022E	2023E	2024E
Generation capacity, MW	**37**	**80**	**91**	**92**	**161**	**264**
Growth (yoy)	*46%*	*117%*	*13%*	*1%*	*75%*	*64%*
Czech Rep	15	15	15	15	15	15
Slovakia	10	10	10	10	10	10
Hungary	12	40	51	52	71	86
Australia	0	15	15	15	15	15
Poland	0	0	0	0	0	28
Romania	0	0	0	0	50	110

MACRO ASSUMPTIONS	2019	2020	2021	2022E	2023E	2024E
Inflation, EU	1.2%	0.3%	1.5%	8.4%	3.3%	2.0%
German power price, EUR/MWh	49	46	89	280	175	135
Generation volume, GWh	44	70	103	122	200	324
Growth (yoy)	*54%*	*60%*	*48%*	*18%*	*65%*	*62%*

Generation by country forecast



FCF, EBITDA and capex forecasts



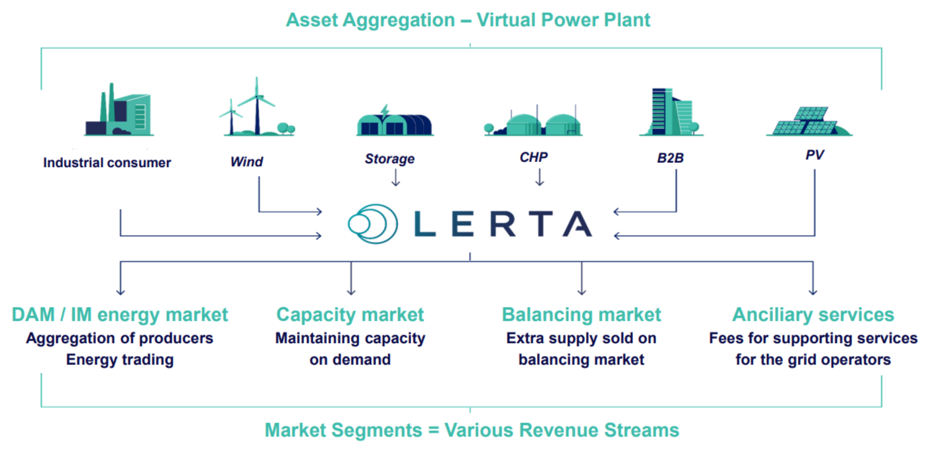
Lerta acquisition – strategically sound expansion

Last month (December 2022), Photon became the full owner of Lerta, acquiring a 43% stake from two founding shareholders, via cash and its own shares (EUR 0.5m and 3.6m shares, respectively). Photon has been a Lerta shareholder indirectly since 2018, and invested directly in the company in 2020, by buying a 12% stake. Earlier, in November last year, Photon increased its stake in the company to 57%, buying 32% of the shares from venture funds (PGE Ventures, ValueTech Seed Fund and Newberg), for EUR 6.9m.

Lerta's founders will now join Photon: Borys Tomala will become the Director of Photon Energy's newly-established New Energy Division, and Krzysztof Drożyński will continue in his role as the Head of Advanced Technologies. The full takeover is expected to close in 1Q23E and we already assume a new shareholder structure at Photon, a different number of shares and free float, and the consolidation of Lerta's numbers starting from this year.

Based in Poland, but active across the region, Lerta operates a virtual power plant (VPP), owns energy trading licenses in six countries, holds a third position in the Polish demand side response (DSR) market, with capacity contract secured for this year already. Photon expects Lerta to improve its own grid flexibility while offering the same service to third parties, with the renewables production on the rise, balancing through gas generation too expensive and grid investments reacting too slowly to the changing production mix.

Lerta: business model



Source: Company data

Through the acquisition, Photon increases its team by roughly 100 members, of which 30 are a salesforce, likely to boost also Photon's other-than-Lerta revenues, in our view.

For this year, Lerta has secured 134MW of DSR capacity in Poland, representing contracted revenues of EUR 7.7m, and the company is already preparing to enter the additional auction for 2024E, to be held in March 2023, with at least 300 MW of DSR capacity. Until 2030E, Lerta aims to grow its Polish DSR portfolio by a minimum of 100MW per year (500MW of DSR in 2026E). For 2027E, the company has already secured a 157MW contract (EUR 13.6m). In 2025E, the expansion of DSR participants is planned, with players from Germany, the Czech Republic, Slovakia, Lithuania and Sweden allowed to participate in providing DSR services to PSE. According to Photon, Lerta is making preparations for this expansion.

We are yet to receive more detailed information on the company's other revenues and our current estimates might be inaccurate. However, we estimate close to EUR 10m of new revenues for Photon and breakeven EBITDA is doable this year already, before further growth is boosted by new capacity contracts, Lerta addressing new customers and Photon's generation portfolio becoming more effective, thanks to Lerta's knowhow. In our model, Lerta's earnings contribution becomes a part of the Solutions segment.

