



29/2023/GPW (66) August 2, 2023

This report is prepared for the Warsaw Stock Exchange SA within the framework of the Analytical Coverage Support Program 4.0.

# **Ferro**

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This is an excerpt from the Polish version of DM BOŚ SA's research report.

**Ferro** 

# 29/2023/GPW (66) August 2, 2023

Analyst: Sylwia Jaśkiewicz, CFA

Sector: Construction materials
Fundamental rating: Hold (->)
Market relative: Underweight (->)
Price: PLN 30.70
12M EFV: PLN 30.1 (->)

Market Cap: US\$ 161 m Bloomberg code: FRO PW Av. daily turnover: US\$ 0.07 m 12M range: PLN 20.00-31.40

Free float: 100%

# **Acquisition of Heating Polska**

Ferro acquired a 100% stake in Heating Polska, a limited liability company based in Konin, for PLN 9.65 million. In 2022 revenues of Heating Polska (without transactions with the Ferro Group) reached c. PLN 16 million. The cash position less financial liabilities is positive. This is not a huge transaction for Ferro and in the ST horizon we see it as neutral (without any material impact on the Company's financials, in our view), albeit from the strategic perspective it may be beneficial.

Heating Polska operates on the heat pump market and offers heat pumps used to heat buildings and for a warm utility water which comply with modern control systems. Heating Polska provides training for professionals in the area of heat pumps selection and installation, it cooperates with the network of authorized service technicians and distributors. The Ferro Group has cooperated with Heating Polska as well.

This acquisition is part of the Strategy F1R2 execution and according to the Group's management will support the further development of the RES segment enabling it to provide the comprehensive offer in the heating systems area. The Group's know-how will increase with regard to the design and selection of heat pumps and specialist training organization which will address the Group's needs as far as the assembly and maintenance is concerned.

# Ferro's heating systems results

The heating systems segment seems very prospective, however this year it has been reporting material revenue declines and is Ferro's weakest segment. We forecast the segment of batteries and accessories/ installation fittings/ heating systems

## Guide to adjusted profits

Income tax.

#### Key data

IFRS consolidated		2022	2023E	2024E	2025E
Sales	PLN m	914.9	773.7	889.7	1,005.4
EBITDA	PLN m	120.7	102.3	127.9	142.3
EBIT	PLN m	105.6	85.2	108.4	119.9
Net income	PLN m	65.4	57.0	72.9	84.7
EPS	PLN	3.08	2.68	3.43	3.99
Adj EPS yoy chg	%	-11	-13	28	16
Net debt	PLN m	181.6	162.4	152.4	139.5
P/E	X	10.0	11.4	8.9	7.7
EV/EBITDA	X	6.9	8.0	6.3	5.6
EV/EBIT	X	7.9	9.6	7.4	6.6
DPS	PLN	1.51	1.50	1.34	1.72
Gross dividend yield	%	4.9	4.9	4.4	5.6
Number of shares (eop)	т	21.2	21.2	21.2	21.2

Source: Company, DM BOŚ SA estimates

## Stock performance



Source: Bloomberg

## Recent events

- 1. Release of FY22 consolidated financial results: March 30
- 2. Release of consolidated 1Q23 financial results: May 29
- 3. Logistic center launch in Romania: 1H23
- 4. Takeover of Heating Polska

# Upcoming events

- 1. Release of consolidated 1H23 results: September 27
- 2. Release of consolidated 3Q23 results: November 28

Overage Program

\*\* US\$ 161 m



(Termet/Tester) generated 48%/ 35%/ 16% of 1H23 consolidated revenues vs 46%/ 33%/ 19% in 2022. In FY22 a sales growth in the segment of batteries and accessories/ installation fittings/ heating systems hit 8%/ 19%/ 4% yoy (mainly thanks to 1Q22 results), while in 1H23 we assume a 15%/ 11%/ 34% yoy decline.

# **Heat pumps**

According to European Heat Pump Association (EHPA), in 2022 the volume of heat pumps sold in Poland grew over 100% yoy which made Poland the leader in Europe as far as the growth rate was concerned.