Valuation: BUY, PT CZK 105, 56% upside

We value Photon at CZK 105/share, implying 56% upside. Our valuation is derived from our DCF and peer EV/EBITDA calculations, weighted 70% and 30%, respectively. As Photon does not plan to distribute dividends soon, we do not employ a DDM and, due to the relatively volatile net profit forecasts of Photon and its competitors, we also skip the P/E valuation for now.

As we believe Photon should also attract interest in Poland, Germany and other markets, we also show PLN and EUR PTs. Both, implied by the current 1Y forward FX rates, generate similar upside to our PT in CZK, as shown in the table below.

Valuation summary

	PT CZK/share	Upside
DCF	93	39%
Peers (EV/EBITDA)	131	95%
Weighted average (70:30)	**105**	**56%**
Implied PLN and EUR PTs		
12M PT PLN/sh	20.1	54%
12M PT EUR/sh	4.02	58%

Source: Bloomberg, WOOD Research

DCF

Our DCF valuation yields upside of 39%, or a 12M PT of CZK 93/share. Our assumptions are:

- ✓ A WACC of 9.2% across our forecast period (up from 7.8% previously), produced from a debt-adjusted beta of 1.2x (up from 1.3x previously), an ERP of 5.0% (without change), and a risk free rate of 6.0% (up from 4.5% previously), which yields a cost of equity of 12.0% (up from 10%, previously), and a cost of debt of 8.0% (up from 6.4%).
- ✓ Terminal growth of 2.5%.
- ✓ Our DCF period covers 2022-27E, by which time we believe the CEE capacity targets should be met, on our numbers. We note that the 300MW RayGen project is not included in our valuation (first 50MW planned for 2024E) and our CEE capacity addition estimates are more conservative than management's, due largely to the situation on the market, not the company itself.
- ✓ While we use our house power price estimates for the markets in which Photon operates, except for Australia, where we rely on the company's guidance and the local power market, we prefer to focus on the current growth story of the next six years, rather than longer-term forecasts, where the sensitivity of long-term power prices and cost inflation alter the valuation significantly, to both the upside and the downside. Also, Photon is yet to prove that the 2024E targets are not too ambitious and our one-to-two year lag is punishing the valuation already, in our view, with more upside potential.

DCF

EUR (000s)	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**
EBIT	14,980	18,187	27,869	41,131	45,977	48,352
Depreciation	10,458	12,656	15,662	20,160	24,325	25,677
Capex	-3,503	-46,956	-68,801	-105,934	-96,483	-24,054
Working capital	-4,967	-2,763	-2,315	-3,119	-2,937	-2,937
Tax	-996	-637	-5,574	-8,226	-10,695	-11,170
FCF	**15,971**	**-19,513**	**-33,159**	**-55,988**	**-39,813**	**35,868**
Discount factor	1.00	0.92	0.84	0.77	0.71	0.65
Discounted FCF	**16,017**	**-17,921**	**-27,888**	**-43,121**	**-28,080**	**23,166**
Discounted cash flows	**-77,826**					
Terminal value	354,403			Risk free		6.0%
Enterprise value	276,577			Beta		1.20
2021 net debt	89,104			ERP		5.0%
Minorities	150			Cost of equity		12.0%
Equity value	**187,323**			Weight of equity		30.0%
PT, CZK/sh	83			Weight of Debt		70.0%
12M PT, CZK/sh	**93**			Cost of debt, net tax		8.0%
Upside	*39%*			**WACC**		**9.2%**

Source: Company data, WOOD Research

Peer valuation

Our peer valuation approach remains unchanged. Photon is the first pure solar (and water treatment) company under our coverage. Looking at the CEE region, there are no well-covered solar companies with publicly available forecasts by the sell-side. Therefore, we have chosen a mix of western European and US companies, which have similar business models, sizes and growth profiles. However, the basket is not perfect, we admit. The peer 2022-24E EV/EBITDAs, on the Bloomberg consensus, produce a higher PT than our DCF, due most likely to the low liquidity of shares traded. Therefore, we have decided to place only a 30% weight on the peer valuation, as Photon's business model is specific and exposed to a different region. Regarding the other multiples, e.g., P/E and P/CF, we believe it is premature to use these, given the volatility of earnings at both Photon and its peers.

We note that we expect Photon's EBITDA margin to grow gradually, thanks mostly to the higher weight of power generation, but we also expect other segments' profitability to improve over our forecast period. However, being an integrated solar utility, with segments such as technology trading or engineering, it still produces lower margins than most of the peers below, which are more invested in high-margin power generation. Despite these lower margins vs. its peers, we believe that this is where the added value is at Photon – a business model that can grow in any solar downstream direction globally, while not overpaying for generation capacity expansion.

On our numbers, Photon is trading at 2022-24E EV/EBITDAs of 7.4-9.7x, at a 37% discount vs. the peer average. Despite the low liquidity, we believe these multiples are attractive. Our peer valuation yields 95% upside, or CZK 131/share.

Peer valuation: EV/EBITDA

EUR 000s	2022E	2023E	2024E
Peer multiple	16.1	13.2	12.5
EBITDA	25,437	30,843	43,531
Net debt	96,637	133,105	169,595
Equity value	**311,980**	**274,480**	**375,540**
Average	293,230		
CZK/sh	**131**		
Upside	*95%*		

Source: Bloomberg, WOOD Research

Valuation multiples of selected peers

Company		MCAP (EUR m)	AVTD 3M (EUR m)	EV/EBITDA			EBITDA growth			EBITDA margin		
				2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
ABO Wind	EUR	716	0.2	22.3	16.9	15.0	6%	30%	10%	18%	20%	20%
Azure Power Global	USD	234	1.6	6.8	6.2	n.a.	32%	9%	n.a.	81%	84%	n.a.
Encavis	EUR	3,020	0.1	15.2	14.3	13.7	25%	7%	4%	75%	75%	75%
Grenergy Renovables	EUR	902	1.6	20.2	15.5	13.0	49%	81%	50%	33%	40%	47%
Neoen	EUR	4,168	4.8	18.2	15.8	14.9	31%	23%	19%	82%	84%	83%
Scatec	NOK	1,276	2.9	12.8	11.5	10.2	-11%	29%	32%	61%	60%	66%
Solaria Energia	EUR	2,445	9.3	21.8	17.0	14.4	59%	41%	28%	88%	87%	87%
Voltalia	EUR	2,355	1.1	19.3	13.5	12.3	36%	50%	14%	41%	51%	53%
7C SolarParken	EUR	361	0.3	8.1	8.2	6.8	41%	-2%	-12%	86%	84%	79%
Average		**1,720**	**2.4**	**16.1**	**13.2**	**12.5**	**30%**	**30%**	**18%**	**63%**	**65%**	**64%**
Photon		**168**	**0.1**	**9.7**	**9.3**	**7.4**	**165%**	**21%**	**41%**	**30%**	**27%**	**32%**
Discount peers, delta				-39%	-30%	-41%	136%	-8%	23%	-33%	-38%	-32%

Source: Bloomberg, WOOD Research

We are now more bullish vs. our July update on 2022E, which is in line with both the company's revised guidance and the operating report released this week. In 2023-24E, our sales estimates are higher, due mainly to stronger expectations in the Technology segment, but also driven by Lerta's revenues. These more than offset our now slower pipeline rollout, but are not strong enough to compensate for the lower EBITDA expectations, after we reduce the much more profitable generation outlook.

Model update

EUR m	Revenues			EBITDA			Net profit		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
New	85.9	113.2	136.1	25.4	30.8	43.5	6.3	12.5	15.8
Old	64.1	81.6	102.8	20.3	32.3	49.5	3.3	11.1	17.3
% Difference	**34.0%**	**38.7%**	**32.4%**	**25.3%**	**-4.5%**	**-12.1%**	**89.5%**	**13.0%**	**-8.7%**

Source: WOOD Research

Risks

Power prices. Our model is based on Photon selling a large portion of its generated power through merchant pricing, opting out of the regulatory schemes where it can, until the market power price drops below the regulated one, after which the plants would return to regulated earnings, if not before. We believe that our future power price estimates are conservative enough, but we stress that there is both upside and downside to our estimates, depending on the future developments on both the European and Australian power markets. With most of the EBITDA coming from Electricity Generation (90%, after adjusting for Other EBITDA, which includes the company-level costs), the risks are clearly skewed towards the generation segment, rather than the stable, service-like earnings of the other segments. Over time, when power prices fall and the other segments grow with the market, including the water treatment business, the power price risk will fall.

Regulatory risks. As with any other utility, the majority of Photon's EBITDA comes from power generation, which is facing an increasing risk of government intervention in all of the countries in which it operates, given the ongoing elevated power prices. From last year already, Photon has been already running most of its PV capacity at merchant pricing and we have already seen changes in the renumeration schemes in the Czech Republic and Slovakia recently. Having said that, any form of price caps, additional changes in renumeration schemes or other measures could result in downside for our current estimates and valuation.

Execution risk. The company plans to reach 600MW of generation capacity by 2024E, which would mean that its production capacity would grow almost sevenfold vs. its current capacity. The current pipeline looks busy and the targets are achievable, in our view. However, either due to delays on the company's end or caused by third parties, this target may not be reached, which we reflect in our model.