According to PORT PC (Polish Organization for Heat Pumps Technology Development) data, in 1Q23 the upwards trend on the market of heat pumps for buildings continued (a 64% yoy growth of sales of air-to-water heat pumps) with projections indicating a 20-30% growth for air-to-water heat pumps and 40-50% for ground (geothermal) heat pumps in 2023. However, in July a slump of the sales growth was reported while the distributors' warehouses were fully stocked and projections needed to be modified. Ultimately, PORT PC revised projections which now assume that in 2023 sales of ground heat pumps should grow 20-30% yoy with a 20-30% drop of sales of air-to-water heat pumps (in the worst case scenario: down 40% yoy). The return of the upwards trend is expected in 2024.

#### Risk factors

- 1. Economic slowdown in Europe
- 2. Falling demand for new flats
- 3. Falling frequency of renovations
- 4. Qualified workforce shortage
- 5. Pressure on salaries
- 6. Volatile raw materials prices (of copper and zinc, in particular)
- 7. Unfavorable/ volatile FX rates (currency risk when PLN and CZK weaken against US\$ and EUR)
- 8. Lack of stability in the region
- 9. Temporary higher inventories
- 10. High interest rates

## **Catalysts**

- 1. Expansion in European markets
- 2. Strengthening position on the existing markets
- 3. Launching a new logistic center in the southern Europe
- 4. New products (expanding the product offer)
- 5. Favorable FX rates and raw materials prices
- 6. Acquisitions in attractive segments
- 7. Implementation of the adopted strategy F1R2

#### BASIC DEFINITIONS

A/R turnover (in days) = 365/(sales/average A/R))

Inventory turnover (in days) = 365/(COGS/average inventory))

A/P turnover (in days) = 365/(COGS/average A/P))

Current ratio = ((current assets - ST deferred assets)/current liabilities)

Quick ratio = ((current assets - ST deferred assets - inventory)/current liabilities)

Interest coverage = (pre-tax profit before extraordinary items + interest payable/interest payable)

Gross margin = gross profit on sales/sales

EBITDA margin = EBITDA/sales EBIT margin = EBIT/sales

Pre-tax margin = pre-tax profit/sales

Net margin = net profit/sales

ROE = net profit/average equity

ROA = (net income + interest payable)/average assets

EV = market capitalization + interest bearing debt - cash and equivalents

EPS = net profit/ no. of shares outstanding

**CE** = net profit + depreciation

Dividend yield (gross) = pre-tax DPS/stock market price

Cash sales = accrual sales corrected for the change in A/R

Cash operating expenses = accrual operating expenses corrected for the changes in inventories and A/P, depreciation, cash taxes and changes in the deferred taxes

DM BOŚ S.A. generally values the covered non bank companies via two methods: comparative method and DCF method (discounted cash flows). The advantage of the former is the fact that it incorporates the current market assessment of the value of the company's peers. The weakness of the comparative method is the risk that the valuation benchmark may be mispriced. The advantage of the DCF method is its independence from the current market valuation of the comparable companies. The weakness of this method is its high sensitivity to undertaken assumptions, especially those related to the residual value calculation. Please note that we also resort to other valuation techniques (e.g. NAV-, DDM- or SOTP-based), should it prove appropriate in a given case

#### Banks

Net Interest Margin (NIM) = net interest income/average assets

Non interest income = fees&commissions + result on financial operations (trading gains) + FX gains Interest Spread = (interest income/average interest earning assets)/ (interest cost/average interest bearing liabilities)

Cost/Income = (general costs + depreciation)/ (profit on banking activity + other net operating income) ROE = net profit/average equity