Supply chain issues/inflating costs. While the LCOE of the PVs has dropped around 90% over the past two decades and the recent price spike stands at roughly 20% for a MW of PV capacity, the supply chain disruptions and the unprecedented demand for new solar capacity, coupled with inflation, could increase the company's capex/MW further, or delay the pipeline, due to missing parts.

Disclosure and modelling. For a small cap, considering our coverage universe, Photon has detailed disclosure, we see the company and its majority shareholders as transparent, and Photon is doing, in our view, what it can do reach out to the market, through a well-prepared IR team and improving segmental disclosure. That said, we still find it quite difficult to model the Engineering and Technology arms of the business and their future value add for the Electricity Generation profitability, as well as their own long-term revenue growth and margins. Moreover, we prefer pencilling in conservative load factors in Romania, where Photon just built 32MW of new capacity, and believe our Lerta estimates are also cautious. Separately, the water business and its potential upside are not fully reflected in our numbers, nor the giant 300MW RayGen project and the rights to it. Therefore, we may adjust our numbers in future, in line with the upcoming developments, observing the market trends, the company's performance and more detailed guidance on each of the projects mentioned above. We believe we are conservative in our assumptions, and we see the risks as more skewed to the upside, rather than the downside.

Main shareholders. Mr. Hotar and Mr. Gartner own around 70% of the company's shares. We are not aware of them planning to dispose of their stakes, and we are pleased with the corporate governance at Photon, but we note that the business is highly dependent on their leadership, from the CEE capacity growth to new developments in Australia.

Competition. Photon operates in a very competitive space. It is a well-established player in each of the solar segments, and competes with both large, international players on larger-scale projects, as well as many more smaller players, focusing on smaller projects. Similarly, in the Engineering, Technology and O&M segments, the market is extremely competitive, and the company has yet to show the market that it can succeed in new markets, such as Poland and Romania.

Liquidity of shares. Photon is traded in Prague, Warsaw and Germany. Being a small cap, the combined 3M daily liquidity stands at only EUR 0.1m.

Financials

Income statement

EUR m	2019	2020	2021	2022E	2023E	2024E
Revenues	**30.4**	**28.6**	**36.8**	**85.9**	**113.2**	**136.1**
Raw materials and consumables used	-9.8	-4.6	-12.7	-14.6	-18.6	-31.0
Solar levy	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
personnel expenses	-4.6	-5.8	-6.7	-7.3	-7.5	-7.7
Other expenses	-7.1	-8.9	-6.8	-37.6	-55.3	-53.0
EBITDA	**7.9**	**8.4**	**9.6**	**25.4**	**30.8**	**43.5**
Depreciation	-6.8	-8.3	-10.7	-10.5	-12.7	-15.7
Impairments	-0.1	-0.4	-0.2	0.0	0.0	0.0
Gain (loss) on disposal of investments	4.3	0.0	0.5	0.0	0.0	0.0
Share of profit equity-accounted investments	0.0	0.1	0.1	0.0	0.0	0.0
EBIT	**5.4**	**-0.1**	**-0.7**	**15.0**	**18.2**	**27.9**
Financial income	0.2	0.1	0.2	0.2	0.2	0.2
Financial expenses	-4.7	-6.0	-6.8	-7.7	-9.3	-11.0
Profit before Tax	**1.0**	**-6.5**	**-5.9**	**7.5**	**9.1**	**17.1**
Result from discontinued operations				**0.0**	**4.3**	**4.5**
Income tax due/deferred	-1.7	-2.2	-0.5	-1.0	-0.6	-5.6
Profit/loss	**-0.7**	**-8.7**	**-6.4**	**6.3**	**12.5**	**15.8**

Source: Company data, WOOD Research

Balance sheet

EUR m	2019	2020	2021	2022E	2023E	2024E
Current assets	**28.4**	**23.9**	**54.2**	**73.5**	**60.3**	**120.8**
Cash & Equivalents	12.4	9.9	32.5	43.8	26.1	82.9
Trade receivables	10.4	6.1	9.1	14.2	17.0	19.3
Inventories	1.2	1.0	2.2	5.2	6.8	8.2
Other	4.3	6.8	10.4	10.4	10.4	10.4
Non-current assets	**108.7**	**135.1**	**142.5**	**146.3**	**161.5**	**215.7**
Tangible	102.0	126.3	127.5	131.4	146.6	200.7
Intangible	0.9	1.3	0.8	0.8	0.8	0.8
Other	5.7	7.5	14.1	14.1	14.1	14.1
Total assets	**137.0**	**158.9**	**196.6**	**219.8**	**221.8**	**336.5**
Current liabilities	**12.3**	**15.2**	**34.0**	**24.9**	**26.6**	**28.1**
ST debt	3.7	6.0	28.5	16.4	16.4	16.4
Trade payables	7.4	7.2	4.5	7.5	9.3	10.7
Other	1.2	1.9	1.0	1.0	1.0	1.0
Non-current liabilities	**86.8**	**103.6**	**111.1**	**137.1**	**124.9**	**222.3**
LT debt	76.4	90.9	98.3	124.3	112.1	209.5
Other	10.4	12.7	12.8	12.8	12.8	12.8
Total liabilities	**99.2**	**118.8**	**145.1**	**162.0**	**151.5**	**250.4**
Minority interest	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Shareholders' equity	**37.8**	**40.1**	**51.5**	**57.8**	**70.3**	**86.1**
Total liabilities and equity	**137.0**	**158.9**	**196.6**	**219.8**	**221.8**	**336.5**

Source: Company data, WOOD Research

Cash flow statement

EUR m	2019	2020	2021	2022E	2023E	2024E
Profit before income tax	1.0	-6.5	-5.9	7.5	9.1	17.1
Depreciation and amortisation	6.8	8.3	10.7	10.5	12.7	15.7
Finance costs	4.4	6.4	5.2	7.5	9.1	10.8
Other	-4.5	0.5	3.7	4.3	0.0	-0.2
Operating cash flows before WC changes	**7.7**	**8.6**	**13.7**	**29.8**	**30.9**	**43.3**
WC changes	0.7	-2.4	-5.0	-5.0	-2.8	-2.3
Income tax paid	-0.3	0.8	-2.3	1.0	0.6	5.6
Other	-1.9	-1.0	-0.1	0.0	0.0	0.0
Net cash from operating activities	**6.2**	**6.0**	**6.2**	**25.8**	**28.8**	**46.6**
Capex	-19.7	-18.3	-8.6	-14.3	-27.9	-69.8
Other	5.3	-1.9	-5.6	-10.0	4.3	4.5
Net cash used in investing activities	**-14.4**	**-20.2**	**-14.2**	**-24.3**	**-23.5**	**-65.3**
Net proceeds from borrowings	15.4	18.6	29.8	17.5	36.5	36.5
Other	-3.7	-6.7	-6.9	-7.7	-9.3	-11.0
Capital increase	0.0	0.2	7.8	0.0	0.0	0.0
Net cash used in financing activities	**11.7**	**12.1**	**30.6**	**9.8**	**27.2**	**25.5**

Source: Company data, WOOD Research

Important disclosures

This publication is issued by WOOD & Company Financial Services, a.s. ("WOOD&Co") and/or one of its branches who are authorised and regulated by the Czech National Bank (CNB) as Home State regulator and in Poland by the Polish Financial Supervision Authority (KNF), in Slovakia by the National Bank of Slovakia (NBS), in Italy by the Companies and Stock Exchange Commission (CONSOB), in Ireland by Central Bank of Ireland (CBI), in Romania by National Bank of Romania (NBR) and in the UK by the Financial Conduct Authority (FCA) as Host State regulators.

This investment research was prepared by WOOD&Co with financial assistance from Taipei China through the TaiwanBusiness EBRD Technical Cooperation Fund managed by the European Bank for Reconstruction and Development ("EBRD"). Neither EBRD nor Taipei China has had any editorial rights or other influence on the content of this investment research. Neither EBRD nor Taipei China makes any representation or warranty or assumes any responsibility or liability in relation to the contents of this investment research or reliance thereon. The views expressed in this investment research are those of WOOD&Co and can in no way be taken to reflect the official opinion of EBRD or of Taipei China. EBRD may, as of the date hereof or in the future, have an investment in, provide other advice or services to, or otherwise have a financial interest in, certain of the companies and parties contained or named in this investment research or in their affiliates.

This investment research was completed on 15/01/2023 at 14:15 CET and disseminated on 16/01/2023 at 07:45 CET.

WOOD&Co's rating and price target history for Photon Energy in the preceding 12-month period:

Date	Rating	Date	PT
25/05/2022	BUY – initation of coverage	25/05/2022	CZK 84
		21/072022	CZK 90.0
		16/01/2023	CZK 105

The history of all WOOD&Co's investment research disseminated during the preceeding 12-month period can be accessed via our website at **https://research.wood.com**.

The meanings of recommendations made in WOOD&Co's investment research are as follows:
BUY: The stock is expected to generate total returns of over 15% during the next 12 months as measured by the price target.
HOLD: The stock is expected to generate total returns of 0-15% during the next 12 months as measured by the price target.
SELL: The stock is expected to generate a negative total return during the next 12 months as measured by the price target.
RESTRICTED: Financial forecasts, and/or a rating and/or a price target is restricted from disclosure owing to Compliance or other regulatory/legal considerations such as a blackout period or a conflict of interest.
NOT RATED: Suspension of rating after 30 consecutive weekdays where the current price vis-à-vis the price target has been out of the range dictated by the current BUY/HOLD/SELL rating.
COVERAGE IN TRANSITION: Due to changes in the Research team, the disclosure of a stock's rating and/or price target and/or financial information are temporarily suspended.