ROA = net income/average assets

Non performing loans (NPL) = loans in 'basket 3' category

Net provision charge = provisions created - provisions released

NPL coverrage ratio = loan loss provisions/NPL

DM BOŚ S.A. generally values the covered banks via two methods: comparative method and fundamental target fair P/E and target fair P/BV multiples method. The advantage of the former is the fact that it incorporates the current market assessment of the value of the company's peers. The weakness of the comparative method is the risk that the valuation benchmark may be mispriced. The advantage of the fundamental target fair P/E and target fair P/BV multiples method is its independence of the current market valuation of the comparable companies. The weakness of this method is its high sensitivity to undertaken assumptions, especially those

related to the residual value calculation. Assumptions used in valuation can change, influencing thereby the level of the valuation. Among the most important assumptions are: GDP growth, forecasted level of inflation, changes in interest rates and currency prices, employment level and change in wages, demand on the analysed company products, raw material prices, competition, standing of the main customers and suppliers, legislation changes, etc. Changes in the environment of the analysed company are monitored by analysts involved in the preparation of the recommendation, estimated, incorporated in valuation and published in the recommendation whenever needed.

#### **KEY TO INVESTMENT RANKINGS**

This is a guide to expected price performance in absolute terms over the next 12 months:

Buy - fundamentally undervalued (upside to 12M EFV in excess of the cost of equity) + catalysts which should close the valuation gap identified;

Hold - either (i) fairly priced, or (ii) fundamentally undervalued/overvalued but lacks catalysts which could close the valuation gap;

Sell – fundamentally overvalued (12M EFV < current share price + 1-year cost of equity) + catalysts which should close the valuation gap identified.

This is a guide to expected relative price performance:

Overweight - expected to perform better than the benchmark (WIG) over the next quarter in relative terms Neutral - expected to perform in line with the benchmark (WIG) over the next quarter in relative terms Underweight - expected to perform worse than the benchmark (WIG) over the next quarter in relative terms

The recommendation tracker presents the performance of DM BOŚ S.A.'s recommendations. A recommendation expires on the day it is altered or on the day 12 months after its issuance, whichever comes first. Relative performance compares the rate of return on a given recommended stock in the period of the recommendation's validity (i.e. from the date of issuance to the date of alteration or – in case of maintained recommendations – from the date of issuance to the current date) in a relation to the rate of return on the benchmark in this time period. The WIG index constitutes the benchmark. For recommendations that expire by an alteration or are maintained, the ending values used to calculate their absolute and relative performance are: the stock closing price on the day the recommendation expires/ is maintained and the closing value of the benchmark on that date. For recommendations that expire via a passage of time, the ending values used to calculate their absolute and relative performance are: the average of the stock closing prices for the day the recommendation elapses and four directly preceding sessions and the average of the benchmark's closing values for the day the recommendation expires and four directly preceding sessions.

## Distribution of DM BOS's current recommendations

	Buy	Hold	Sell	Suspended	Under revision	Not rated
Numbers	39	31	9	9	0	2
Percentage	43%	34%	10%	10%	0%	2%

## Distribution of DM BOS's current market relative recommended weightings

					-	
	Overweight	Neutral	Underweight	Suspended	Under revision	Not rated
Numbers	33	33	13	9	0	2
Percentage	37%	37%	14%	10%	0%	2%

Distribution of DM BOŚ's current recommendations for the companies which DM BOŚ has supplied with material investment services within the last 12 months

	Buy	Hold	Sell	Suspended	Under revision	Not rated
Numbers	6	6	1	1	0	2
Percentage	38%	38%	6%	6%	0%	13%

Distribution of DM BOS's current market relative recommended weightings for the companies which DM BOS has supplied with material investment services within the last 12 months

	Overweight	Neutral	Underweight	Suspended	Under revision	Not rated
Numbers	7	3	3	1	0	2
Percentage	44%	19%	19%	6%	0%	13%

Analyst	Recommendation	1	Report date	Reiteration date	Distribution date	Expiry date	Performance	Relative performance	Price at issue/ reiteration*	EFV (12 months)	
Ferro	Hald		04.07.0040		00.07.0040	0440.0040	440/	000/	40.70	4740	
Sylwia Jaśkiewicz	Hold	_	21.07.2019	20.07.2010	22.07.2019	04.12.2019	11%	20%	13.70	17.10	
Sylwia Jaśkiewicz Sylwia Jaśkiewicz	-	$\rightarrow$	-	30.07.2019	31.07.2019	-	-	-	13.50	17.10	-
•	-	$\rightarrow$	-	01.09.2019	02.09.2019	-	-	-	12.05	17.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	10.09.2019	11.09.2019	-	-	-	12.10	17.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	15.09.2019	16.09.2019	-	-	-	12.65	17.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	13.10.2019	14.10.2019	-	-	-	13.40	17.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	24.10.2019	25.10.2019	-	-	-	13.00	17.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	17.11.2019	18.11.2019	-	-	-	13.00	17.10	-
sylwia Jaśkiewicz	-	$\rightarrow$	-	18.11.2019	19.11.2019	-	-	-	13.00	17.10	-
Sylwia Jaśkiewicz	Buy	<b>↑</b>	04.12.2019	-	05.12.2019	28.01.2020	17%	15%	15.20	17.80	
Sylwia Jaśkiewicz	-	$\rightarrow$	-	08.12.2019	09.12.2019	-	-	-	15.00	17.80	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	09.01.2020	10.01.2020	-	-	-	16.30	17.80	-
Sylwia Jaśkiewicz	Hold	$\downarrow$	28.01.2020	-	29.01.2020	22.07.2020	-4%	5%	17.80	18.50	
Sylwia Jaśkiewicz	-	$\rightarrow$	-	04.02.2020	05.02.2020	-	-	-	17.90	18.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	06.02.2020	07.02.2020	-	-	-	17.50	18.50	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	03.03.2020	04.03.2020	-	-	-	15.20	18.50	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	30.03.2020	31.03.2020	-	-	-	12.25	18.50	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	22.04.2020	23.04.2020	-	_	-	14.00	18.50	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	23.04.2020	24.04.2020	_	_	_	14.00	18.50	_
ylwia Jaśkiewicz	_	$\rightarrow$	_	19.05.2020	20.05.2020	_	_	_	13.65	18.50	-
ylwia Jaśkiewicz		$\rightarrow$		15.06.2020	16.06.2020			_	16.60	18.50	
•											
ylwia Jaśkiewicz	- D	$\rightarrow$	- 00.07.0000	13.07.2020	14.07.2020	40.04.0004	750/	- 540/	17.90	18.50	-
ylwia Jaśkiewicz	Buy	<b>↑</b>	22.07.2020		23.07.2020	16.04.2021	75%	51%	17.00	20.30	
ylwia Jaśkiewicz	-	$\rightarrow$	-	01.09.2020	02.09.2020	-	-	-	18.60	20.30	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	17.09.2020	18.09.2020	-	-	-	18.90	20.30	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	29.09.2020	30.09.2020	-	-	-	18.70	19.90	,
ylwia Jaśkiewicz	-	$\rightarrow$	-	08.10.2020	09.10.2020	-	-	-	19.00	19.90	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	03.11.2020	04.11.2020	-	-	-	17.30	22.00	
ylwia Jaśkiewicz	-	$\rightarrow$	-	08.11.2020	09.11.2020	-	-	-	17.25	22.00	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	19.11.2020	20.11.2020	-	-	-	18.40	23.40	
ylwia Jaśkiewicz	-	$\rightarrow$	-	26.11.2020	27.11.2020	-	_	_	20.00	23.40	_
ylwia Jaśkiewicz	-	$\rightarrow$	_	06.12.2020	07.12.2020	_	_	_	24.80	25.70	
ylwia Jaśkiewicz	_	$\rightarrow$	_	05.01.2021	05.01.2021	_	_	_	25.50	25.70	-
ylwia Jaśkiewicz ylwia Jaśkiewicz		$\rightarrow$		28.01.2021	29.01.2021				26.50	25.70	_
•	-		-			-	-	-			-
ylwia Jaśkiewicz	-	$\rightarrow$	-	09.02.2021	10.02.2021	-	-	-	25.70	30.80	
ylwia Jaśkiewicz	-	$\rightarrow$	-	28.02.2021	01.03.2021	-	-	-	26.10	30.80	-
ylwia Jaśkiewicz	•	$\rightarrow$	-	31.03.2021	01.04.2021			-	27.00	30.80	-
ylwia Jaśkiewicz	Buy	$\rightarrow$	16.04.2021	-	16.04.2021	14.04.2022	16%	9%	29.30	30.80	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	10.05.2021	11.05.2021	-	-	-	29.80	34.10	