As of the end of the last calendar quarter, the proportion of all WOOD&Co's investment research vis-à-vis the proportion of subject companies that were investment banking clients over the previous 12 months is as follows:

	BUY	HOLD	SELL	Restricted	NOT RATED	Coverage in transition
Equity Research Coverage	61%	32%	6%	1%	n.a.	n.a.
IB Clients	1%	1%	n.a.	n.a.	n.a.	n.a.

Any prices of financial instruments quoted in this investment research are taken as of the previous day's market close on the home market unless otherwise stated.

Details of the methodologies used to determine WOOD&Co's price targets and risk assessment related to the achievement of the targets are outlined throughout the most recent substantive report/note on the subject company.

It should be assumed that the risks and valuation methodology presented in daily news or flash notes, and not changing WOOD&Co's estimates or ratings, are as set out in the most recent substantive research report/note on the subject company and can be found on our website at **https://research.wood.com**.

WOOD&Co's policy is to update investment research as it deems appropriate, based on developments in the subject company, sector or market that may have a material impact on the views or opinions stated in the investment research.

WOOD Research Disclosures (as of 16 January 2023)

Company	Disclosures
Alior Bank	5
AmRest	5
Astarta Holding	4
Banca Transilvania	5
Bank of Cyprus	4
BRD	5
Bucharest Stock Exchange	5
CCC	5
CD Projekt	5
Colt CZ Group	3, 5
CEZ	5
Dino	5
DO&CO	5
Electrica	5
Erste Group Bank	5
Eurobank	4
Eurocash	5
Fondul Proprietatea	4, 5
Kazatomprom	5
Kernel	5
KGHM	5
Kofola CS	5
Komercni	4, 5
Kruk	5
Lotos	5
MedLife	4
MONETA Money Bank	5
NLB Group	5
Nuclearelectrica	5
O2 Czech Republic	4, 5
OMV Petrom	5
Orange PL	5
Pekao	4, 5
PGE	5
PGNiG	5
Philip Morris CR	5
PKN Orlen	5
PKO BP	4, 5
PZU	4, 5
Romgaz	5
Santander Bank Polska	5

Siauliu Bankas	**5**
STS	**1, 2, 3**
TBC Bank	**3**
Transelectrica	**5**
Transgaz	**5**

#	Description
1	The company currently is, or in the past 12 months was, a client of WOOD&Co or any of its affiliates for the provision of corporate finance/investment banking services.
2	In the past 12 months, WOOD&Co or any of its affiliates have received compensation for corporate finance/investment banking services from the company.
3	In the past 12 months, WOOD&Co or any of its affiliates have been lead manager or co-lead manager of a publicly disclosed offer of the company's financial instruments.
4	In the past 12 months, WOOD&Co or any of its affilates have acted as broker to the company
5	WOOD&Co or any of its affiliates are market maker(s) or liquidity provider(s) in relation to financial instruments of the company.
6	In the past 12 months, WOOD&Co or any of its affiliates have provided to the company any services set out in Sections A and B or Annex I to the Directive 2014/65/EU of the European Parliament and of the Council, other than services listed under points 1, 3, 4 or 5 above, or received compensation for such services from the company.
7	The authoring analyst or any individual involved in the preparation of this investment research have purchased/received shares in the company prior to a public offering of those shares; and the price at which they were acquired along with the date of acquisition are disclosed above.
8	The authoring analyst or any individual involved in the preparation of this investment research has a direct ownership position in securities issued by the company.
9	A partner, director, officer, employee or agent of WOOD&Co and its affiliates, or a member of his/her household, is an officer, or director, or serves as an advisor or board member of the company.
10	WOOD&Co or its affiliates hold a net long or short position exceeding the threshold of 0,5% of the total issued share capital of the company, calculated in accordance with Artcle3 of Regulation (EU) No 236/2012 and with Chapters III and IV of Commission Delegated Regulation (EU) No 918/2012.
11	The company owns more than 5% of the total issued share capital in WOOD&Co or any of its affiliates.

The authoring analysts who are responsible for the preparation of this investment research have received (or will receive) compensation based upon (among other factors) the overall profits of WOOD&Co, which includes corporate finance/investment banking, sales and trading and principal trading revenues. However, such authoring analysts have not received, and will not receive, compensation that is directly based upon or linked to one or more specific activities, or to recommendations contained in the investment research. One factor in equity research analyst compensation is arranging corporate access events/meetings between institutional clients and the management teams of covered companies (with the company management being more likely to participate when the analyst has a positive view of the company).

WOOD&Co and its affiliates may have a corporate finance/investment banking or other relationship with the company that is the subject of this investment research and may trade in any of the designated investments mentioned herein either for their own account or the accounts of their clients, in good faith or in the normal course of market making. Accordingly, WOOD&Co or their affiliates, principals or employees (other than the authoring analyst(s) who prepared this investment research) may at any time have a long or short position in any such designated investments, related designated investments or in options, futures or other derivative instruments based thereon.

WOOD&Co manages conflicts of interest arising as a result of preparation and publication of research through its use of internal databases, notifications by the relevant employees and Chinese Walls as monitored by Compliance. For further details, please see our website at **https://www.wood.cz/mifid-information/**.

The information contained in this investment research has been compiled by WOOD&Co from sources believed to be reliable, but (with the exception of the information about WOOD&Co) no representation or warranty, express or implied, is made by WOOD&Co, its affiliates or any other person as to its fairness, accuracy, completeness or correctness. WOOD&Co has not independently verified the facts, assumptions, and estimates contained herein. All estimates, opinions and other information contained in this investment research constitute WOOD&Co' judgement as of the date of this investment research, are subject to change without notice and are provided in good faith but without legal responsibility or liability.

WOOD&Co salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our proprietary trading desk that reflect opinions that are contrary to the opinions expressed in this investment research. WOOD&Co's affiliates, proprietary trading desk and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this investment research.

This investment research is provided for information purposes only and does not constitute or form part of an offer or invitation or solicitation to engage in investment activity or to buy or sell any designated investments discussed herein in any jurisdiction. As a result, the designated investments discussed in this investment research may not be eligible for offer or sale in some jurisdictions. This investment research is not, and under no circumstances should be construed as, a solicitation to act as a securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction.

This investment research does not have regard to the investment objectives, financial situation or particular needs of any particular person. Investors should consider this report as only a single factor in making their investment decision and obtain advice based on their own individual circumstances before making an investment decision. To the fullest extent permitted by law, none of WOOD&Co, its affiliates or any other person accepts any liability whatsoever for any direct or consequential loss arising from or in connection with the use of this investment research.

For United Kingdom or EU Residents:

This investment research is for persons who are eligible counterparties or professional clients within the meaning of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU and is exempt from the general restrictions in section 21 of the Financial Services and Markets Act 2000 (or any analogous legislation) on the communication of invitations or inducements to engage in investment activity on the grounds that it is being distributed in the United Kingdom only to persons of a kind described in Article 19(5) (Investment Professionals) and 49(2) (High Net Worth companies, unincorporated associations etc) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended).

For United States Residents:

This investment research distributed in the United States by WOOD&Co, and in certain instances by Brasil Plural Securities LLC ("Brasil Plural"), a U.S. registered broker dealer, only to "major U.S. institutional investors", as defined under Rule 15a-6 promulgated under the U.S. Securities Exchange Act of 1934, as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC"). This investment research is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research and are not a major U.S. institutional investor, you are instructed not to read, rely on or reproduce the contents hereof, and to destroy this research or return it to WOOD&Co or to Brasil Plural. Analyst(s) preparing this report are employees of WOOD&Co who are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore the analyst(s) are not be subject to Rule 2711 of the Financial Industry Regulatory Authority ("FINRA") or to Regulation AC adopted by SEC which, among other things, restrict communications with a subject company, public appearances and personal trading in securities by a research analyst. Any major U.S. Institutional investor wishing to effect transactions in any securities referred to herein or options thereon should do so by contacting a representative of Brasil Plural. Brasil Plural is a broker-dealer registered with the SEC and a member of FINRA and the Securities Investor Protection Corporation. Its address is 545 Madison Avenue, 8th Floor, New York, NY 10022 and its telephone number is 212-388-5613. WOOD&Co is not affiliated with Brasil Plural or any other U.S. registered broker-dealer.

The views and sentiments expressed in this investment research and any findings thereof accurately reflect the analyst's truthful views about the subject securities and or issuers discussed herein.

CONTACTS

Czech Republic
namesti Republiky 1079/1a
Palladium
110 00 Praha 1
Czech Republic
Tel +420 222 096 111
Fax +420 222 096 222

Romania
Lamda Building
7A Bucuresti-Ploiesti Street
4th Floor
013682 Bucharest 1
Tel.: +40 316 30 11 81

Poland
Centrum Marszalkowska
Marszalkowska 126/134
7th Floor
00 008 Warszawa
Poland
Tel +48 22 222 1530
Fax +48 22 222 1531

UK
16 Berkeley Street
London
W1J 8DZ

Tel +44 20 3530 0691

Italy
Via Luigi Settembrini, 35
20124 Milan
Italy

Tel +39 02 36692 500

Kristen Andrasko
Head of Equities
+420 222 096 253
kristen.andrasko@wood.com

Bloomberg page
WUCO

www.wood.com

Research

Co-Head of Research/ Head of Research Poland
Marta Jezewska-Wasilewska
+48 22 222 1548
marta.jezewska-wasilewska@wood.com