ylwia Jaśkiewicz	-	$\rightarrow$	-	27.05.2021	28.05.2021	-	-	-	32.50	34.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	30.05.2021	31.05.2021	-	-	-	33.00	34.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	09.07.2021	09.07.2021	-	-	-	35.30	34.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	12.08.2021	13.08.2021	-	-	-	38.00	41.70	
ylwia Jaśkiewicz	-	$\rightarrow$	-	31.08.2021	31.08.2021	-	_	-	40.50	41.70	-
ylwia Jaśkiewicz	-	$\rightarrow$	_	30.09.2021	01.10.2021	_	_	_	35.60	41.70	_
ylwia Jaśkiewicz	-	$\rightarrow$	_	07.10.2021	07.10.2021	_	_	_	38.90	41.70	_
ylwia Jaśkiewicz	_	$\stackrel{'}{ ightarrow}$	_	02.11.2021	03.11.2021	_	_	_	37.50	41.70	-
ylwia Jaśkiewicz		$\rightarrow$		04.11.2021	04.11.2021				37.20	41.70	
•	-		-			-	-	-			-
ylwia Jaśkiewicz	-	$\rightarrow$	-	29.11.2021	30.11.2021	-	-	-	34.60	41.70	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	05.12.2021	06.12.2021	-	-	-	33.00	39.60	,
ylwia Jaśkiewicz	-	$\rightarrow$	-	16.01.2022	17.01.2022	-	-	-	34.80	39.60	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	01.02.2022	02.02.2022	-	-	-	32.00	39.60	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	07.02.2022	07.02.2022	-	-	-	32.50	39.60	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	28.02.2022	28.02.2022	-	-	-	29.00	39.60	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	30.03.2022	31.03.2022	-	-	-	30.90	39.60	-
ylwia Jaśkiewicz	Buy	$\rightarrow$	14.04.2022	-	14.04.2022	03.10.2022	-21%	9%	31.70	39.60	_
ylwia Jaśkiewicz	-	$\rightarrow$	-	20.04.2022	21.04.2022	-	-	-	31.30	37.10	
ylwia Jaśkiewicz	-	$\rightarrow$	-	25.05.2022	26.05.2022	-	_	_	27.20	37.10	_
ylwia Jaśkiewicz	-	$\stackrel{'}{ ightarrow}$	-	26.05.2022	26.05.2022	_	_	_	28.20	37.10	-
ylwia Jaśkiewicz	-	$\stackrel{'}{\rightarrow}$	_	15.07.2022	15.07.2022	-	_	_	25.50	37.10	-
ylwia Jaśkiewicz ylwia Jaśkiewicz	_	$\rightarrow$	-	24.07.2022	25.07.2022	-	-	-	24.30	37.10	
ylwia Jaśkiewicz ylwia Jaśkiewicz	-		-	16.08.2022		-	-	-			
•	-	$\rightarrow$			16.08.2022	-	-		26.60	37.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	02.09.2022	02.09.2022	-	-	-	25.20	37.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	20.09.2022	21.09.2022	-	-	-	25.50	37.10	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	26.09.2022	27.09.2022	-	-	-	23.10	37.10	-
ylwia Jaśkiewicz	Hold	$\downarrow$	03.10.2022	-	04.10.2022	Not later than	31%	-15%	23.50	28.70	
					,_ ·-	03.10.2023					
ylwia Jaśkiewicz	-	$\rightarrow$	-	07.10.2022	07.10.2022	-	-	-	23.30	28.70	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	28.10.2022	28.10.2022	-	-	-	22.80	28.70	-
ylwia Jaśkiewicz	-	$\rightarrow$	-	20.11.2022	21.11.2022	-	-	-	24.00	28.70	-
rlwia Jaśkiewicz	-	$\rightarrow$	-	01.12.2022	02.12.2022	-	-	-	22.60	28.70	-
/lwia Jaśkiewicz	-	$\rightarrow$	-	04.12.2022	05.12.2022	-	-	-	23.00	28.70	-
rlwia Jaśkiewicz	-	$\rightarrow$	-	13.01.2023	13.01.2023	-	_	_	23.50	28.70	
/lwia Jaśkiewicz	-	$\rightarrow$	_	03.02.2023	03.02.2023	-	_	_	25.00	28.70	
ylwia Jaśkiewicz ylwia Jaśkiewicz	_	$\rightarrow$	-	16.02.2023	17.02.2023		_	-	24.50	28.70	
	-		-			-	-	-			
rlwia Jaśkiewicz	-	$\rightarrow$	-	10.03.2023	10.03.2023	-	-	-	24.10	28.70	
ylwia Jaśkiewicz	-	$\rightarrow$	-	30.03.2023	31.03.2023	-	-	-	25.50	28.70	
/lwia Jaśkiewicz	-	$\rightarrow$	-	13.04.2023	13.04.2023	-	-	-	26.70	28.70	
ylwia Jaśkiewicz	-	$\rightarrow$	-	28.04.2023	28.04.2023	-	-	-	27.40	28.70	-
/lwia Jaśkiewicz	-	$\rightarrow$	-	29.05.2023	29.05.2023	-	-	-	30.50	28.70	
	-	$\rightarrow$	-	29.05.2023	29.05.2023	_	_	-	30.50	28.70	_
yiwia Jaskiewicz										28.70	
	-	$\rightarrow$	-		14 (1/ 2023	-					-
ylwia Jaśkiewicz ylwia Jaśkiewicz ylwia Jaśkiewicz	-	$\rightarrow$ $\rightarrow$	-	14.07.2023 31.07.2023	14.07.2023 01.08.2023	-	-	-	30.90 30.00	30.10	-

 $<sup>^{*}</sup>$  prices at issue/reiteration are the closing prices at the report or reiteration date

Analyst	Relative Recommendation		Report date	Reiteration date	Distribution date	Expiry date	Price at issue/ reiteration*	Relative performance
Ferro								
Sylwia Jaśkiewicz	Neutral	-	21.07.2019	-	22.07.2019	18.11.2019	13.70	-2%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	30.07.2019	31.07.2019	-	13.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	01.09.2019	02.09.2019	-	12.05	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	10.09.2019 15.09.2019	11.09.2019	-	12.10 12.65	-
Sylwia Jaśkiewicz	-	$\rightarrow$ $\rightarrow$	-	13.10.2019	16.09.2019	-		-
Sylwia Jaśkiewicz Sylwia Jaśkiewicz	-		-	24.10.2019	14.10.2019 25.10.2019	-	13.40 13.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$ $\rightarrow$		17.11.2019	18.11.2019		13.00	
Sylwia Jaśkiewicz	Overweight	$\uparrow$	18.11.2019	17.11.2013	19.11.2019	28.01.2020	13.00	41%
Sylwia Jaśkiewicz	-	$\rightarrow$	10.11.2013	04.12.2019	05.12.2019	20.01.2020	15.20	
Sylwia Jaśkiewicz	_	$\stackrel{'}{\rightarrow}$	_	08.12.2019	09.12.2019	_	15.00	_
Sylwia Jaśkiewicz	_	$\rightarrow$	_	09.01.2020	10.01.2020	_	16.30	_
Sylwia Jaśkiewicz	Neutral	<b>↓</b>	28.01.2020	-	29.01.2020	23.04.2020	17.80	-1%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	04.02.2020	05.02.2020	-	17.90	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	06.02.2020	07.02.2020	_	17.50	_
Sylwia Jaśkiewicz	-	$\rightarrow$	_	03.03.2020	04.03.2020	_	15.20	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	30.03.2020	31.03.2020	-	12.25	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	22.04.2020	23.04.2020	-	14.00	-
Sylwia Jaśkiewicz	Overweight	<b>↑</b>	23.04.2020	-	24.04.2020	16.04.2021	14.00	60%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	19.05.2020	20.05.2020	-	13.65	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	15.06.2020	16.06.2020	-	16.60	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	13.07.2020	14.07.2020	-	17.90	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	22.07.2020	23.07.2020	-	17.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	01.09.2020	02.09.2020	-	18.60	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	17.09.2020	18.09.2020	-	18.90	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	29.09.2020	30.09.2020	-	18.70	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	08.10.2020	09.10.2020	-	19.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	03.11.2020	04.11.2020	-	17.30	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	08.11.2020	09.11.2020	-	17.25	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	19.11.2020	20.11.2020	-	18.40	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	26.11.2020	27.11.2020	-	20.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	06.12.2020	07.12.2020	_	24.80	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	05.01.2021	05.01.2021	_	25.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	28.01.2021	29.01.2021	-	26.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	09.02.2021	10.02.2021	-	25.70	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	28.02.2021	01.03.2021	-	26.10	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	31.03.2021	01.04.2021	-	27.00	-