Co-Head of Research/Head of Greek Research
Alex Boulougouris
+30 216 200 5261
alex.boulougouris@wood.com

Head of Consumer/Industrials
Lukasz Wachelko
+48 22 222 1560
lukasz.wachelko@wood.com

Macroeconomics
Raffaella Tenconi
+44 20 3530 0685
raffaella.tenconi@wood.com

Head of Turkey Research
Atinc Ozkan
+90 542 202 3632
atinc.ozkan@wood.com

Head of Russia Research
Ildar Davletshin
+44 203 530 0631
ildar.davletshin@wood.com

Head of Romania Research
Iuliana Ciopraga
+40 316 30 1185
iuliana.ciopraga@wood.com

Macroeconomics
Alessio Chiesa
+44 75177 06102
alessio.chiesa@wood.com

Head of Financials
Can Demir
+44 20 3530 0623
can.demir@wood.com

Head of TMT
Piotr Raciborski
+48 22 222 1551
piotr.raciborski@wood.com

Energy
Jonathan Lamb
+44 20 3530 0621
jonathan.lamb@wood.com

Utilities/Mining/Pharma
Bram Buring
+420 222 096 250
bram.buring@wood.com

Consumer/Real Estate
Jakub Caithaml
+420 222 096 481
jakub.caithaml @wood.com

Energy/Utilities
Ondrej Slama
+420 222 096 484
ondrej.slama@wood.com

Metals/Mining
Artem Bagdasaryan
+420 222 096 710
artem.bagdasaryan@wood.com

Gaming/Mid-caps
Maria Mickiewicz
+48 602 450 718
maria.mickiewicz@wood.com

Turkey
Can Yurtcan
+420 222 096 780
can.yurtcan@wood.com

Greece
Fani Tzioukalia
+30 216 200 5260
fani.tzioukalia@wood.com

Russia
Dmitry Vlasov
+44 750 714 6702
dmitry.vlasov@wood.com

CEE
Aidar Ulan
+420 739 627 170
aidar.ulan@wood.cz

Financials
Miguel Dias
+420 735 729 418
miguel.dias@wood.com

Real Estate
Peter Palovic
+420 222 096 486
peter.palovic@wood.cz

Sales

Head of Sales
Kristen Andrasko
+420 222 096 253
kristen.andrasko@wood.cz

Jan Koch
+48 22 222 1616
jan.koch@wood.com

Piotr Kopec
+48 22 222 1615
piotr.kopec@wood.com

Ioana Pop
+44 20 3530 0693
ioana.pop@wood.com

Grzegorz Skowronski
+48 22 222 1559
grzegorz.skowronski@wood.com

Jarek Tomczynski
+44 203 530 0688
jarek.tomczynski@wood.com

Tatiana Sarandinaki
Brasil Plural in association with WOOD&Co.
1 212 388 5613
tsarandinaki@wood-brasilplural.com

Sales Trading and Execution Services

Zuzana Mora
+420 222 096 283
zuzana.mora@wood.com

Ermir Shkurti
+420 222 096 847
ermir.shkurti@wood.com

Vladimir Vavra
+420 222 096 397
vladimir.vavra@wood.com

RECENTLY PUBLISHED REPORTS

Date	Company/Sector	Title	Analyst
13/01/23	Georgian Banks	Still good value, despite the taxman	Can Demir, Alex Boulougouris
12/01/23	Raiffeisen Bank International	Potential event-driven BUY	Marta Jezewska-Wasilewska, Miguel Dias
11/01/23	Greece	Investment grade in the making	Alex Boulougouris, Fani Tzioukalia
09/01/23	NLB Group	Too appealing to ignore	Alex Boulougouris, Marta Jezewska-Wasilewska
06/01/23	European Oil and Gas	December 2022	Jonathan Lamb, Ondrej Slama
04/01/23	Rear-View Mirror – EME markets	2022 ends with Turkey still on top	Research Team
22/12/22	Kaspi.kz	Possible trinity	Can Demir, Alex Boulougouris
21/12/22	Pepco Group	Time for discounters	Lukasz Wachelko, Fani Tzioukalia
20/12/22	Bittnet Systems	Continuing M&A spree	Piotr Raciborski, Iuliana Ciopraga
19/12/22	Jumbo	Christmas has come early this year	Fani Tzioukalia, Lukasz Wachelko
16/12/22	MOL	An invisible hand, once more	Jonathan Lamb, Ondrej Slama
15/12/22	Icelandic Banks	The outliers	Can Demir, Miguel Dias, Aidar Ulan
15/12/22	OTP Bank	Should fare well, absent more negative events	Marta Jezewska-Wasilewska, Miguel Dias