Sylwia Jaśkiewicz	Overweight	$\rightarrow$	16.04.2021	-	16.04.2021	05.12.2021	29.30	7%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	10.05.2021	11.05.2021	-	29.80	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	27.05.2021	28.05.2021	-	32.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	30.05.2021	31.05.2021	_	33.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	09.07.2021	09.07.2021	-	35.30	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	12.08.2021	13.08.2021	-	38.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	_	31.08.2021	31.08.2021	_	40.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	30.09.2021	01.10.2021	-	35.60	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	07.10.2021	07.10.2021	-	38.90	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	02.11.2021	03.11.2021	-	37.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	04.11.2021	04.11.2021	-	37.20	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	29.11.2021	30.11.2021	-	34.60	-
Sylwia Jaśkiewicz	Neutral	$\downarrow$	05.12.2021	-	06.12.2021	03.10.2022	33.00	11%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	16.01.2022	17.01.2022	-	34.80	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	01.02.2022	02.02.2022	-	32.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	07.02.2022	07.02.2022	-	32.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	28.02.2022	28.02.2022	-	29.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	30.03.2022	31.03.2022	-	30.90	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	14.04.2022	14.04.2022	-	31.70	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	20.04.2022	21.04.2022	-	31.30	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	25.05.2022	26.05.2022	-	27.20	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	26.05.2022	26.05.2022	-	28.20	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	15.07.2022	15.07.2022	-	25.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	24.07.2022	25.07.2022	-	24.30	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	16.08.2022	16.08.2022	-	26.60	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	02.09.2022	02.09.2022	-	25.20	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	20.09.2022	21.09.2022	-	25.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	26.09.2022	27.09.2022	-	23.10	-
Sylwia Jaśkiewicz	Underweight	$\rightarrow$	03.10.2022	-	04.10.2022	20.11.2022	23.50	-14%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	07.10.2022	07.10.2022	-	23.30	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	28.10.2022	28.10.2022	-	22.80	-
Sylwia Jaśkiewicz	Neutral	<b>↑</b>	20.11.2022	-	21.11.2022	16.02.2023	24.00	-8%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	01.12.2022	02.12.2022	-	22.60	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	04.12.2022	05.12.2022	-	23.00	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	13.01.2023	13.01.2023	-	23.50	-
Sylwia Jaśkiewicz	- -	$\rightarrow$	-	03.02.2023	03.02.2023	-	25.00	-
Sylwia Jaśkiewicz	Underweight	$\downarrow$	16.02.2023	-	17.02.2023	Not later than 16.02.2024	24.50	7%
Sylwia Jaśkiewicz	-	$\rightarrow$	-	10.03.2023	10.03.2023	-	24.10	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	30.03.2023	31.03.2023	-	25.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	13.04.2023	13.04.2023	-	26.70	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	28.04.2023	28.04.2023	-	27.40	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	29.05.2023	29.05.2023	-	30.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	29.05.2023	29.05.2023	-	30.50	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	14.07.2023	14.07.2023	-	30.90	-
Sylwia Jaśkiewicz	-	$\rightarrow$	-	31.07.2023	01.08.2023	-	30.00	-
Sylwia Jaśkiewicz	_	$\rightarrow$	_	02.08.2023	03.08.2023	_	30.70	_

Sylwia Jaskiewicz - →

\* prices at issue/reiteration are the closing prices at the report or reiteration date

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